## 2018

## Components



## the weigh you want...today!

## $\longrightarrow$

 Dear Customer:

This catalog has been prepared especially for the professional in the weighing industry. I am sure that you will find it informative and helpful.

We pride ourselves on answering the phone on the first ring and shipping your order the same day that you place it.

You will also benefit from our huge inventory. Our records indicate that we ship 49 out of 50 orders from stock.

Price is also important and you can depend on our price being the best in the industry. If you have large quantities we can give you better prices.

You will note that there are many new items in this catalog. Please take the time to see what has been added to see if it fits what you need.

Thank you for being our customer. We look forward to many successful years with you.

Best Personal Regards<br>Rudolph J. Kolaci<br>President

## Mission

Serve, Supply, \& Inform You with Totalcompetence.

## Vision

Embrace Change While Maintaining Values.

## Values

Honest in all of our dealings.
Helpful to our customers \& each other.
Happy in both home and office.
Healthy in all aspects of our lives.

## Totalcomp

## T500 Weight Indicator

Weighing indicator with an extremely small package size. Full duplex RS232 serial port. T500E have ABS plastic enclosure, T500ESS has SS enclosure. All have stainless steel swivel stand. 120 VAC adapter is included. 15 ft load cell cable with connector included. NTEP 96-028 III 5,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| T500E Indicator w/Green LED display | 4 lb | 2841 | $\$ 235.00$ |
| T500 |  |  |  |

## Service Parts

AC adapter 120 VAC to 12 VDC 0.5 A for T500, T500E switching
AC adater 120 VAC to 0 VDC 0.5 A for T500E
AC adapter 120 VAC to 9 VDC 0.5A for T500E new version $\quad 1 \mathrm{lb} \quad 2489 \mathrm{M} \quad 28.50$
AC adapter 120 VAC to 6 VDC 300 mA for T 500 new version
AC adapter 120 VAC to 12 VDC 0.8 A for TI500BWL
1 lb 2497M

AC adapter $100-240 \mathrm{VAC}$ to 12 VDC 0.9 A for T500ESS, TI-600ESS
AC Power cord for 100-240 VAC adapter
$1 \mathrm{lb} \quad 2812 \mathrm{M} \quad 28.50$

Load cell connector for T500 \& T500E
$1 \mathrm{lb} 3640 \mathrm{M} \quad 10.20$

Load cell cable w/connector for T500 \& T500E
$\begin{array}{lll}1 \mathrm{lb} & 2952 \mathrm{M} & 29.00 \\ 1 \mathrm{lb} & 2687 \mathrm{M} & 55.70\end{array}$
Rear panel load cell connector, flange mount
1 lb 2953M
Main board for T500E
Main board for T500ESS
Front overlay for T500
Front overlay for T500E
Front overlay for T500ESS




## TI-500P Weight Indicator

Weighing indicator with an extremely small package size. Full duplex RS232 serial port. Aluminum enclosure. Three point calibration is standard. Peak hold is a selectable feature of the TI-500EP. Remote display is a selectable feature of the TI-500EP. All have stainless steel swivel stand. 120 VAC adapter is included. Includes 15 ft load cell cable with connector.
NTEP 96-028 III 5,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TI-500EP Indicator w/Green LED display, peak hold | 4 lb | 6437 M | $\$ 275.00$ |
| TI-500 Indicator w/LCD w/backlite display | 4 lb | 2840 | 215.00 |
| TI-500E Indicator w/green LED | 4 lb | 4408 | 275.00 |
|  |  |  |  |
| Service Parts |  |  | C |
| AC adapter 120 VAC to 9 VDC 0.5A for, TI-500EP | 1 lb | 2489 M | 28.50 |
| AC adapter 120 VAC to 6 VDC 300 mA for TI-500P | 1 lb | 2497 M | 34.20 |
|  |  |  |  |
| Load cell connector for TI-500P \& TI-500EP | 1 lb | 2952 M | 29.00 |
| Load cell cable w/connector for TI-500P \& TI-500EP | 1 lb | 2687 M | 55.70 |
| Rear panel load cell connector, flange mount | 1 lb | 2953 M | 29.00 |
| Front overlay for TI-500ESS | 1 lb | 4821 | 38.50 |

## SPECIFICATIONS

LOAD CELL . . . . . . . 10 VDC, 120 ma
(4)350 or (8)700 ohm load cells

ANALOG INPUT . . . . $0.4 \mu \mathrm{~V}$ per div, $1.0 \mu \mathrm{~V}$ per div NTEP
CONVERSION . . . . . 25 updates per sec
5,000 display div NTEP
50,000 div, industrial
OUTPUT . . . . . . . . . . . Full duplex RS232
Baud 1200, 2400, 4800, 9600, O, E, N
ACCURACY $\qquad$ . $0.01 \%$ of full scale

KEYS
ANNUNCIATORS . . . Gross, Net, Tare, Zero, lb, kg, pcs
DISPLAY . . . . . . . . . . Liquid Crystal display or Green LED
6 digit 0.6" high
Decimal point selectable
Display div 1,2,5,10,20,50,100,200
POWER $\qquad$ . 120 VAC wall adapter $50 / 60 \mathrm{~Hz}, 0.5$ watt output is 12VDC, 500 mA

SIZE
. . . . . . . . . . . . . .T500P,T500EP:
6.81 "W x $2.26 " \mathrm{D} \times 3.19 \mathrm{H}, 4 \mathrm{lb}$

Aluminum enclosure,
desk top or wall mount

## Totalcomp




## Indicators



| SPECIFICATIONS |  |  |  |
| :---: | :---: | :---: | :---: |
| LOAD CELL . | .5VDC, 150ma <br> (4)350 ohm load cells | KEYS. ........ | . . .G/N, UNIT, PRINT/MT, TARE, ZERO, ON/OFF |
| ANALOG INPUT | 2.5 ¢V/div | ANNUNCIATORS | .. .lb, kg, g, oz, lb:oz, battery, stable, zero, gross, net, tare, pcs |
|  |  | DISPLAY . . . . | . . 6 digit, 2" LCD with backlight |
|  |  | POWER ...... | . . . AC adapter/Battery or internal |
| CONVERSION | Update max 60 times per second $1,2,5,10,20,50$ | SIZE | $\text { .11.4" W x } 3.5 " \mathrm{D} \times 7.4 \text { "H }$ |
| ACCURACY . . | . $0.01 \%$ full scale |  | Desk or wall mount <br> Stainless steel enclosure IP65 housing |
| OUTPUT | RS232 and optional 5VDC Light Tower w/ relay board <br> 4-20ma/0-20ma Analog output |  |  |

## Totalcomp

## T7-P \& T7-SS Touch Screen Indicator

T7-P has ABS plastic enclosure. $6.75^{\prime \prime}$ touch screen display. T7-SS has IP65 stainless steel housing. 6.75" touch screen dislplay. 5 tactile keys for: On/Off, Set up, Home, Tare, Zero. Panel home screen keys for: Class, Take Out, Target, Count, Check, M+, Pre-Tare, Print, Sum. Applications for: Hi/Lo, Unit, Product. Built in applications include: standard weighing, over/under check weighing with bar graph, Take Out, Target, Counting, Class (grading), Hi/Lo applications. Built in Time/Date clock. Indicator has 4 Pre-Tare settings that can be saved and one Pre-Tare setting for custom entry. T7-SS and T7-P can store up to 9999 product ID by product name, barcode, Pre-Tare, unit weight in $\mathrm{g} / \mathrm{pcs}$ or $\mathrm{Ib} / \mathrm{pcs}$, Hi.Lo level. If product ID has barcode assigned to it using optional barcode scanner, product ID retrievable for fast access. M+ function will add weighment to memory that is retrievable with Sum and transferred to PC using flash drive or printed on paper and then cleared manually. USB port for plug and play ZoomSun barcode scanner and software upload and data download. T7-SS is equipped with 1xRS232 port, 1xRS422, 2x USB port. T7-P is equipped with $1 \times R S 232$ port, $1 \times$ USB port.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| T7-P | 7 lb | 4977 | $\$ 685.00$ |
| T7-SS | 8 lb | 4978 | 828.00 |
|  |  |  |  |
| Options | 2 lb | 4987 | 248.00 |
| ZoomSun USB barcode scanner | 2 lb | 1716 M | 325.00 |



Touch Sreen Indicator ABS Plastic


T7-SS
Touch Sreen Indicator Stainless Steel




## Totalcomp



| SPECIFICATIONS |  |  |  |
| :---: | :---: | :---: | :---: |
| LOAD CELL . | 5VDC, 150ma <br> (4) 350 ohm load cells | KEYS. | . . . ON/OFF, ZERO, TARE, G/N, PRINT/M+, UNIT |
| ANALOG INPUT CONVERSION | . $2.5 \mu \mathrm{~V} / \mathrm{div}$ <br> .Update max 60 times per sec $1,2,5,10,20,50$ | ANNUNCIATORS . . . .lb, kg, g, oz, tj, hj, mt, hi, ok, lo, Peak, Battery, Hold, Stable, Auto, Animal, Zero, Tare Net, Gross |  |
|  |  | DISPLAY ..... | . . 6 digit, 0.8" high LCD with backlight |
| ACCURACY . | . $0.01 \%$ full scale | POWER .... | . . . AC adapter/Battery |
| OUTPUT .... | $\begin{aligned} & . \text { RS232 } \\ & \text { baud 600, 1200, } 2400 \end{aligned}$ |  | .7.2"W x $1.77^{\prime \prime} \mathrm{D} \times 3.93^{\prime \prime} \mathrm{H}$ Desktop or wall mount ABS housing |

## Indicators



## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC +/- 5\%, 60 ma
(4) 350 ohm load cells No remote sensing

ANALOG INPUT . . . . $0.2 \mu \mathrm{~V}$ per div min

CONVERSION . . . . . Update rate 20 times/second

ACCURACY $\qquad$ 0.01\% of full scale

OUTPUT $\qquad$ RS232 \& comparator relay* RS422/485 \& comparator relay* * optional

KEYS. $\qquad$ ON/OFF, RECALL, KEY, SAMPLE, PT, STORE, LO, HI, TARE, UNITS, DISPLAY ZERO, CLEAR, PRINT/ENTER

ANNUNCIATORS . . . . .Stable, Net, Zero, Print, PT, Lo, Ok, Hi

DISPLAY . . . . . . . . . . 7 segment LCD. 0.73 " with backlight

POWER . . . . . . . . . . . 100-240 VAC +/-10\%, 50/60Hz, 30 VA 80 hours (depends on usage)

SIZE
. . . . . . . . . . . . .9.8"W x 8"D x 10.5"H
desktop/wall mount stand and connector plug for use with platforms from A\&D Weighing and most manufacturers. SS enclosure, IP65

A\&D WEIGHING DIVISION

| AD-4321 Weighing Indicator |  |  |  |
| :--- | ---: | ---: | ---: |
| Service parts only for AD-4321 indicator. |  |  |  |
| Part Number | Weight | Stock | Price C |
| Service Parts |  |  | C |
| 01 Parallel BCD output TTL level | 1 lb | 1016 | $\$ 199.00$ |
| 05 Stainless steel water resistant enclosure | 1 lb | 1018 | 399.00 |
|  | 1 lb | 698 | 451.00 |
| PZ:710A A/D converter board | 1 lb | 64 | 6.60 |
| 08:A47486 capacity tag |  |  |  |
|  | 1 lb | 642 M | 61.40 |
| JM:NJC-207-PF load cell connector | 1 lb | 474 M | 24.90 |



## Indicators



AND
A\&D WEIGHING DIVISION

## AD-4322A MKII Weighing Indicator

10 key pad for easy tare entry. 100 I.D. code (8 digit) memory information blocks that contain Tare, Comparator limits, running code total weight and number of weighing events for each separate coded item. 50 tare weights can be stored in memory by I.D. number. Full Digital Calibration (FDC) for easy setting of zero and span. Digital linearization function to compensate for non- linearity of load cells. Will switch from lb to kg at the press of a button. Standard 20 ma serial output. Digital filter with four settings for everything from high speed automated weighing to animal weighing. Waterproof keyboard makes this indicator very useful in a variety of environments. Optional built in printer. Panel mount, desk top or wall mount. Twin displays. One display for weight, other for parameter setting, optional time and date. Peak hold circuit, built in comparator, complete RFI protection. NTEP approved Truck Scale program for general applications and WeighIn, Weigh-Out usage. S.WA 4315

NTEP 89-037 III/IIIL 10,000 div.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-4322A MKII-08 Indicator w/printer | 11 lb | 1680 | $\$ 1,770.00$ |
|  |  |  |  |
| Options |  |  | C |
| AD-4322-01A Parallel BCD output TTL levels | 1 lb | 1929 | 399.00 |
| AD-4322-08 Built in printer | 1 lb | 1578 | 405.00 |
|  |  |  |  |
| AD-4322-10 Panel mount kit | 1 lb | 1109 | 129.00 |
| AD-4322-11 Wall mount kit | 1 lb | 1110 | 59.00 |
|  |  |  |  |
| Service Parts |  |  | A5 |
| JM:NJC-207-PF load cell connector | 1 lb | 642 M | 43.00 |
| JM:NJC-207-RM connector w/flange for rear panel | 1 lb | 474 M | 15.00 |
|  |  |  |  |
| WP:PP129-28A Thermal paper for printer, pack of (5) | 1 lb | 1750 | 27.00 |
| 01:A39844 Keysheet overlay | 1 lb | 65 | 14.00 |
| PZ:2084 Switchboard (behind overlay) | 1 lb | 66 | 147.00 |
|  |  |  |  |
| PZ:2082 Main board for AD4322A MKII | 1 lb | 1552 | 909.00 |
| Maintenance manual | 1 lb | 665 | 39.00 |
| OPT-01 BCD open collector | 1 lb | 1575 | 271.00 |

## SPECIFICATIONS

LOAD CELL . . . . . . . . 12 VDC +/- 5\%, 280 ma
(8)350 ohm load cells Remote sensing for long cable runs

ANALOG INPUT . . . . $0.6 \mu \mathrm{~V}$ to $200 \mu \mathrm{~V}$ per div
CONVERSION . . . . . .Update rate 16 times/sec 20,000 display divisions 330,000 internal divisions
ACCURACY . . . . . . . $0.01 \%$ of full scale
OUTPUT
.20ma serial loop RS232 \& 20ma serial loop or BCD * Baud 600, 1200, 2400, 4800, 9600, even 4-20ma analog * Setpoint interface * * Optional

KEYS. . . . . . . . . . . . . ZERO, NET/GROSS, TARE, CODE, M+, M-, STORE, RECALL, TOTAL, PRINT, FEED, STANDBY/OPERATE

ANNUNCIATORS . . . .Center of Zero, Motion Detection, Net/Gross, Tare Entered, kg, lb, Under, Accept, Over
DISPLAY . . . . . . . . . . Bright easy to see cobalt blue 0.5 " high 500,000 max display
Decimal point selectable Display div 1,2,5,10,20,50

POWER . . . . . . . . . . . 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 200$ watts
SIZE . . . . . . . . . . . . . .200W x 142D x 186H mm, 10 lb
Desk top or panel mount Plastic enclosure

A\&D WEIGHING DIVISION

| AD-4323 Digital Weighing Indicator |  |  |  |
| :--- | :--- | :--- | :--- |
| Includes all the latest improvements to be a successor to the reliable AD4316. Standard |  |  |  |
| functions are 17 updates/second, full RFI protection, digital filtering, DIN panel cutout, full |  |  |  |
| digital calibration, no pots, set point interface, serial current loop output. |  |  |  |

## SPECIFICATIONS

| LOAD CELL $\ldots \ldots$. | 12 VDC $+/-5 \%, 280 \mathrm{ma}$ |
| ---: | :--- |
|  | (8) 350 ohm load cells |
|  | Remote sensing for long cable runs |

ANALOG INPUT . . . . . $0.6 \mu \mathrm{~V}$ to $36 \mu \mathrm{~V}$ per div
CONVERSION . . . . . 17 times/sec display update 70/sec sample rate for internal setpoint comparison Integrating dual slope 10,000 display divisions

ACCURACY . . . . . . . .0.01\% of full scale
OUTPUT
. . . . . . . . . . .RS232 \& 20ma serial loop or BCD *
Baud 600, 1200, 2400, 4800, 9600, even
4-20ma analog *

* Optional

|  | .ZERO, TARE, GROSS/NET, PRINT, STANDBY/OPERATE |
| :---: | :---: |
| ANNUNCIATORS | Zero, MD, Net/Gross, Tare entered, lb, kg |
| DISPLAY | Bright, easy to see cobalt blue $0.5^{\prime \prime}$ high 500,000 max display Decimal point selectable Display div 1,2,5,10,20,50 |
| POWER | 120 VAC +/-10\%, 50/60Hz, 20 watts |
| SIZE | $.7 .6^{\prime \prime} \mathrm{W} \times 7.4 " \mathrm{D} \times 3.8 " \mathrm{H}, 7 \mathrm{lb}$ <br> Desk top or panel mount plastic enclosure |

## Indicators



## AD-4325A Batch Weighing Indicator

Options only for AD-4325A indicator..

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Options |  |  |  |
| AD-4342-04 Serial output/RS232, 20mA loop | 1 lb | 1445 M | 259.00 |
| AD-4325-02 Relay output | 2 lb | 1037 | 488.00 |

A\&D WEIGHING DIVISION

## AD-4327 Weighing Indicator

Service parts only for AD-4327 indicator.

| Part Number | Weight | Stock | Price A5 |
| :--- | ---: | ---: | ---: |
| Service Parts |  | A5 |  |
| JM:NJC-207-PF load cell connector | 1 lb | 642 M | $\$ 61.40$ |
| JM:NJC-207-RM connector w/flange for rear panel | 1 lb | 474 M | 24.90 |
|  |  |  |  |
| 08:C42675B Keysheet overlay AD-4327A | 1 lb | 2726 | 23.00 |
| 08:C42677A Keysheet overlay AD-4327B | 1 lb | 2727 | 23.00 |
| 08:B31449B Display overlay AD-4327B | 1 lb | 2793 | 35.00 |
| TB:662 AC adapter 120VAC | 2 lb | 1305 MB | 43.00 |



## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC +/- 5\%, 90 ma
(6)350 or (12)700 ohm load cells Remote sensing for long cable runs

ANALOG INPUT . . . . $0.2 \mu \mathrm{~V}$ to $120 \mu \mathrm{~V}$ per div
CONVERSION ..... . Update rate 5 times/sec 10,000 display divisions 40,000 internal divisions

ACCURACY . . . . . . . . $0.01 \%$ of full scale
OUTPUT . . . . . . . . . . .RS232 \& 20 ma serial loop or set points * Baud 600, 1200, 2400, 4800, 9600, even * Optional

KEYS. . . . . . . . . . . . ON/OFF, MODE, ZERO, TARE, NET/GROSS, SAMPLE, PRINT

ANNUNCIATORS . . . .MD, Zero, Gross, Net, Under, Target, Over
DISPLAY . . . . . . . . . . . . Large easy to see LCD 0.87" high 199,980 max display Decimal point selectable Display div $1,2,5,10,20,50$

POWER
(6) "C" size batteries or 120 VAC adapter, 160 hours w/alkaline cells driving a load cell.

SIZE
. . . . . . . . . . . . . . 11.00"W x $6.30 " \mathrm{D} \times 5.12^{\prime \mathrm{H}} \mathrm{H}, 10 \mathrm{lb}$
Desk top or wall mount NEMA 4 stainless steel enclosure

## Indicators



## SPECIFICATIONS

| LOAD CELL | $.5 \mathrm{VDC}+/-5 \%, 90 \mathrm{ma}$ <br> (6) 350 or (12) 700 ohm load cells Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | $0.2 \mu \mathrm{~V}$ to $375 \mu \mathrm{~V}$ per div |
| CONVERSION | .10 times/sec display update Dual slope integration 20,000 display divisions 40,000 internal divisions |
| ACCURACY | .0.01\% of full scale |
| OUTPUT | .20ma serial loop <br> Parallel BCD open collector transistor * Comparator output, open collector transistor * RS422/485 serial w/comparator output* RS232/20ma/Comp relay 100ma,50VDC* Baud 600, 1200, 2400, 4800, 9600, even * Optional |


| KEYS. | OPERATE/STANDBY, PRESET TARE, M+, MODE, NET/GROSS, ZERO, TARE, PRINT |
| :---: | :---: |
| ANNUNCIATORS | Zero, MD, Gross, Net, PT, lb, kg |
| DISPLAY | Bright red LED 14.2 mm high <br> 6 digits 7 segment <br> Decimal point selectable <br> Display div 1,2,5,10,20,50 |
| POWER | .Nominal 9VDC(6VDC to 12VDC) AC adapter 120 VAC $50 / 60 \mathrm{~Hz}$, 4 watts |
| SIZE | .6.6"W x 5 "D x 5.5 " H, 8 lb Desk top or panel mount Plastic enclosure | RS232/20ma/Comp relay 100ma,50VDC* * Optional

A\&D WEIGHING DIVISION

| AD-4329 Weighing Indicator |  |  |  |
| :--- | :---: | ---: | ---: | ---: |
| Triple ranges on weighing capacities. Standard RS232 and 20 ma current loop serial |  |  |  |
| output. 4-point digital linearization across the full span. Standard accessories included: |  |  |  |
| 2m cable for 120 VAC, load cell connector, capacity sticker, external input plug, (4) rubber |  |  |  |
| feet, current loop output plug. |  |  |  |
| NTEP 03-046 III/IIL 10,000 div |  |  |  |
| Part Number | Weight | Stock | Price C |
| Options | 1 lb | 614 | 243.00 |
| AD-4329-01 BCD output replaces standard RS232 |  |  |  |
| Service Parts | 1 lb | 642 M | 43.00 |



SPECIFICATIONS

| LOAD CELL | . 5 VDC +/- 5\%, 120 ma <br> (8) 350 ohm load cells <br> Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | . $0.2 \mu \mathrm{~V}$ per div |
| CONVERSION | Update rate 10 times/sec 20,000 display divisions 40,000 internal divisions |
| ACCURACY | . $0.01 \%$ of full scale |
| OUTPUT | .RS232 <br> 20ma serial loop <br> Baud 600, 1200, 2400, 4800, 9600, even <br> BCD * <br> Relay outputs * <br> * Optional |

(8)350 ohm load cells
(8)350 ohm load cells Remote sensing for long cable runs

Update rate 10 times/sec 20,000 display divisions 40,000 internal divisions

ACCURACY
.RS232
20ma serial loop
BCD *

* Optional

KEYS.
OPERATE/STANDBY, PRESET TARE,M+, MODE, NET/GROSS, ZERO, TARE, PRINT

ANNUNCIATORS . . . .M+, MD, Gross, Net, PT, Zero, kg, lb
DISPLAY $\qquad$ .Bright easy to see cobalt blue 0.5 " high 7 digit max display Decimal point selectable Display div 1,2,5,10,20,50

POWER . . . . . . . . . . 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 30$ watts
SIZE
.192W x 165D x 96H mm, 8 lb
7.56 " $\times 6.5$ "D $\times 3.78$ "H

Desk top or panel mount Plastic enclosure


AD-4401

## AND <br> A\&D WEIGHING DIVISION

## AD-4401 Batch Weighing Indicator

Fuzzy Logic and Automatic Free Fall Compensation. Enter setpoints through front keys or external thumbwheels. Hold and Peak Hold functions. Weigh-In and Loss-in-Weight batching. Check Weighing.

Assign up to 6 input functions from a selection of 14,
Programmable "F" function key on the front key pad of the AD-4401 may be programmed for special operation,

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-4401 Batch Weighing Indicator | 4 lb | $4083 \$ 1,365.00$ |  |
| Options |  |  | C |
| AD-4401-01 Parallel BCD output open collector | 1 lb | 4084 | 284.00 |
| AD-4401-03 RS422/485 serial output | 1 lb | 4085 | 263.00 |
| AD-4401-04 RS232C serial output | 1 lb | 4086 | 243.00 |
| AD-4401-05 Setpoint Unit | 1 lb | 4087 | $1,140.00$ |
| AD-4401-07 Analog output 4-20 ma | 1 lb | 4088 | 390.00 |

## SPECIFICATIONS

| LOAD CELL | .10 VDC +/-5\%, 230 ma (8) 350 or (16) 700 ohm load cells Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | 0.3 $\mu \mathrm{V}$ per div min |
| CONVERSION | .17 times/sec display update <br> 100/sec sample rate for internal setpoint comparison <br> Sigma Delta conversion <br> 16,000 display divisions <br> 1,000,000 internal divisions |
| ACCURACY | . $0.01 \%$ of full scale |
| OUTPUT | .20ma serial loop <br> RS232, RS422/485, 4-20ma, BCD * <br> Baud 600, 1200, 2400, 4800, 9600, O, E, N <br> 100 ingredients <br> Setpoint relays * <br> * Optional |


|  | SETPOINT, ZERO, TARE, NET/GROSS, F, ENTER, OPR/STB/ESC |
| :---: | :---: |
| ANNUNCIATORS | .Zero, MD, Gross, Net, Hold, Alarm, Final, F.Fall, Prelm, OP.PLM, Over, Under, Z.Band |
| DISPLAY | .Bright easy to see cobalt blue 13 mm high 999,950 max display <br> Decimal point selectable <br> Display div $1,2,5,10,20,50$ |
| POWER | . 120 VAC +/-10\%, 50/60Hz, 20 watts |
| SIZE | .5.67"W x 7.76"D x 2.83 "H, 4 lb Plastic enclosure, panel mount only |

A\&D WEIGHING DIVISION

## AD-4402 Batching/Network Weighing Indicator

Multiple sequences \& functions for filling, mixing, timing functions can be pre-programmed in this unit. Stores 100 sets of ingredient data, 100 sets of recipe codes. Select from 50 functions for each of 11 control inputs and 11 control outputs. 100 times per second high speed sampling. Compact DIN table or panel mounting. Standard RS485 communication for up to 32 units. Option cards for CC Link, Device Net \& Profibus.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-4402 Batching Network Indicator | 5 lb | 5521 | $\$ 2,050.00$ |
|  |  |  | C |
| Options | 1 lb | 5522 | 425.00 |
| AD-4402-01 Parallel BCD output-open collector | 1 lb | 5523 | 425.00 |
| AD-4402-02 Relay output | 1 lb | 5524 | 425.00 |
| AD-4402-03 RS422/485 serial output | 1 lb | 5525 | 425.00 |
| AD-4402-04 RS232 serial output | 1 lb | 5526 | 425.00 |
| AD-4402-05 Parallel I/O | 1 lb | 5527 | 552.00 |
| AD-4402-07 Analog 4-20ma output | 1 lb | 5528 | 740.00 |
|  | 11 lb | 5529 | $1,070.00$ |
| AD-4402-20 CC link interface | 1 lb | 5530 | $1,040.00$ |

## SPECIFICATIONS




## Indicators



## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC +/- 5\%, 60 ma
(4)350 or (8) 700 ohm load cells Remote sensing for long cable runs

ANALOG INPUT . . . . $0.2 \mu \mathrm{~V}$ per div min
CONVERSION $\qquad$ 10 times/sec display update Integrating dual slope type 40,000 display divisions 1,000,000 internal divisions

ACCURACY $\qquad$ .0.01\% of full scale
OUTPUT $\qquad$ RS232 serial
RS422/485/Relays replaces std RS232 *
RS232 w/Relays replaces std RS232 *
Baud 600, 1200, 2400, 4800, 9600, O, E, N

* Optional

KEYS. $\qquad$ CODE, SAMPLE, SET POINT, PT, TOTAL, ZERO, TARE, M+, START, STOP, FEED, MODE, NET/GROSS,ON/OFF, PRINT
ANNUNCIATORS . . . . . Stable, Net Zero, PT, Ready, M+, 1-3, HI, OK, LO

DISPLAY $\qquad$ Bright easy to see cobalt blue 13 mm high 999,950 max display
Decimal point selectable
Display div 1,2,5,10,20,50
POWER $\qquad$ $100-240$ VAC $+/-10 \%, 50 / 60 \mathrm{~Hz}, 30$ VA

SIZE $\qquad$ 10.83 "W x 4.37 "D x 6.26 "H, 6 lb

Desktop, panel, wall mount Plastic enclosure, IP65

A\&D WEIGHING DIVISION

## AD-4406 Weighing Indicator

A general purpose Weighing Indicator. 1/40,000 display resolution. Mount on table, wall or desktop. Large 1" high LCD display. Front panel is waterproof, protected to IP65.
Counting mode. Digital linearization. RS232 standard. Accumulator with auto or manual entry. Optional relay outputs or 4-20ma analog output. 3 input signals for external control. NTEP 04-034 III/IIIL 10,000 div.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-4406 Weighing Indicator | 6 lb | 6146 | $\$ 441.00$ |
| Options |  |  | C |
| AD-4406-03 RS422/485/Relays solid state AC output <br> $\quad$ Replaces standard RS232 | 1 lb | 6147 | 275.00 |
| AD-4406-05 RS232 w/Relays solid state AC output <br> $\quad$ Replaces standard RS232 | 1 lb | 6148 | 232.00 |
| AD-4406-07* Analog output 4-20 ma (replaces std RS232) | 1 lb | 6149 | 423.00 |

* Analog output card comes with its own AC adapter. When the analog output card is installed, (2) AC adapter will be used, one for the basic indicator and one for the analog output.



## Indicators



AD-4407

## AD-4407 Weighing Indicator

Stainless steel washdown industrial enclosure. 1/40,000 display resolution. Mount on table, wall or desktop. Bright blue VFD display. Front panel is waterproof, protected to IP65. RS232 standard. Counting mode. Digital linearization. Accumulator with auto or manual entry. Optional relay outputs or 4-20ma analog output.
NTEP 04-034 IIIIIIIL 10,000 div.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-4407 Weighing Indicator, SS, 0-9 keys | 8 lb | 6150 | $\$ 780.00$ |
| Options |  |  | B5 |
| AD-4407-03 RS422/485/Relays (replaces std RS232) | 1 lb | 6151 | 281.00 |
| AD-4407-05 RS232 w/Relays (replaces std RS232) | 1 lb | 6152 | 226.00 |
| AD-4407-07 Analog output 4-20 ma (replaces std RS232) | 1 lb | 6153 | 430.00 |

## SPECIFICATIONS

LOAD CELL . ....... . 5 VDC +/- 5\%, 60 ma
(4) 350 or (8) 700 ohm load cells Remote sensing for long cable runs

ANALOG INPUT . . . . $0.2 \mu \mathrm{~V}$ per div min
CONVERSION . . . . . . 10 times/sec display update Integrating dual slope type 40,000 display divisions 1,000,000 internal divisions

ACCURACY $\qquad$ $0.01 \%$ of full scale

OUTPUT $\qquad$ .RS232 serial
RS422/485/Relays replaces std RS232 * RS232 w/Relays replaces std RS232 * Baud 600, 1200, 2400, 4800, 9600, O, E, N * Optional

KEYS.
CODE, SAMPLE, SET POINT, PT, TOTAL, ZERO, TARE, M+, START, STOP, MODE, NET/GROSS,ON/OFF, PRINT, 0-9

ANNUNCIATORS . . . . . Stable, Net Zero, PT, Ready, M+, 1-3, Hi, Ok, Lo
DISPLAY . . . . . . . . . . Bright easy to see cobalt blue 13mm high 999,950 max display
Decimal point selectable Display div 1,2,5,10,20,50

POWER $\qquad$ 100-240 VAC +/-10\%, 50/60Hz, 30 VA

SIZE
. . . . . . . . . . . . . .7.83"W x 3.15 "D x $8.11^{\prime \prime} \mathrm{H}$, 8 lb
Bracket included for desktop or wall mount. SS enclosure IP65

A\&D WEIGHING DIVISION
AD-5000 Programmable Weighing Indicator
Options and service parts only for the AD-5000,
NTEP 95-040 III/IIIL 10,000 div.

| Part Number | Weight | Stock | Price C |
| :--- | :---: | :---: | ---: |
| Options |  |  | C |
| AD-5000-IR Input relay for AD-5000-255 | 1 lb | 2891 | $\$ 65.60$ |

## SPECIFICATIONS

| LOAD CELL | . 10 VDC, 240 ma <br> (8) 350 ohm load cells <br> Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | . $0.1 \mu \mathrm{~V}$ to $3.9 \mu \mathrm{~V}$ per div |
| CONVERSION | Update 60 times/sec 10,000 display divisions H44 120,000 display divisions 1,000,000 internal divisions |
| ACCURACY | .0.01\% of full scale <br> Span +/-5ppm/ deg C <br> Zero $+/-0.3 \mathrm{uV}+0.005 \%$ offset/ deg C |
| OUTPUT | ```.16 setpoints RS232,RS422,RS485,20ma loop Baud 150,300,1200,2400,4800,9600, O, E, N Setpoint relays * * Optional``` |


| KEYS. | 1-0, F1, F2, CLEAR, ENTER, ZERO, TARE, NET/GROSS, UNITS, PRINT |
| :---: | :---: |
| ANNUNCIATORS | Gross, Net, Motion, Zero, lb, kg |
| DISPLAY | Bright red 1" high w/16 bright levels |
|  | 999,990 max display |
|  | Display div 1,2,5,10,20,50 |
|  | Status:Gross, Net, Motion, Zero, lb, kg |
| POWER | 120/240 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 60$ watts |
|  | 240 VAC must be specified when ordering. |
| SIZE | .8.88"W $\times 3.63$ "D x 8.75 "H, 11 lb |
|  | Desk top or wall mount |
|  | NEMA 4 stainless steel enclosure |

## Indicators



PUE 7
Measuring Indicator

## BADWAG

PUE 7 Measuring Indicator
PUE 7: Indicators are intended for building industrial scales. Plastic housing for rack installations. 5.7" color display, touch panel and membrane keypad. Counting pieces with labeling. Dosage with recipes. KTP (CPG) for pre-packages. Two infrared proximity sensors with programmable functionality installed. Two platforms can be connected to the indicator. PUE 7 supports 1 weighing platform in standard version. Ports for barcode scanners, receipt and label printers, transponder card and readers and typical PC equipment. Window CE 6.0 operating system. Two proximity sensors. IP54. 230VAC.

PUE 7P: Indicators are intended for building industrial scales. Stainless steel housing for rack installations. 5.7" color display, touch panel and membrane keypad. Counting pieces with labeling. Dosage with recipes. KTP (CPG) for pre-packages. Two infrared proximity sensors with programmable functionality installed. Four platforms can be connected to the indicator. PUE 7 supports 1 weighing platform in standard version. Ports for barcode scanners, receipt and label printers, transponder card and readers and typical PC equipment. Window CE 6.0 operating system. Front IP66/67, whole IP32. 15VDC


| Part Number | Weight | Stock | Price C5 |
| :--- | ---: | ---: | ---: |
| PUE 7 Measuring Indicator | 3 lb | 6313 | $\$ 858.00$ |
| PUE 7P Measuring Indicator | 4 lb | 6314 | $1,298.00$ |

PUE 7P
Measuring Indicator

## SPECIFICATIONS



| KEYS | .Touch panel (8) keys |
| :---: | :---: |
| ANNUNCIATORS | .Graphic display |
| DISPLAY | .5.7" graphic display |
| POWER | .PUE7: 120 VAC PUE7P: 15 VDC |
| SIZE | .PUE7: $8^{\prime \prime W} \mathrm{~W} 5.5^{\prime \prime} \mathrm{D} \times 2.8^{\prime \prime} \mathrm{H}$ plastic enclosure IP54 |

plastic enclosure IP54
PUE7/P: 8.5 "W x 4.7 "D x $6.2 " H$
stainless steel enclosure, panel mount front IP66/67 whole IP32

## Cardinal. <br> \section*{Cardinal Scale Manufacturing Co.}

## 180 Weighing Indicator

304 stainless steel enclosure. Versatile mounting bracket for wall or desktop. 0.56 " highly visible LED. Easy operation, 6 key keypad. On demand serial data. Continuous serial data. Serial connectivity for Output to One Label/Ticket Printer or PC. Cardinal Control Ticket/Label Printing Configuration. Remote display/keypad for other Cardinal indicators. NTEP 06-105A1 III/III L 5,000 div.

| Part Number | Weight | Stock | Price A9 |
| :--- | ---: | ---: | ---: |
| 180 Indicator | 5 lb | 2097 | $\$ 327.00$ |



SPECIFICATIONS

LOAD CELL . . . . . . . 8 VDC, 240 ma
(4) 350 ohm load cells

ANALOG INPUT . . . . .1.28 $\mu \mathrm{V}$ div displayed
CONVERSION . . . . . Update 1-16 times/sec 5,000 display divisions

ACCURACY
0.01\% of full scale

OUTPUT $\qquad$ (1) Bi-directional RS232

KEYS $\qquad$ ON/OFF, ZERO, TARE, NET/GROSS, UNITS, PRINT

ANNUNCIATORS . . . . .lb, kg, oz
$\qquad$ Bright red 6 digit, 7 segment 0.56 " high LED Display div 1,2,5,10,20 x 0.1,0.01,0.001

POWER
12 VDC, 1A UL/CSA listed power supply
SIZE
5.67 "W x 9.13 "D x 2.81 " $\mathrm{H}, 2.1 \mathrm{lb}$

Desk top or wall mount 304 stainless steel enclosure Nema 1/IP40

## Indicators



## 190 Storm

 Weight Indicator

## 190 \& 190DC Storm Weight Indicator

High temp, high pressure washdown indicator. The 190 storm high impact indicator is perfect for food processing, chemical industry, pharmaceutical, and almost any harsh application environment. Thermoplastic IP69K wall or desktop mount. Unique capacitive touch keys, the keypad senses the operators finger from inside of the enclosure. Red status lamps provide a visual indication of key-presses. Colorzone checkweighing changes color automatically as the pre-assigned target weights are reached.
NTEP 10-084
Canada AM-5804
OIML pending

| Part Number | Weight | Stock | Price A9 |
| :--- | ---: | ---: | ---: |
| 190 Storm indicator AC Version | 10 lb | 7035 | $\$ 655.00$ |
| Options |  |  | A9 |
| BP190 Lithium ion battery pack | 1 lb | 7036 | 194.00 |
| Part Number | Weight | Stock | Price A9 |
| 190DC Storm indicator, includes battery pack | 11 lb | 7037 | $\$ 655.00$ |
| Options |  |  |  |
| PS190 AC adapter | 1 lb | 7038 | 101.00 |

Select one of the following cables for the use with the AC adapter.

| 190DC6 Power cable 6ft | 3 lb | 7039 | 40.00 |
| :--- | :--- | :--- | :--- |
| 190DC12 Power cable 12ft | 6 lb | 7040 | 49.00 |
| 190DC18 Power cable 18ft | 9 lb | 7041 | 69.00 |

## SPECIFICATIONS

LOAD CELL . ........ .5.18 VDC, 120 ma
(6) 350 ohm load cells

ANALOG INPUT . . . . $0.15 \mu \mathrm{~V}$ per div Non-Commercial $0.5 \mu \mathrm{~V}$ per div Commercial

CONVERSION . . . . . Update 1 to 100 times/sec selectable 10,000 display divisions NTEP 240,000 display divisions Non-Commercial

ACCURACY $\qquad$ .0.2\% full scale
OUTPUT $\qquad$ (1) RS232 bidirectional

KEYS $\qquad$ .OFF/ON, ZERO, TARE, GROSS/NET, UNITS, FUNCTION, PRINT

ANNUNCIATORS . . . .lb, kg, oz, g

DISPLAY $\qquad$ .Back lit 1" high LCD
6 digits, 7 segments

POWER $\qquad$ .110-240 VAC, 50/60Hz Power cord 190DC 10.5 to 30 VDC Power pack

SIZE
. . . . . . . . . . . . .9.4"W x 3. " "D $^{\text {D }} 6.4$ "H, lb IP69K


## 200 Weight Indicator

Panel mount digital weight indicator. Mounts to panel with side slides. Wiring connections are to screw terminals which have as a service feature a plug in terminal block. 3/16 DIN panel mount cutout. (2) RS232 serial ports. Aluminum housing. 120 VAC.
NTEP 01-011 III/III L 10,000 div.
Canada AM 5397

| Part Number | Weight | Stock | Price A9 |
| :--- | ---: | ---: | ---: |
| 200 Indicator, panel mount | 7 lb | 5265 | $\$ 783.00$ |
| Options |  |  |  |
| 2XX-DAC 4-20ma output | 1 lb | 3177 M | 306.00 |

## SPECIFICATIONS

| SPECIFICATIONS |  |
| :---: | :---: |
| LOAD CELL . . . . . . . . 12 VDC, 120 ma <br> (8) 350 ohm load cells <br> Remote sensing for long cable runs <br> ANALOG INPUT . . . . . $0.5 \mu \mathrm{~V}$ per div | KEYS . . . ............. ZERO, UNITS, PRINT, OVER, UNDER <br> ANNUNCIATORS $\qquad$ .MOTION, ZERO, LB, KG, G, OZ, LB/OZ, UNDER, ACCEPT, OVER, MOTION, NEGATIVE, ZERO |
| CONVERSION ...... Update 20 times/sec 10,000 display divisions NTEP | DISPLAY . . . . . . . . . . 6 Bright red $0.56 "$ high LED $100,000 \mathrm{max}$ |
| ACCURACY ..........0.01\% of full scale | POWER ........... 120 VAC +/-10\%, 50/60Hz, 60 watts |
| $\begin{aligned} & \text { OUTPUT } \text {. . . . . . . . . . (2) RS232 bidirectional } \\ & \text { Baud } 150,300,1200,2400,4800,9600, ~ O, ~ E, ~ N ~\end{aligned}$ |  |

## Indicators

## Cardinal Scale Manufacturing co.



204 Weight Indicator
Stainless steel digital weight indicator. Units selectable are lb, kg, g. AC or battery power. with auto shutoff and sleep mode to save battery life. RS232 serial port. Stainless steel enclosure is not washdown. 120 VAC or (6) C cell batteries. NTEP 02-016, III, 5,000 div

| Part Number | Weight | Stock | Price A9 |
| :--- | ---: | ---: | ---: |
| 204 Indicator | 10 lb | 5266 | $\$ 470.00$ |
| Service Parts |  |  | A5 |
| $6800-1045$ AC adapter | 1 lb | 5069 | 77.00 |

204

## SPECIFICATIONS

LOAD CELL $\ldots \ldots \ldots$. $10 \mathrm{VDC}, 120 \mathrm{ma}$

(4) 350 ohm load cells
Remote sensing for long cable runs

| KEYS | .ZERO, TARE, NET/GROSS, UNITS, *, PRINT, ON/OFF |
| :---: | :---: |
| ANNUNCIATORS | .MOTION, ZERO, LB, KG, G, OZ, MOTION, NEGATIVE, ZERO |
| DISPLAY | .LCD 1" high 6 digits 100,000 max |
| POWER | 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}$, 6 watts or (6) C cell batteries. |
| SIZE | $.8 " W \times 2-1 / 8 " D \times 6-5 / 8 " H, 10 \mathrm{lb}$ U bracket for desk top or wall mount NEMA 4 stainless steel enclosure,IP55 |

## 205 Weight Indicator

Digital weight indicator. Units are $\mathrm{lb}, \mathrm{lb}-\mathrm{oz}, \mathrm{oz}, \mathrm{T}, \mathrm{kg}, \mathrm{g}, \mathrm{t}$, custom. Auto shut off and sleep modes, push button tare, gross, tare, net selection, accumulator, gross and net, adjustable filtering, selectable lock out, four input lines. (2) RS232 serial ports. Stainless steel enclosure. 120 VAC.
NTEP 01-011, III/IILL, 10,000 div

| Part Number | Weight | Stock | Price A9 |
| :--- | ---: | ---: | ---: |
| 205 Indicator | 12 lb | 5268 | $\$ 645.00$ |
|  |  |  |  |
| Options | 1 lb | 3177 M | 306.00 |
| 2xx-DAC 4-20 ma output | 1 lb | 3509 M | 206.00 |
| RB3 Relay box w/ 3 relays | 1 lb | 3594 M | 376.00 |
| RB9 Relay box w/ 9 relays |  |  |  |
|  | 1 lb | 7001 M | 347.00 |
| 2XX-IP Serial to Ethernet | 1 lb | 7002 M | 103.00 |
| 2XX-Panel mount kit | 1 lb | 7004 M | 80.00 |
| 2XX-BAT kit for 205 210 |  |  |  |
|  |  |  | C |
| Service Parts | 1 lb | 4584 | 591.00 |
| 8200-D201-0A mainboard | 1 lb | 4585 | 93.30 |



## SPECIFICATIONS

LOAD CELL . . . . . . . . 10 VDC, 120 ma
(8) 350 ohm load cells Remote sensing for long cable runs

ANALOG INPUT . . . . $0.3 \mu \mathrm{~V}$ per div
CONVERSION
.... . Update 1 to 100 times/sec 10,000 display divisions NTEP 240,000 divisions non NTEP

ACCURACY $\qquad$ $.0 .01 \%$ of full scale
OUTPUT $\qquad$ .RS232 bidirectional RS232 output only Baud 150,300,1200,2400,4800,9600, O, E, N

KEYS . . . . . . . . . . . .ZERO, UNITS, PRINT, OVER, UNDER
ANNUNCIATORS . . . ZERO, STABLE, TARE, GROSS, NET, Ib, oz, kg, g, t, T, lo bat

DISPLAY . . . . . . . . . . Bright red 0.6" high LED 6 digits 100,000 max

POWER . . . . . . . . . . 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 60$ watts
SIZE . . . . . . . . . . . . . .9"W x 2.75"D x 7"H, 12 lb
U bracket for desk top or wall mount NEMA 4 stainless steel washdown enclosure IP66

## Indicators

SPECIFICATIONS

LOAD CELL . . . . . . . . 10 VDC, 120 ma
(8) 350 ohm load cells

Remote sensing for long cable runs
ANALOG INPUT . . . . . $0.5 \mu \mathrm{~V}$ per div
CONVERSION $\qquad$ Update 1 to 100 times/sec
10,000 display divisions NTEP
240,000 divisions non NTEP
ACCURACY $\qquad$ . $0.01 \%$ of full scale
OUTPUT $\qquad$ RS232 bidirectional
RS232 output only
Baud 150,300,1200,2400,4800,9600, O, E, N

| KEYS | .ZERO/REVIEW, TARE, NET/GROSS, TARE, UNITS/TEST, ON/OFF, COUNT/SAMPLE, TIME/DATE, PRESET, PRINT, 0-9 NUMERIC KEYPAD, ENTER |
| :---: | :---: |
| ANNUNCIATORS | .ZERO, STABLE, TARE, GROSS, NET, Ib, oz, $\mathrm{kg}, \mathrm{g}, \mathrm{t}, \mathrm{T}$, lo bat, PWC1/under, PWC2/accept, PWC3/over |
| DISPLAY | .Bright red 0.56 " high LED 6 digits 100,000 max |
| POWER | . 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 60$ watts |
| SIZE | .9"W x 2.75 "D x 7"H, 12 lb <br> U bracket for desk top or wall mount NEMA 4 stainless steel washdown enclosure IP66 |

## JCardinal. <br> \section*{Cardinal Scale Manufacturing Co.}

## 210FE Weight Indicator

Digital weight indicator. Gross, tare, net selection. Units are lb, lb-oz, oz, T, kg, g, t, custom. Numeric keypad, piece count, checkweighing, (3) preset weight comparators, time/date in 12 or 24 hour format. (2) RS232 serial ports. Fiberglass enclosure. 120 VAC.
NTEP 01-011, III/IIIL, 10,000 div

| Part Number | Weight | Stock | Price A9 |
| :--- | ---: | ---: | ---: |
| 210FE Indicator | 7 lb | $5270 \$ 1,793.00$ |  |



SPECIFICATIONS

| LOAD CELL | 10 VDC, 120 ma <br> (8) 350 ohm load cells <br> Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | . $0.5 \mu \mathrm{~V}$ per div |
| CONVERSION | Update 1 to 100 times/sec 10,000 display divisions NTEP 240,000 divisions non NTEP |
| ACCURACY | . $0.01 \%$ of full scale |
| OUTPUT | .RS232 bidirectional RS232 output only Baud 150,300, 1200, 2400,4800,9600, O, E, N |


| KEYS | ZERO, UNITS, PRINT, OVER, UNDER |
| :---: | :---: |
| ANNUNCIATORS | .ZERO, STABLE, TARE, GROSS, NET, Ib, oz, kg, g, t, T, lo bat, PWC1/under, PWC2/accept, PWC3/over |
| DISPLAY | . $3^{\prime \prime}$ high transflective LCD display with photo detector controlled back lighting 6 digits 100,000 max |
| POWER | . 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 60$ watts |
| SIZE | .9"W x 2.75 "D x 7"H, 7 lb U bracket for desk top or wall mount NEMA 4 fiberglass enclosure IP66 |

## Indicators



## SPECIFICATIONS

| LOAD CELL | .12 VDC, 120 ma <br> (14) 350 ohm load cells <br> Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | $0.5 \mu \mathrm{~V}$ per div |
| CONVERSION | .Update 1 to 200 times/sec selectable 10,000 display divisions NTEP 100,000 divisions non NTEP |
| ACCURACY | .0.01\% of full scale |
| OUTPUT | (3) RS232 bidirectional RS232 output only 20 mA 8 remote inputs 16 control outputs |

KEYS $\qquad$ . 60 Key keypad with QWERTY keys plus four soft keys and 13 function keys
ANNUNCIATORS . . . ZERO, ID, MEM, STABLE, ACCUM, MAX, OVER, UNDER, ACCEPT

DISPLAY . . . . . . . . . . $240 \times 64$ pixel monochrome graphics LCD with white LED backlight

POWER . . . . . . . . . . 230 VAC, $50 / 60 \mathrm{~Hz}$
SIZE . . . . . . . . . . . . . 12.95"W x 4.64"D x 9.87"H, 8 lb U bracket for desk top or wall mount NEMA 4 stainless steel enclosure IP66

## Cl-2001 Weight Indicator

Weighing indicator with an extremely small package size. Full duplex RS232 serial port. ABS plastic enclosure and optional stainless steel enclosure. Stainless Steel swivel stand. 120 VAC adapter is included.
Canadian AM 5269
NTEP 98-103 III 5,000 div

| Part Number | Weight | Stock | Price D9 |  |
| :--- | :--- | ---: | ---: | ---: |
| ABS case |  |  |  |  |
| CI-2001A Indicator w/red LED display |  | 4 lb | 3669 | $\$ 325.00$ |



CA01-12A-0102 Eprom for $\mathrm{Cl}-2001 \mathrm{~A}$ for Canada
CA01-12AS-0102 Eprom for $\mathrm{Cl}-2001 \mathrm{AS}$ for Canada
CA01-12B-0102 Eprom for $\mathrm{Cl}-2001 \mathrm{~B}$ for Canada
3012 No Charge
1 lb 6198 No Charge
1 lb 3427 No Charge
Note: The above Eproms will comply with Canadian Weights \& Measures.
The push button ZERO will only work when less than $4 \%$ of capacity.

## Service Parts

AC adapter 120 VAC to 12 VDC

| 1 lb | 3862 | 34.30 |
| :--- | :--- | :--- |
| 1 lb | 3863 | 14.30 |
|  |  |  |
| 1 lb | 3864 | 10.00 |
| 1 lb | 3865 | 10.00 |
| 1 lb | 3866 | 10.00 |





## Cl-200 Cas indicators

Cl-200A: Nema 12 plastic enclosure. Numeric keypad. Units: lb/kg. Accumulation mode. Keyboard tare. Password protected. Hi/lo alarm. Multi-point calibration. Time and date. Weight back-up. Dual range capabilities.

CI-201A: Nema 12 plastic enclosure. Numeric keypad. Units: lb/kg. Accumulation, Counting, Percent modes. Keyboard tare. Password protected. Hi/lo alarm. Multi-point calibration. Time and date.
Weight back-up. Dual range capabilities.
CI-200A-DB: Nema 12 plastic enclosure. Numeric keypad. Units: lb/kg. Keyboard tare. Password protected. Hi/lo alarm. Multi-point calibration. Time and date. Weight backup. Dual range capabilities.

CI-201A-DB: Nema 12 plastic enclosure. Numeric keypad. Units: lb/kg. Keyboard tare. Password protected. Hillo alarm. Multi-point calibration. Time and date. Weight backup. Dual range capabilities.

CI-200S: Stainless steel 304 IP67 enclosure. Numeric keypad. Units: Ib/kg. Keyboard tare. Password protected. Hi/lo alarm. Multi-point calibration. Time and date. Weight back-up. Dual range capabilities.

CI-200SC: Stainless steel 304 IP67 enclosure. Numeric keypad.
Units: lb/kg. Keyboard tare. Password protected. Hi/lo alarm. Multi-point calibration. Time and date. Weight back-up. Dual range capabilities.
NTEP 11-026 III 10,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| CI-200A w/ LED display, AC/Rechargeable battery | 4 lb | 6704 | $\$ 295.00$ |
| CI-201A w/ LCD display, AC/Rechargeable battery | 4 lb | 6705 | 295.00 |
|  |  |  |  |
| CI-200A-DB w/ LED display, AC/Dry battery | 4 lb | 6706 | 295.00 |
| CI-201A-DB w/ LCD display, AC/Dry battery | 4 lb | 6707 | 295.00 |
| CI-200S w/ LED display, AC/Rechargeable battery | 6 lb | 6708 | 395.00 |
| CI-200SC w/ LED display, AC/Dry battery | 6 lb | 6709 | 425.00 |

## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC, 120 ma
(8) 350 or (16) 1000 ohm load cells

ANALOG INPUT . . . . . $0.2 \mu \mathrm{~V}$ per division

CONVERSION . ..... 80 updates per sec
10,000 div NTEP

ACCURACY . . . . . . . $0.01 \%$ of full scale

OUTPUT
(2) RS232C communication ports

| KEYS | 0-9, F1, F2, Print, Tare, Power, On/Off |
| :---: | :---: |
| ANNUNCIATORS | .Over, Under, Accept |
| DISPLAY | .LCD: CI-201A w/ adjustable backlight, CI-201A-DB <br> LED: CI-200A, CI-200A-DB, CI-200S/SC |
| POWER | .115V AC adapter and battery |
| SIZE | .ABS plastic: 9.1 "W x $6.5 " \mathrm{H} \times 3.6$ " D Stainless steel: $9.8^{\prime \prime} \mathrm{W} \times 7.6^{\prime \prime} \mathrm{H} \times 3.3^{\prime \prime} \mathrm{D}$ Desktop or wall mount included |

## X320 Washdown Indicator

Manufactured with high tech composite alloy. Highest environmental rating IP69K/68. Impact resistant. Encapsulated components. Capacitive keyboard technology: knife, scissor and sharp tool proof. Checkweighing annunciators. Lb/oz/g unit switchable or fixed lb/oz/kg/g/ton.
NTEP 11-050

| Part Number | Weight | Stock | Price B7 |
| :--- | ---: | ---: | ---: |
| X320 Washdown Indicator w/ wall/desk mount 90-240 VAC | 5 lb | 6714 | $\$ 725.00$ |
| X320B Washdown Indicator w/ battery/wall mount | 6 lb | 6715 | 975.00 |
|  |  |  |  |
| Options | 1 lb | 6716 | 135.00 |
| C0080 RS232 to RS485 converter | 1 lb | 6717 | 135.00 |
| C0081 20mA converter | 1 lb | 6718 | 69.00 |
| A10012 cable, serial link, USB |  |  |  |
|  | 1 lb | 6719 | 295.00 |
| C0200 Bluetooth serial adapter single master end | 1 lb | 6720 | 295.00 |
| C0201 Bluetooth serial adapter siggle slave end | 1 lb | 6721 | 295.00 |
| C0202 Bluetooth serial adapter multi-roam master end | 1 lb | 6722 | 295.00 |
| C0203 Bluetooth serial adapter multi-roam slave end |  |  |  |
|  |  |  |  |
| Service Parts | 1 lb | 4976 | 166.00 |



Service Parts
0113 AC adapter 90-240VAC

## SPECIFICATIONS

| LOAD CELL | .(4)350 or (8)700 ohm load cells |
| :---: | :---: |
| ANALOG INPUT . . . . $0.25 \mu \mathrm{~V}$ per division |  |
| CONVERSION | .Update 20 times/sec |
|  | 30,000 display divl |
|  | 8,388,608 internal div |
|  | 24 bit A/D |
| ACCURACY . . . . . . . $0.02 \%$ full scale |  |
| OUTPUT | .RS232 communication port |
|  | 2400, 4800, 9600 baud (3) set point outputs |


| KEYS | .POWER, ZERO, TARE, GROSS, NET, PRINT, FUNCTION |
| :---: | :---: |
| ANNUNCIATORS | Over, pass, under |
| DISPLAY | 6 digits, $0.8^{\prime \prime}$ high LCD LED backlit |
| POWER | AC Power, 110/240V AC adapter <br> 12V DC 1.2A/ battery <br> 12V battery pack, rechargeable NiMH |
| SIZE | $\text { .9.8"W x } 6.4^{\prime \prime D} \times 4.7^{\prime \prime} \mathrm{H}$ <br> IP69K <br> Stainless steel wall/desktop mount |

## Indicators



## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC, 50 ma
(4)350 or (8)700 ohm load cells Remote sense for long cables

ANALOG INPUT . . . . $0.3 \mu \mathrm{~V}$ per division
CONVERSION . . . . . 15 updates/second
10,000 division display NTEP
80,000 division display, Industrial 500,000 division internal

ACCURACY . . . . . . . $0.01 \%$ full scale
OUTPUT
. . . . . . . . . .RS232 duplex
RS232 simplex
RS485, RS422, 20ma serial loop *
Baud 600, 1200, 2400, 4800, 9600, 19,200
Time \& date

* Optional

KEYS

ANNUNCIATORS . . . .Zero, Motion, Net, lb, kg, Total
DISPLAY . . . . . . . . . . .Bright red LED 0.8" high 6 digits $(199,999)$
Decimal location selectable
Div 1, 2, 5, 10, 20, 50
POWER . . . . . . . . . . 115 VAC +/-10\%,60Hz 5 watts
230 VAC unit available 12 VDC, 24VDC, 26VDC unit available Optional NiCad batteries

SIZE
8.75 "W x 3.5 "D x 5.25 "H, 5 lb

Stainless steel enclosure

## NEMA 4

Desk top or wall mount
Optional panel mount

Genuine Quality, Proven Performance.

| UMC555 Digital Weight Indicator |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Spare parts only for UMC555 indicators. |  |  |  |  |
| Part Number | Weight | Stock | Price C |  |
| Service Parts | 1 lb | 578 | $\$ 51.60$ | Sep |



UMC555

## SPECIFICATIONS




## Indicators



UMC600 Digital Weight Indicator
Service Parts Only for UMC600 indicators.
NTEP 00-004 III/IIIL 10,000 div

| Part Number | Weight | Stock | Price C7 |
| :--- | ---: | ---: | ---: |
| Options |  |  | C |
| KBT7116-5 Panel mounting kit | 1 lb | 594 | $\$ 83.30$ |
| KBT7116-13 RS422/RS485 output |  | 531 | 350.00 |
|  | 1 lb | 1595 | 491.00 |
| KBT7116-11 Solid State Relay option board AC only |  |  |  |
| $\quad$ 20VAC to 120VAC, 5ma to 1 amp | 1 lb | 1475 | 416.00 |
| KBT7116-12 Dry Contact Relay option board DC only |  |  |  |
| $\quad$ 100VDC max, 0.5 amps max, 10 VA max | 1 lb | 3997 | 491.00 |
| KBT7116-17 Analog output chips 0-10VDC or 4-20ma |  |  |  |
| $\quad$ Requires KBT7116-16 | 1 lb | 2439 | 50.00 |
| KBD7431A Solid state relay |  |  |  |
|  | 1 lb | 1070 M | 23.40 |
| Service Parts | 1 lb | 243 | 483.00 |
| MS3106A-14S-6S load cell connector 6 sockets w/collar | 1 lb | 964 | 75.00 |
| KGV8924-2 display assembly LED |  |  |  |
| KHK7237 Front panel overlay | 1 lb | 3985 | 50.00 |
|  | 3 lb | 612 | $1,006.00$ |
| KMK7237B Display Lens Red | 3 lb | 963 | 150.00 |

## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC battery unit will drive (4)350 or (8)700 ohm load cells AC unit is 10 VDC will drive (8)350 ohm load cells.

ANALOG INPUT . . . . . $0.3 \mu \mathrm{~V}$ per div
CONVERSION . . . . . 10 updates per sec 20 ms integration time 80,000 display div 100,000 internal div
ACCURACY
0.01\% full scale

OUTPUT
.(2)20ma serial loop or 5VDC RS232
Baud 300, 600, 1200, 2400, 4800, 9600, odd 2 setpoints w/preact \& dribble

KEYS $\qquad$ .ZERO, NET/GROSS, TARE, lb/kg CONV, PRINT, 1 SET POINT, 2 SET POINT, TARE RECALL

ANNUNCIATORS . . . .Zero, Net, Gross, lb, kg, Motion
DISPLAY . . . . . . . . . . . 0.56 " LED or LCD
6 digit 999999
Decimal point selectable Division 1,2,5,10
POWER . . . . . . . . . 115 VAC $+/-10 \%, 50 / 60 \mathrm{~Hz}, 6$ watts
SIZE . . . . . . . . . . . . .9"W x 4"D x 6"H, 13 lb
NEMA 4 stainless steel enclosure

## doran

## DS100 Weight Indicator

Adaptable and economically priced, the DS100 includes many features found on much higher priced indicators. U bracket mount for table wall or shelf. Weighing units: lb, kg, g, oz, lb/oz. 1 year warranty.
NTEP 05-061 Class III 5,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| DS100 Weight indicator | 4 lb | 3689 | $\$ 320.00$ |
| BS |  |  | B5 |
|  | 5 lb | 7230 | 350.00 |
|  |  |  |  |
| Service Parts | 1 lb | 3779 | 57.10 |
| XFR0035 Wall mount transformer 115VAC | 1 lb | 3796 | 71.50 |
| SWI0147 Touch Panel DS100-3M |  |  |  |

## SPECIFICATIONS

LOAD CELL . . . . . . . . 10 VDC, 120 ma
(4) 350 ohm load cells

ANALOG INPUT . . . . $0.5 \mu \mathrm{~V}$ to $3.9 \mu \mathrm{~V}$ per div
CONVERSION ...... Update 20 times/sec 5,000 display divisions NTEP

ACCURACY . . . . . . . $0.01 \%$ of full scale
OUTPUT $\qquad$ .RS232 bidirectional

KEYS
GROSS/NET, TARE, ZERO/ON/OFF, UNITS, PRINT

ANNUNCIATORS . . . .LB, KG, G, OZ, NET, ZERO, BATT, MOT
DISPLAY . . . . . . . . . . .Bright red 0.56 " high LED
6 digits
POWER $\qquad$ . 115 VAC, 60Hz, Transformer, UL/ULc (230 VAC Optional)

SIZE
.7.5"W x 2"D x 4.25"H, 4 lb
U bracket for table, wall or shelf mount

## Indicators



## 2200 Process and batch Indicators

Flexibility, simplicity and easy to use saving you time and money. Full function keypad allows for simple entry of digital tare, time and date, accumulator eight product ID's, eight setpoint outputs. Start, stop and pause batching processes with color coded Start and Stop keys. Standard software features such as programmable data communication, multiple ID numbers, accumulator, counter and learning preacts. Configure batching routines of up to 100 steps incorporating 35 commands with Point and Click, with the free Windows based Dimension Software. Two standard RS-232 ports. Two year parts and labor warranty. 6 "H x $10 " \mathrm{~W} \times 3$ "D.
NTEP 06-101 10,000d Class III

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 2200 | 9 lb | 7207 | $\$ 750.00$ |
| Service Parts |  |  |  |
| SUB0635 Touch panel 2200 | 1 lb | 1017 | 98.00 |



## doran

## 4300M Over-Accept-Under Weighing Indicator

Over-Accept-Under Weighing Indicator. U bracket for mounting on table, wall or under shelf. Bright blue VFD display. Front panel is waterproof, protected to IP65. RS232 standard. (6) built in print formats. Optional RS485 output. Optional remote switch NTEP 97-038 III 10,000 div.

| Part Number | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: |
| 4300M Check Weigh Indicator | 12 lb | 6216 MB | $\$ 740.00$ |
|  |  |  | C |
| Service Parts | 1 lb | 6219 | 646.00 |
| PCA0415 Main board 4300M (4)screws | 1 lb | 6201 | 579.00 |
| PCA0410 Mainboard enhanced 7XL/4300 | 1 lb | 6220 | 186.00 |
| 4300-006 Key sheet for old tower version | 1 lb | 6265 | 126.00 |
| SUB0566 Key sheet w/4 screws on back | 1 lb | 6328 | 120.00 |
| SUB0860 Key sheet w/12 scres on back |  |  |  |



## SPECIFICATIONS

| LOAD CELL | . 10 VDC, 120 ma <br> (4) 350 ohm load cells <br> Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | . $0.5 \mu \mathrm{~V}$ to $3.9 \mu \mathrm{~V}$ per div |
| CONVERSION | Update 20 times/sec 10,000 display divisions NTEP |
| ACCURACY | .0.01\% of full scale <br> Span +/-5ppm/ deg C <br> Zero $+/-0.3 \mathrm{uV}+0.005 \%$ offset/ deg C |
| OUTPUT | RS232 bidirectional <br> RS485 * <br> Baud 150,300,1200,2400,4800,9600, O, E, N <br> * Optional |


| KEYS | .ZERO, UNITS, PRINT, OVER, UNDER |
| :---: | :---: |
| ANNUNCIATORS | .MOTION, ZERO, LB, KG, G, OZ, LB/OZ, UNDER, ACCEPT, OVER, MOTION, NEGATIVE, ZERO |
| DISPLAY | .Bright red 0.56 " high LED 6 digits 100,000 max |
| POWER | . 120 VAC +/-10\%, $50 / 60 \mathrm{~Hz}, 60$ watts |
| SIZE | $.12^{\prime \prime} \mathrm{W} \times 3.25^{\prime \prime} \mathrm{D} \times 8.75$ "H, 12 lb <br> U bracket for desk top or wall mount <br> NEMA 4 stainless steel enclosure |




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## doran

## 7000XL Stainless Steel Indicator

Rugged 304 Washdown Safe Stainless Steel construction. Displays Weight In lb, kg, oz, g or lb \& oz. Front panel keys: ZERO, PRINT, UNITS. 120 VAC, 60 Hz . Indicator 6" x $10^{\prime \prime} \times 3$ " 10 lb .
Canadian approval AM-5347
NTEP 99-129 III 10,000

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 7000XLM Digital Indicator | 10 lb | 3632 MB | $\$ 715.00$ |
|  |  |  |  |
| Service Parts | 1 lb | 4053 | 186.00 |
| SWIO066 Touch Panel for 7000XLM | 1 lb | 4106 | 126.00 |
| SUB0427 Touch Panel for 7000XLS | 2 lb | 2461 M | 415.00 |
| SUB0568 Main Board 7000/7000XL |  |  |  |




## Indicators



GSE 350


GSE-350 Zinc

| 350 Weight Indicators - GSE |  |  |  |
| :--- | :---: | ---: | ---: |
| Service parts only for 350 indicators. | Weight | Stock | Price A3 |
| Part Number |  |  | A3 |
| Options | 2 lb | 4048 | $\$ 80.00$ |
| 24350B-302C0 Swivel bracket for SS enclosure | 5 lb | 4125 | 315.00 |
| 24350B-121B1 Rechargeable battery, SS enclosure | 5 lb | 4160 | 260.00 |
| 24350B-120B1 Rechargeable battery, zinc enclosure |  |  |  |
|  | 1 lb | 5238 | 345.00 |
| 24350B-204B0 Analog output, SS enclosure | 1 lb | 5730 | 215.00 |
| Output relay module with option bracket | 1 lb | 5731 | 315.00 |
| Analog output module only, zinc enclosure |  |  |  |
|  |  | 1 lb | 465 |
| Service Parts | 1 lb | 3715 | 567.00 |
| Main board for GSE-350 stainless steel | 1 lb | 3711 | 181.00 |
| 31-70-35578 Durashield in use cover |  |  |  |
| 420893-35320 LED display board |  |  |  |

660 \& 665 Weight Indicator - GSE
Options and service parts only for 660 \& 665

| Part Number | Weight | Stock | Price A2 |
| :--- | ---: | ---: | ---: |
| Options |  | A2 |  |
| 420916-36371 GSE-665 database board | 2 lb | 7020 | 260.00 |
| 420920-36408H GSE-660 main board | 1 lb | 7102 | $1,516.00$ |
| 24660B-002MO 2MB RAM | 1 lb | 4170 | 355.00 |
|  |  |  |  |
| 24660B-130AO AC Output 240V | 1 lb | 4174 | 205.00 |
| 24660B-132AO AC I/O 240V | 1 lb | 4176 | 205.00 |
|  |  |  | A2 |
| 24660B-200BO multiscale card | 1 lb | 4935 | 350.00 |
| 24660B-41JC0 Ethernet Option Kit 60 Series | 1 lb | 4172 | 465.00 |
|  |  |  |  |
| Service parts | 1 lb | 4932 | 352.00 |
| 07-15-43804 LCD display 562/662 | 11 lb | 4915 | 498.00 |
| 07-15-43645 LCD replacement M663/665 | 1 lb | 4902 | 199.00 |

## SPECIFICATIONS

LOAD CELL . . . . . . . . 10 VDC
(6) 350 ohm load cells

ANALOG INPUT . . . . . 0.1 to $20 \mathrm{mV} / \mathrm{V}$
CONVERSION . . . . . Updates 60 times/second
10,000 display div (NTEP) 100,000 display div, industrial

ACCURACY . . . . . . . $0.01 \%$ of full scale
OUTPUT $\qquad$ RS232 bi-directional output
Baud 150, 300, 600, 1200, 2400, 4800, 9600
RS484 serial output (replaces RS232) *
0-10V, 0-20 mA, 4-20mA analog output *
3 solid state relay module (mounts internally)*

* Optional

| KEYS | ZERO/CLR, PRINT, UNITS, TARE, SELECTION/ON |
| :---: | :---: |
| ANNUNCIATORS | .lb, kg, Neg, Mot, Zero, Gross, Net, Quantity, Setpoint 1, 2, 3 |
| DISPLAY | .LED display $22 \mathrm{~mm} 0.8^{\prime \prime}$ high 6 digit 999,990 display Decimal point selectable |
| POWER | .Stainless steel: 120 (85-265) VAC $60(47-440) \mathrm{Hz}$, internal transformer Zinc die cast: 120 VAC, 60 Hz AC adapter Optional battery: 120 VAC or 12-36 VDC |
| SIZE | 7.83"W x 2.65 "D x 5.75 " $\mathrm{H}, 7 \mathrm{lb}$ |

## 460 \& 465 Weight Indicators - GSE

Service parts only for 460 \& 465 indicators.

| Part Number | Weight | Stock | Price A2 |
| :--- | ---: | ---: | ---: |
| Service Parts for 460 |  |  | A2 |
| 31-70-35255 In use cover for GSE 460 | 1 lb | 4409 | 30.00 |
| 420912-36341H Mainboard for GSE 460 | 1 lb | 4067 | 993.00 |
| 420949-37695 Keypad for GSE-460 | 1 lb | 4009 | 102.00 |
|  |  |  |  |
| 07-12-25500 display board foor GSE 460/465 | 1 lb | 5753 | 264.00 |
| 24660B-203BO Analog output | 1 lb | 4089 | 450.00 |
| 44-70-37823 splash guard | 1 lb | 4001 | 25.00 |
|  |  |  |  |
| 31-70-35319 Dura shield M465 M56X M66X | 1 lb | 4016 | 30.00 |
| 22-30-31157 ribbon cable | 11 lb | 4019 | 39.00 |
| 421020-425336 Keyboard M465 | 1 lb | 4029 | 186.00 |



## SPECIFICATIONS

LOAD CELL . ........ 10 VDC
(12)350 ohm load cells

ANALOG INPUT . . . . . $0.4 \mu \mathrm{~V}$ to $1.0 \mu \mathrm{~V}$ per div (NTEP)
CONVERSION ...... Update 10 times/sec 10,000 display div (NTEP) 100,000 display div, industrial

ACCURACY . . . . . . . $0.01 \%$ of full scale
OUTPUT $\qquad$ .RS232 bi-directional output Baud rate 150-58,300 bps

| KEYS. . . . . . . . . . . . . 460: ZERO, PRINT, UNITS, TARE,SELECT |  |
| :--- | :--- |
|  | 465: ZERO, PRINT, UNITS, TARE, SELECT, |
|  | ENTER, SCALE SELECT, CLEAR, 1 |

460: ZERO, PRINT, UNITS, TARE,SELECT位. ZERO, PRINT, UNIT, TARE, SELECT, ENTER, SCALE SELECT, CLEAR, 1 FUNCTION, TARGET, ID, 0-9

ANNUNCIATORS . . . .Zero, Stable, Gross, Net, lb, kg, g, oz
DISPLAY . . . . . . . . . . Vacuum fluorescent display
Primary $0.75^{\prime \prime}$ high 6 digit
Secondary 10 character dot matrix VFD atus indication Decimal point selectable

ACCURACY ......... $0.01 \%$ of full scale
POWER
.90-250 VAC @ 0.5 amp 10-28 VDC @ 20W (Optional)

465: $11^{\prime \prime W} \times 2.4^{\prime \prime} \times 9$ " $\mathrm{H}, 6.5 \mathrm{lb}$

## Indicators



SBI-505 Brecknell Indicator

| Part Number | Weight | Stock | Price C5 |
| :--- | ---: | ---: | ---: |
| SBI-505 |  |  |  |

SBl-505 $4 \mathrm{lb} \quad 4965$ \$ 310.00

SBI-505

## SPECIFICATIONS

| LOAD CELL | . 10 VDC <br> (6)350 ohm load cells |
| :---: | :---: |
| ANALOG INPUT | . 0.1 to $20 \mathrm{mV} / \mathrm{V}$ |
| CONVERSION | Updates 60 times/second <br> 10,000 display div (NTEP) <br> 100,000 display div, industrial |
| ACCURACY | . $0.01 \%$ of full scale |
| OUTPUT | .RS232 bi-directional output <br> Baud 150, 300, 600, 1200, 2400, 4800, 9600 <br> RS484 serial output (replaces RS232) * <br> $0-10 \mathrm{~V}, 0-20 \mathrm{~mA}, 4-20 \mathrm{~mA}$ analog output * <br> 3 solid state relay module (mounts internally)* <br> * Optional |

* Optional

| KEYS | .ZERO/CLR, PRINT, UNITS, TARE, SELECTION/ON |
| :---: | :---: |
| ANNUNCIATORS | .lb, kg, Neg, Mot, Zero, Gross, Net, Quantity Setpoint 1, 2, 3 |
| DISPLAY | .LED display $22 \mathrm{~mm} 0.8^{\prime \prime}$ high 6 digit 999,990 display Decimal point selectable |
| POWER | .Stainless steel: 120 (85-265) VAC 60 (47-440) Hz, internal transformer Zinc die cast: 120 VAC, 60 Hz AC adapter Optional battery: 120 VAC or 12-36 VDC |
| SIZE | .7.83"W x 2.65 " ${ }^{\text {c }} 5.75$ " $\mathrm{H}, 7 \mathrm{lb}$ |

SIZE .7.83"W x 2.65 "D x 5.75 "H, 7 lb

## Avery Weigh-Tronix

## Avery Weightron

ZM400 series indicators are IP69K certified, 304 brushed stainless steel. Designed for long service foin extreme condition, including corrosive environments and frequent heavy washdown, they are available in desk, wall or coloumn mount versions. The ZM400 features six operational keys, imcluding Zero, Print, Units, Tare, Select and F1. Built-in operation rotuines or applications can be configured at the time of installation, tailored to your requirements. Multi-scale input, ethernet port, two RS232 serial interface ports, USB host port facilities. DeviceNet, Profibus, Analog output, USB device, Current Loop, RS485/RS422 and Ethernet wireless options are also available.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| ZM-401 Indiciator AWT05-507987 | 9 lb | 689 | $\$ 1,572$ |



ZM400

scale
systems

| Jul |  |  |  |  |
| :--- | :--- | :--- | ---: | ---: |
| 560 Digital Weight Indicator - GSE |  |  |  |  |
| Options and service parts only for GSE-560 |  |  |  |  |
| Part Number | Weight | Stock | Price A2 |  |
| Options | 1 lb | 4935 M | 320.00 |  |
| 24660B-200BO multiscale card |  |  | A2 |  |
|  |  | 1 lb | 4932 M | 352.00 |
| Service parts | 1 lb | 4973 | 25.00 |  |

## Indicators


tids

## 410 \& 422 Multi Function Weight Indicator - IDS

Preprogrammed with 10 different modes of operation to accommodate most of the basic scale applications.

Mode 0: Normal for basic gross or net weighing.
Mode 1: Keyboard Tare for keyboard entry of tare weight for net weight calculation.
Mode 2: Accumulate w/running total for gross or net weights and running total for job, lot, etc. Calculates G,T,N totals
Mode 3: Print Weight w/Subtotal \& Total for job or lot subtotal. Totalize and clear at the end of the run.
Mode 4: Manual (Axle) Weigh Push the PRINT button to sequentially number and print a series of weighments. Push Total to print and clear the total and sequence number.
Mode 5: Auto (Axle) Weigh Similar to Mode 4 except printing is automatic when motion stops. Traffic light control, trip level selection and delay times for control functions.
Mode 6: Auto Axle Weigh on Long Scales Scale is automatically tared after each weighment. Operation and controls as in Mode 5.
Mode 7: Peak Hold for display and print of the peak weight in gross or net mode.
Mode 8: Over/Under Checkweigh has (3) TTL outputs and (2) setpoints. Outputs for use with lights or alarms to indicate OVER, UNDER or BETWEEN setpoints.
Mode 9: Bulkweigh has a setpoint with remote start/stop option and fill control relay signal. Scale empty weight and draft weights are configurable. Use for multiple drafts with total and subtotal printing.
Canadian AM 5216
NTEP 96-133 III 10,000 div

| Part Number | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: |
| IDS 422 Multi Function Weight Indicator | 9 lb | 1661 | \$ 695.00 |
| IDS 410 Multi Function Weight Indicator w/SS enclosure | 8 lb | 4063 | 820.00 |
| IDS 410HS High Speed Indicator w/SS enclosure 100 Samples per second | 9 lb | 1769 | 960.00 |
| Options |  |  | C |
| Time \& date clock option for IDS 410 | 8 lb | 4064 | 140.00 |
| Service parts |  |  |  |
| 0110 Mainboard IDS 410/430 | 1 lb | 4092 | 663.00 |



## 430 \& 440 Weight Indicator - IDS

Preprogrammed with 8 different modes of operation to accommodate most of the basic scale applications. Indicator lights for GROSS, NET, MOTION, ZERO, lb, kg.

Mode 0: Normal Basic gross or net mode weighing.
Mode 1: Fill to Setpoint Single setpoint fill with relay output control and weigh print.
Mode 2: Over/Under Checkweigh Provides (3) TTL outputs and (2) setpoints. Outputs for use with lights or alarms to indicate OVER, UNDER or BETWEEN setpoints.
Mode 3: Vehicle Weigh In/Out with totals Weigh In/Out program for up to 500 vehicles.
Maintains running totals for each vehicle. Provides reporting functions.
Mode 4: Multi Container/Axle Auto Weighing Auto weighs and prints each weight placed on the scale. Each weight is sequentially numbered and accumulated. The total can be printed manually or automatically. Provides traffic light control.
Mode 5: Auto Axle Weigh on Long Scales Same as mode 4 but previous axles are auto tared.


Mode 6: ID Tare, Print and Total Provides tare entry and recall by ID. Prints ID, sequence \# and GTN weights. Keeps running totals by ID. Provides reporting functions.
Mode 7: Peak Hold Display or print the peak gross or net weight detected.
Canadian AM 5216
NTEP 96-133 III 10,000 div

| Part Number | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: |
| IDS 430 Weight Indicator | 8 lb | 2207 | \$ 975.00 |
| IDS 440 Weight Indicator | 8 lb | 1755 | 1,355.00 |
| Options |  |  | C |
| Time \& date clock option for IDS 430 | 8 lb | 2469 | 131.00 |
| OP430A/O KIT Analog output board | 2 lb | 4507 | 266.00 |
| 8501 Relay board, 4 channel | 2 lb | 4504 | 411.00 |
| 4101 Output relay, solid state | 1 lb | 4505 | 63.20 |
| 4104 Input relay, solid state | 1 lb | 4506 | 63.20 |
| Note: Relay board is necessary to use the input or output relays. |  |  |  |
| Service Parts |  |  | C |
| 0102 main board IDS-440 | 1 lb | 4940 | 978.00 |
| 7337 keyboard IDS-430 | 1 lb | 4517 | 169.00 |

## SPECIFICATIONS

| LOAD CELL | .10 VDC, 345 ma <br> (12) 350 ohm load cells <br> Remote sensing for long cable runs |
| :---: | :---: |
| ANALOG INPUT | . $0.1 \mu \mathrm{~V}$ per div |
| CONVERSION | 60 or 100 updates per sec 10,000 divisions H44 NTEP 200,000 divisions industrial 1,048,000 divisions internal |
| ACCURACY | $.0 .0015 \%$ of full scale OUTPUT Port 1 <br> Simplex RS232 or 20ma current loop Port 2 Duplex RS232, 20ma or RS485 Baud 150 to 38,500, O, E, N Digital Port <br> (3) outputs low active TTL <br> (3) inputs low active TTL |


| KEYS | Zero, Tare, Gross/Net, Units, Print, Clear, Enter, F1, F2, 0-9 keypad |
| :---: | :---: |
| ANNUNCIATORS | .Gross, Net, Motion, Zero, lb, kg |
| DISPLAY | .Red LED 6 digit 1" high <br> Decimal point selectable Display div $1,2,5,10,20,50,100$ |
| POWER | $.115 \mathrm{VAC}+/-10 \%, 50 / 60 \mathrm{~Hz}, 10$ watts or 12 to 28 VDC |
| SIZE | .9"W x 2"D x 8"H, 8 lb <br> Stainless Steel <br> NEMA 4 <br> Desk top or wall mount |

## Indicators



## SPECIFICATIONS



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## Indicators



## OHPUS ${ }^{\circ}$

## Defender 5000 Indicators - Ohaus

T51P: ABS plastic housing with reversible rear cover for either wall, column, scale front or table top mounting. High visibility 6 digit, 7 segment LCD display. 3 color LED checkweigh indicator. Fast display stable weight within 2 seconds. 4 key membrane raised tactile keys. One key, multiple mode selection. Internal slot for capacity label. Included table/wall mount bracket. Built in RS232 bi-directional interface and built in external input, optional RS422/485, optional second RS232 and optional AC or DC relay. Simple plug in battery installation. (6) 'C' Alkaline batteries or optional NiMH battery. Universal switching power supply automatically adapts to different voltages from 100-240 VAC.

T51XW: Stainless steel. Bright white 6 digit, 7 segment LED backlight. 3 color LED checkweigh indicator. Fast display stable weight within 2 seconds. 4 key membrane raised tactile keys. One key, multiple mode selection. Internal slot for capacity label. Included table/wall mount bracket. Built in RS232 bi-directional interface and built in external input, optional RS422/485, optional second RS232 and optional AC or DC relay. Optional NiMH battery. IP66/NEMA4X enclosure. Universal switching power supply automatically adapts to different voltages from 100-240 VAC.
NTEP 08-039
Canada AM 5687

| Part Number | Weight | Stock | Price C5 |
| :--- | ---: | ---: | ---: |
| T51XW indicator | 10 lb | 7390 | $\$ 571.00$ |
| T51P indicator | 5 lb | 7391 | 467.00 |
|  |  |  |  |
| Options | 1 lb | 7392 M | 282.00 |
| 80500720 AC relay kit, 24-240 VAC | 1 lb | 7393 M | 242.00 |
| 80500727 DC relay kit, 5-60 VDC | 1 lb | 7394 M | 79.00 |
| 80500731 RS485/422 Interface kit | 1 lb | 7395 M | 59.00 |
| 80500733 RS232 Interface kit | 4 lb | 7396 M | 182.00 |
| 80500729 Rechargeable battery kit |  |  |  |
|  | 1 lb | 7397 M | 45.00 |
| 80500722 Base mount kit | 1 lb | 7398 M | 61.00 |
| 80500723 35cm Painted column kit | 1 lb | 7399 M | 71.00 |
| 80500724 68cm Painted column kit |  |  |  |
|  | 1 lb | 7400 M | 138.00 |
| 80500725 35cm SS Column kit | 1 lb | 7401 M | 176.00 |
| 80500726 68cm SS Column kit | 1 lb | 7244 M | 59.40 |
| 72210180 Membrane Switch T51 | 1 lb | 7245 M | 25.50 |
| 72210191 Hardware Kit T61 T71 |  |  |  |




## OHPUS ${ }^{\circ}$

## T31P \& T32XW 3000 Defender Indicators - Ohaus

T32MC \& T32ME: ABS plastic front panel with painted carbon steel rear housing; includes painted carbon steel table-wall mount bracket. 6 digit, 7 segment red LED (T32ME), 6 digit, 7 segment LCD (T32MC). Weighing units for: lb, oz, lb-oz, kg, g. 3 LED: Red/Green/Yellow annunciators for: Parts Counting, Display Hold, Checkweighing, Weight Accumulation. 4 button mechanical switches, raised tactile keys. Painted steel mounting bracket included. $12 \mathrm{VDC}, 0.5 \mathrm{~A}$, external AC adapter.

T31P: ABS plastic housing with internal rib reinforcements. 6 digit, 7 segment backlit LCD. Raised tactical keys. Built in bidirectional RS232C with manual, continuous and interval printing. Weighing units for: lb, oz, lb-oz, kg, g. Hardware configuration lockout switch. Software included for parts counting mode with selectable sample sizes.
Selectable span calibration points. Averaging level, auto zero tracking. Battery saving off, Geo Code geographical gravity calibration adjustment. 9 VDC Internal lead acid rechargeable battery and AC adapter.

T32XW: Stainless steel. 6 digit, 7 segment backlit LCD. Raised tactical keys. Built in bidirectional RS232 with manual, continuous and interval printing. Weighing units for: Ib , $\mathrm{oz}, \mathrm{lb}-\mathrm{oz}, \mathrm{kg}, \mathrm{g}$. Hardware configuration lockout switch. Software included for parts counting mode with selectable sample sizes. Selectable span calibration points. Averaging level, auto zero tracking. Battery saving off, Geo Code geographical gravity calibration adjustment. Stainless steel mounting bracket included. $120 \mathrm{VAC}, 50-60 \mathrm{~Hz}$. Internal AC power. IP66/NEMA4X.
NTEP 09-090

| Part Number | Weight | Stock | Price C5 |
| :--- | ---: | ---: | ---: |
| T32MC LCD* | 4 lb | 5761 | $\$ 259.00$ |
| T32ME LED* | 4 lb | 5762 | 259.00 |
| *NTEP |  |  |  |
|  |  |  | C |
| T31P ABS plastic indicator | 4 lb | 2471 | 333.00 |
| T32XW SS enclosure indicator | 7 lb | 2472 | 407.00 |
|  |  |  |  |
| Options |  |  | A |
| 80251747 Adj angle wall bracket, painted steel | 1 lb | 2588 | 34.00 |
|  |  |  |  |
| Service Parts |  |  | A |
| 46001802 120 VAC adapter w/o Prong set | 2 lb | 403 | 48.00 |
| 46001780 Prong set, Int'I | 1 lb | 714 MB | 15.00 |
| 72231279 PCB Main T32XW | 1 lb | 8021 | 124.00 |
| 72202163 LCD Display T31P T32XW/M | 1 lb | 8022 | 33.00 |
| 72198198 Battery T32XW | 1 lb | 8023 | 26.00 |
| 72202162 main board T31P | 1 lb | 6812 | 133.00 |
| 7221284 overlay T32XW | 1 lb | 6333 | 33.00 |
| 72202333 Cable kit for T31P T32XW | 1 lb | 392 | 23.35 |

Sep 46001780 Prong set, Int'l
72231279 PCB Main T32XW
2202163 LCD Display T31P T32XW/M

62 main board T31P

72202333 Cable kit for T31P T32XW


T32ME Indicator


T31P
Indicator


T32XW Indicator


T32MC
Indicator



[^0]
## Indicators




## OHAUS ${ }^{\circ}$

## T71XW \& T71P 7000 Defender Indicators - Ohaus

T71P: ABS plastic housing with internal rib reinforcements, reversible rear cover, backlit LCD weight display, checkweighing indication (green, yellow, red), membrane keypad with raised tactile keys. Built in bi-directional RS232 with manual/continuous/interval printing. External tare input. Hardware configuration lock-out switch. Internal universal power supply with line cord and battery power using (6) "C" cell batteries
$100-240$ VAC, $50-60 \mathrm{~Hz}$.
T71XW: Stainless steel water resistant NEMA 4X/IP66 housing. Integral faceplates supports for easy servicing. Backlit LCD weight display. Checkweighing indication (green, yellow, red), membrane keypad with raised tactile keys. Built in bi-directional RS232 with manual/continuous/interval printing. External tare input. Hardware configuration lock-out switch. Internal universal power supply with hardwired cord. 100-240 VAC, $50-60 \mathrm{~Hz}$ NTEP 09-102 III 10,000
Canadian AM-5762

| Part Number | Weight | Stock | Price C5 |
| :--- | ---: | ---: | ---: |
| T71P ABS plastic indicator | 5 lb | 1694 | $\$ 500.00$ |
| T71XW SS enclosure indicator | 10 lb | 1695 | 605.00 |
|  |  |  |  |
| Options | 1 lb | 7392 M | 282.00 |
| 80500720 AC relay kit, 24-240 VAC | 1 lb | 7393 M | 242.00 |
| 80500727 DC relay kit, 5-60 VDC | 1 lb | 7394 M | 79.00 |
| 80500731 RS485/422 Interface kit |  |  |  |
|  | 1 lb | 7395 M | 59.00 |
| 80500733 RS232 Interface kit | 4 lb | 7396 M | 182.00 |
| 80500729 Rechargeable battery kit | 1 lb | 7397 M | 45.00 |
|  | 1 lb | 7398 M | 61.00 |
| 80500722 Base mount kit | 1 lb | 7399 M | 71.00 |
| 80500723 35cm Painted column kit |  |  |  |
| 80500724 68cm Painted column kit | 1 lb | 7400 M | 138.00 |
|  | 1 lb | 7401 M | 176.00 |

## SPECIFICATIONS

| LOAD CELL $\ldots \ldots$. | 5 VDC, 60 ma |
| ---: | :--- |
|  | (8) 350 ohm load cells |
| no remote sense |  |

ANALOG INPUT . . . . $0.1 \mu \mathrm{~V}$ per div
CONVERSION ...... Within 2 seconds
ACCURACY . . . . . . . $0.01 \%$ full accuracy
OUTPUT $\qquad$ RS232 serial bidirectional for printing or to PC

POWER
T71P Internal universal power supply, line cord. 100-240 VAC/50-60 Hz. (6) "C" cell batteries (not included). 80 hour battery operation

T71XW Internal universal power supply, hardwire cord. 120-240 VAC/50-60 Hz. 100 hour battery operation

KEYS
. . . . . . . . . . . . .ON/ZERO/OFF, PRINT/UNITS/FUNCTION/MODE, TARE/MENU, LIBRARY/EDIT

ANNUNCIATORS . . . .kg, g, lb, oz, lb:oz (decimal), tonnes and user definable custom unit

DISPLAY . . . . . . . . . . . 6 digit, 7 segment, Backlit dual LCD, red, yellow, green LED

SIZE $\qquad$ .T71P: $10.2^{\prime \prime} \times 2.7^{\prime \prime} \times 8.8^{\prime \prime}$ T71XW: $10.3^{\prime \prime} \times 3$ " $\times 8.7^{\prime \prime}$

## PGNNSYLVANIA

## 7400+ Weight Indicator - Pennsylvania

Weight only. Stainless steel washdown enclosure w/ U bracket. Process and bulk applications. 10 point linearization. Terminal strip load cell connect with sealed fittings. Push button tare, 5 button front panel. 16 bit Microprocessor with flash memory. 60 updates per second. (2) data interfaces from a list of (4) including RS232, RS422, RS485, 20 ma current loop. 120 VAC $50 / 560 \mathrm{~Hz}$, (4) year warranty.
NTEP 97-009, III 10,000 div
Canadian AM-5647 10,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| $7400+$ Indicator | 10 lb | 6768 | $\$ 645.00$ |
|  |  |  | C |
| Options | 1 lb | 6769 M | 267.00 |
| AO Analog Output | 1 lb | 6770 M | 267.00 |
| Solid State Relays (4) | 1 lb | 6772 M | No charge |
| 220 Volt operation |  | 6773 M | No charge |
| Factory Calibration to Pennsylvania base |  | 6774 M | Call |
| SAE Special features including software or hardware |  |  |  |
| Service Parts | 1 lb | 6975 | 92.80 |

## SPECIFICATIONS

| LOAD CELL | . 10 VDC, 450 ma <br> (10)350 or (20)700 ohm load cells Remote sense for long cables |
| :---: | :---: |
| ANALOG INPUT . . . . $0.3 \mu \mathrm{~V}$ per division |  |
| CONVERSION | 60 updates/second |
|  | 10,000 division display NTEP |
|  | 40,000 division display, Industrial |
|  | 16,777,216 division internal |
| ACCURACY . . . . . . . $0.01 \%$ full scale |  |
| OUTPUT | (2) Serial interfaces Choice of RS232, RS485, RS422, 20ma serial loop |
|  | Time \& date w/battery backup |


| KEYS | .ZERO, GROSS/NET, TARE, UNITS, PRINT |
| :---: | :---: |
| ANNUNCIATORS | .Zero, Stable, Gross, Net, lb, kg, g, oz |
| DISPLAY | .Bright green LED 0.56 " high 5 digits $(199,999)$ |
| POWER | . 120 VAC +/-10\%, 60 Hz , 5 watts |
| SIZE | $.12^{\prime \prime} \mathrm{W} \times 4^{\prime \prime} \mathrm{D} \times 7^{\prime \prime} \mathrm{H}, 10 \mathrm{lb}$ <br> 304 Stainless steel enclosure <br> Desk top or wall mount |

## Indicators



## SPECIFICATIONS

| LOAD CELL | 10 VDC, 450 ma (10)350 or (20)700 ohm load cells Remote sense for long cables |
| :---: | :---: |
| ANALOG INPUT | . $0.3 \mu \mathrm{~V}$ per division |
| CONVERSION | .60 updates/second <br> 10,000 division display NTEP <br> 40,000 division display, Industrial 16,777,216 division internal |
| ACCURACY | .0.01\% full scale |
| OUTPUT | (2) Serial interfaces Choice of RS232, RS485, RS422, 20ma serial loop Time \& date w/battery backup |


| KEYS | .ZERO, SAMPLE SET, UNITS, PRINT |
| :---: | :---: |
| ANNUNCIATORS | .Zero, Stable, Gross, Net, lb, kg, g, oz |
| DISPLAY | .Bright green LED 0.56 " high 6 digits $(199,999)$ |
|  | Decimal location selectable |
|  | Div 1, 2, 5 |
| POWER | . 120 VAC +/-10\%, 60Hz, 5 watts |
| SIZE | . 12 " $\mathrm{W} \times 4$ " $\times$ x $7 \mathrm{H}, 10 \mathrm{lb}$ |
|  | 304 Stainless steel enclosure |
|  | NEMA 4 Desk top or wall mount |

## PGNNSYLVANIA

## 7600E Digital Weigh and Batch Indicator - Pennsylvania

Stainless steel washdown enclosure with U Bracket mount for wall or shelf. Preprogrammed Batch and Truck Scale options for easy set up. $0.6^{\prime \prime}$ high red LED. 10 point linearization. Smart Serial programmable Serial Data strings. Direct Keyboard entry of Setpoint values and Tare Weights. 6 button front panel. 24 bit delta sigma; 16 mv Signal Input. 30 updates per second. (2) data interfaces, RS232C or RS485, 20 ma current loop. 117 VAC $50 / 560 \mathrm{~Hz}$, (2) year warranty.
NTEP 97-009 III, 10,000 div
Canadian AM-5647 10,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 7600 E Indicator | 10 lb | 6775 | $\$ 695.00$ |
| 7600E Indicator AC w/ battery | 10 lb | 6422 | 920.00 |
| 7600E 12VDC only, no battery | 10 lb | 6436 | 695.00 |
|  |  |  |  |
| Options | 1 lb | 6769 M | 267.00 |
| 57811 Analog Output | 1 lb | 6770 M | 267.00 |
| Solid State Relays (4) | 1 lb | 6772 M | No charge |
| 220 Volt operation |  |  |  |
|  |  | 6773 M | No charge |
| Factory Calibration to Pennsylvania base | 1 lb | 6774 M | 6978 |
| SAE Special features including software or hardware |  | Call |  |
| 57860 Keypad for 7600E | 1 lb | 6887 | 508.00 |



7600E Indicator Rear view

## SPECIFICATIONS

LOAD CELL . . . . . . . . 5 VDC, 120 ma
(8)350 or (10)1,000 ohm load cells

ANALOG INPUT . . . . $0.1 \mu \mathrm{~V}$ Graduation
CONVERSION
.30 updates/second
ACCURACY $\qquad$ 0.01\% full scale

OUTPUT $\qquad$ (2) Serial interfaces Choice of RS232C or RS485, 20ma current loop

## Indicators



SPECIFICATIONS

| LOAD CELL . | . 10 VDC, 450 ma <br> (10)350 or (20)700 ohm load cells Remote sense for long cables | KEYS | .ZERO, SAMPLE SET, GROSS/NET, TARE, PIECE WEIGHT, KEYBOARD TARE, BASE, UNITS, PRINT, CLEAR, CHECK, ON/OFF, ENT. |
| :---: | :---: | :---: | :---: |
| ANALOG INPUT . . . $0.3 \mu \mathrm{~V}$ per division ${ }^{\text {a }}$ |  |  |  |
| CONVERSION | . 60 updates/second | ANNUNCIATORS | Zero, Stable, Gross, Net, lb, kg, g, oz |
|  | 10,000 division display NTEP | DISPLAY | . Bright green LED 0.56" high |
|  | 40,000 division display, Industrial |  | 6 digits $(199,999)$ |
|  | 16,777,216 division internal |  | Decimal location selectable |
|  | ACCURACY . . . . . . $0.01 \%$ full scale |  |  | Div 1, 2, 5 |
|  |  |  | POWER | $120 \mathrm{VAC}+/-10 \%, 60 \mathrm{~Hz}, 5$ watts |
| OUTPUT | .(2) Serial interfaces Choice of RS232, | POWER | 60Hz, 5 watts |
|  | RS485, RS422, 20 ma serial loop | SIZE | .12"W $\times 4 " \mathrm{D} \times 7$ "H, 10 lb |
|  | Time \& date w/battery backup |  | 304 Stainless steel enclosure |
|  |  |  | NEMA 4 |
|  |  |  | Desk top or wall mount |


| TI-1500E Weight Indicator - Transcell Technology, Inc |  |  |  |
| :---: | :---: | :---: | :---: |
| Service parts only for TI-1500E indicator. |  |  |  |
| NTEP 99-017 III 10,000 div |  |  |  |
| Part Number | Weight | Stock | Price C |
| Service Parts |  |  | C |
| Keypad for TI-1500 | 1 lb | 6675 | \$ 33.50 |
| AC adapter 100-240 VAC to 12 VDC 0.9A for T500E-SS/TI-1500E-SS | 1 lb | 2562M | 47.60 |
| AC power cord for 100-240 VAC adapter1 lb |  | 3640M | 10.20 |

## SPECIFICATIONS

LOAD CELL . . . . . . . 10 VDC, 240 ma
(8) 350 or (16) 700 ohm load cells

ANALOG INPUT $\ldots .0 .4 \mu \mathrm{~V}$ per div, $1.0 \mu \mathrm{~V}$ per div NTEP
CONVERSION . . . . . 30 updates per sec
10,000 display div NTEP 50,000 div, industrial 300,000 div internal

ACCURACY . . . . . . . .0.01\% of full scale.
OUTPUT $\qquad$ Full duplex RS232
Simplex RS232, 20 ma current loop serial Baud 1200, 2400, 4800, 9600, O, E, N

UNITS, ZERO, NET/.GROSS, TARE, PRINT
DISPLAY
Green LED, 6 digit 1" high
Decimal point selectable
Display div 1,2,5,10,20,50,100,200
POWER . . . . . . . . . . 120 VAC $50 / 60 \mathrm{~Hz}, 0.5$ watt
SIZE
10"W x 4"D x 8"H, 8 lb
NEMA 12 ABS plastic enclosure or NEMA 4X Stainless steel Desk top or wall mount

## Indicators



## TRANSCELL TECHNOLOGY, INC.

## TI-500SL Weight Indicator - Transcell Technology, Inc

Stainless steel. 0.8 ", 6 digit LCD display with LED backlight. Displays up to 50,000 graduations. Keys for: Units/ Zero/Off, Net/Gross, Tare, On/Print. Annunciators for: Gross, Net, kg, lb, Center of Zero, Stable, Tare, Negative. Auto weight capture for unstable and live loads. Full duplea RS-232C Serial Port- demand or continuous. Stainless steel swivel stand. Full front panel calibration. Nema 4x/IP65. 12VDC, 800 mA wall adapter
NTEP 94-083A3 III 5,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TI-500SL | 10 lb | 1560 | $\$ 395.00$ |
|  |  |  |  |
| Service Parts | 1 lb | 2812 M | 23.80 |
| AC adapter 120 VAC to 12 VDC 0.8A | 1 lb | 1563 | 21.43 |
| P360195 faceplate TI-500SL | 2 lb | 1591 | 57.20 |

## SPECIFICATIONS



## TRANSCELL TECHNOLOGY, INC.

## TI-1680 Weight Indicator - Transcell Technology, Inc

Stainless steel. Large easy to read LCD display. Applications are Piece counting, Remote Display, Peak Hold, Checkweighing, Batching, Accumulation, Self diagnosis. Gross/Net/Tare print ticket mode with 6 digit ID number. Two full duplex RS232 serial port. Internal power supply. Custom unit. 2.0, full speed, peripheral USB port. Heavy duty swivel mounting stand. Nema 4x, IP65. 240 VAC.
NTEP 10-078
Part Number
TI-1680 Indicator LED, SS

Service Parts


## SPECIFICATIONS

| LOAD CELL . | . 10 VDC, 240 ma <br> (8) 350 or (16) 700 ohm load cells |
| :---: | :---: |
| ANALOG INPUT | .0.4 $\mu \mathrm{V}$ per div, $1.0 \mu \mathrm{~V}$ per div NTEP |
| CONVERSION | .30 updates per sec 10,000 display div NTEP 50,000 div, industrial 300,000 div internal |
| OUTPUT | .Full duplex RS232 <br> Simplex RS232, 20ma current loop serial Baud 1200, 2400, 4800, 9600, O, E, N |


| KEYS | .UNITS, ZERO, MODE, TARE, PRINT, C/CE, F1, SET POINT, UNDER, OVER, ID, ENTER, DEC. Pt, *, 0-9 |
| :---: | :---: |
| ANNUNCIATORS | .Gross, Net, Tare, Zero, Under, Accept, Over, lb, kg, Stable, 01-04 |
| DISPLAY | .LED, 6 digit 1" high |
|  | Decimal point selectable |
|  | Display div 1,2,5,10,20,50,100,200 |
| ACCURACY . . . . . . $0.01 \%$ of full scale |  |
| POWER . . . . . . . . . 120 VAC 50/60 Hz, 0.5 watt |  |
| SIZE | . 10 "W x 4"D x 8"H, 7 lb |
|  | NEMA 12 ABS plastic enclosure or |
|  | NEMA 4X Stainless steel |
|  | Desk top or wall mount |

## Weigh lech



## MW2001 MicroWeigh Digital Indicator - WeighTech

Engineered to be the best in its class. Designed to outperform and outlast other indicators. 5 Touch sensitive keypad responds to human touch, not knives or other sharp instruments. Dust resistant under IP6 makes this the only indicator in this class. Key electronic components permanently sealed in ABS plastic enclosure. Bright, easy to read, 16 character backlit alphanumeric LCD display. Front access panel. Standard weighing, check weighing, bench or floor scales, batch weighing. Can be retrofitted to existing scales. No double boxing. Electrical potted parts for safety when panel is exposed or taken off. Meets industry standards of IP69K, NEMA 4, NEMA 6, IPX7, IPX8.
NTEP 01-082 Class III/IILL 10,000 div

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| MW2001-HW | 6 lb | 2863 | $\$ 997.00$ |
| MW2001 Indicator battery operated | 7 lb | 2864 | $1,035.00$ |
|  |  |  |  |
| Options | 1 lb | 2865 | 67.00 |



## SPECIFICATIONS

LOAD CELL . . . . . . . 4.5 VDC +/- 5\%, 120 ma
(4) 350 ohm load cells no remote sense

ANALOG INPUT . . . . . $0.18 \mu \mathrm{~V} /$ div
CONVERSION . . . . . .7.5/15/30 times/sec display update 10,000 display divisions

ACCURACY $\qquad$ $.0 .01 \%$ of full scale
OUTPUT
RS232
9600 Baud, 8 bits, no parity, 1 stop bit

KEYS. $\qquad$ .UNITS/CANCEL, MENU/HELP, PRINT/ENTER, TARE, ZERO/ON


DISPLAY $\qquad$ LCD w/ adjustable contrast and backlight, 16 character alphanumeric

POWER $\qquad$ 120 VAC, 60Hz, 12 Watts

SIZE
$8.25^{\prime \prime W} \times 3.5^{\prime D} \times 5.25^{\prime H}, 7 \mathrm{lb}$
ABS plastic enclosure,
NEMA 4, NEMA 6, IP69K

## WE2111 Digital Weight Indicator - HBM

Legal for trade with the latest interfaces. Designed for maximum accuracy. The WE2111 weighing indicator uses the Sigma-Delta analog to digital converter, so it allows fast, precise weighing when used with strain guage based load cells. Display resolution of up to 100,000 divisions and an analog to digital conversion rate of up to 100
measurements/second. Enhanced sensitivity setting allows using it in legal for trade scales with a minimum signal of $0.5 \mu \mathrm{~V} / \mathrm{e}$. Multi-range/multi-interval with two sets of 3,000 display divisions.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| I-WE2111 Indicator | 3 lb | 3821 | $\$ 1,693.00$ |
| I-WE2111-ZS Setpoint card | 1 lb | 3822 | 312.00 |
| I-WE2111-AC power module | 1 lb | 3716 | 234.00 |
| 110-240V AC |  |  |  |



## WE2107 Indicator HBM

The WE2107 weighing indicator: you can rely on this talented all-rounder to monitor and control your weighing processes. It does not matter whether these are static or dynamic: the WE2107 is at your side. With first-rate metrological properties and many practical functions that are perfect for incorporating into the industrial weighing process. Because the WE2107 is more than just a weighing indicator: the WE2107 adapts perfectly to your needs, whatever the challenge. So with the WE2107, you will be able to implement many different scale types with just one device.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 1-WF2107M-SS-1 Indicator | 3 lb | 3854 | $\$ 975.00$ |



WE2107M-SS-1

## Indicators



##  <br> WEIGHING SYSTEMS

## RL-920i

The 920i® programmable weight indicator/controller is different, yet intuitively familiar for even the least experienced operators. It is truly the first of its kind to blend revolutionary user interfaces, total flexibility and ultimate processing performance with the simplicity of a basic weight indicator. We have taken the best features from weight instruments, PLCs and computers and added more robust electronics, a crisp graphical display and programmable softkeys. Put it all together inside a virtually indestructible enclosure and you have one of the most advanced HMIs the industry has ever seen.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| $920 i$ Indicator w/USB 115003 | 12 lb | 550 | $\$ 2,745.00$ |
|  |  |  |  |
| Service Parts | 1 lb | 216 | $\$ 339.00$ |
| 164371 display board, LCD | 1 lb | 1557 | 352.00 |
| 6760124 channel I/O board | 1 lb | 1558 | 333.00 |
| 6705 pulse counter card | 1 lb | 1529 | $1,118.00$ |
| 117930 CPU board |  |  |  |

164371 display board

## SPECIFICATIONS

LOAD CELL . . . . . . . 10 VDC, 200 ma
(8) 350 ohm load cells

ANALOG INPUT . . . . . $0.3 \mu \mathrm{~V} /$ div
CONVERSION . .... . 7.5 to 960 H 2 10,000 display divisions
ACCURACY $\qquad$ $0.01 \%$ of full scale
OUTPUT
(4) RS485

9600 Baud, 8 bits, no parity, 1 stop bit

KEYS. . . . . . . . . . . . . .Keypad(0-9), (27) key membrane panel, (5) softkeys and (10) user-defines.

ANNUNCIATORS . . . (60) configurable operator prompts.
DISPLAY . . . . . . . . . . LCD w/ adjustable contrast and backlight.
POWER . . . . . . . . . . 120 VAC, 60Hz, 12 Watts
SIZE . . . . . . . . . . . . . 10.56 " $^{\prime \prime}$ x 4.6"D x 10.87"H, 10 lb NEMA 4x SS, IP66

## Scale Pit T Belting

T-Belting is used on the sides of the scale platform away from the flow of traffic. The ends of the scale platform should use the T-Grip described elsewhere. T-belting is $4-1 / 2^{\prime \prime}$ wide and $1 / 4^{\prime \prime}$ thick at top. The vertical is $1-1 / 2^{\prime \prime}$ high and $1 / 4^{\prime \prime}$ thick.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| T-Grip belting, $82 \mathrm{ft}(25 \mathrm{~m})$ | 66 lb | 2846 | $\$ 451.00$ |



T-Belt


T-Grip

## Scale pit T-Grip belting

T-Grip belting will stop unwanted product from getting into a truck scale pit with its unique design. The " T " section will slip into the gap between the scale platform and the pit wall. The gap must be $1 / 2^{\prime \prime}$ or larger to avoid any scale binding. The exclusive grips on the vertical section of the " $T$ " hold on to the pit wall and platform to help prevent the belting from being pulled out with the normal flow of traffic. The T-Grip belting is installed around the perimeter of the scale platform. To allow ventilation, a gap of 8 "to 12 " can be left on the sides where there is little chance of product spillage. " $T$ " belting is $5-3 / 4$ " wide and $1 / 4^{\prime \prime}$ thick at top. The vertical is $2-1 / 4^{\prime \prime}$ high and $7 / 16^{\prime \prime}$ thick.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| T-Grip belting, $82 \mathrm{ft}(25 \mathrm{~m})$ | 160 lb | 347 | $\$ 541.00$ |


| Connectors |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| For Digital Weight Indicators and printers |  |  |  |  |  |
| Part Number | Used with | Mates with | Weight | Stock | Price C |
| 57-30500 | 8130 desk mount, A\&D | 57-40500 | 1 lb | 633 | \$ 36.00 |
| 57-30360 | Electroscale DR525 | 57-40360 | 1 lb | 630 | 33.00 |
| DE-09P | Ohaus PBI serial | DE-09S | 1 lb | 581 | 16.80 |
| DE-09S | Ohaus PBI serial | DE-09P | 1 lb | 582 | 16.80 |
| DA-15P | UMC 2000 | DA-15S | 1 lb | 881 | 18.00 |
| DA-15S | UMC 2000 | DA-15P | 1 lb | 882 | 18.00 |
| DB-25P | RS232-C, 550/551 | DB-25S | 1 lb | 631M | 20.00 |
| DB-25S | RS232-C | DB-25P | 1 lb | 1052 | 20.00 |
| DC-37P | UMC2000, AO543 | DC-37S | 1 lb | 634M | 23.00 |
| DC-37S | WI 110 | DC-37P | 1 lb | 1053 | 23.00 |
| DD-50P | AN-5316 | MD50F | 1 lb | 464 | 26.00 |



## Cable



| Hazardous Environment Blue Jacket Cable |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Designed for intrisically safe applications, must be wired according to Factory Mutual |  |  |  |  |  |  |  |
| System approved diagram. 0.32 inch diameter. Polyurethane over PVC double jacketing |  |  |  |  |  |  |  |
| provides superior chemical and abrasion resistane. Both foil and braided wire shields for |  |  |  |  |  |  |  |
| added RFI and EMI protection. 6 conductors are industry standard color coded (red, |  |  |  |  |  |  |  |
| black, green, white, blue, brown). Suited for longer runs where remote sense lines can be |  |  |  |  |  |  |  |
| used. -22F to 126F (-30C to 80C) temperature rating. |  |  |  |  |  |  |  |
| Part Number |  |  |  |  | Weight | Stock | Price C |
| Hazardous Environment Blue Jacket Cable/per ft. |  |  |  |  |  |  |  |



Hazardous Environment
Blue Jacket Cable

## Cable



72-N1

## Splicing kit - Scotchcast

Inline splicing kit for shielded or non-shielded cable $1 / 4^{\prime \prime}$ to $5 / 8^{\prime \prime}$ dia. The translucent body is made of strong plastic in molded body halves. Mold body length is $7-3 / 16$ ". Tongue and groove design provides a firm, solid joint. Simply snap together around the splice and seal the ends. Mix the 2104 Electrical Insulating and Sealing Compound in its Unipak container and pour it into the mold. 2104 Compound is a two part, low viscosity polyurethane for permanent splice protection. This compound flows well - even at low temperatures. It fills mold bodies completely and eliminates voids. Cure time is about 1 hour at 72 deg F and 20 hours at 20 deg F. The Unipak container allows fast mixing of premeasured portions that pour cleanly from the container. No tools or containers are needed. A loosely woven polyester spacer web, bonded to the inside of the mold body, allows even distribution of the compound around the splice. Included in the kit are compound, rubber tape end-sealing strips, and instructions. Excellent moisture seal protects against water entry.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| $72-\mathrm{N} 1$ | 1 lb | 768 | $\$ 89.40$ |

## PVC Splice Box

Low cost/high performance high impact PVC(non-metallic). Weatherproof gasket cover for wet or corrosive environments indoors or outdoors. 7 position screw clamp terminal block on lid accepts up to No. 10 AWG wire. Cable connectors: (2) watertight nylon compression fittings. 0.69-395 cable diameters.
$4^{\prime \prime} \times 4$ " $\times 2-1 / 2^{\prime \prime}$ deep. Mounting ears molded into base.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| NM-44B | 1 lb | 2440 | $\$ 84.40$ |


| BLH Load Cell Cable \& Box |  |  |  |
| :--- | ---: | ---: | ---: |
| 2070786 cond cable |  |  |  |
| Part Number | Weight | Stock | Price C |
| NM-44B | 1 lb | 312 | $\$ 4.65$ |

## Load Cell Cable

4 Conductor and 6 Conductor 20 gage (AWG) stranded tinned copper, vinyl insulation, aluminum shield with drain wire (100\% shield coverage), vinyl jacket. Resistance is 10.3 ohms per 1,000 ft.
4 Cond: Black, white, red, green and shield.
6 Cond : Black, white, red, green, yellow, blue and shield.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 4 Conductor |  |  |  |
| 1 to 499 ft | $4 \mathrm{lb} / 100 \mathrm{ft}$ | 190 | $\$ 1.25 / \mathrm{ft}$ |
| 500 ft roll | 20 lb | 241 | $5000.00(1.00 / \mathrm{ft}))$ |
| 1000 ft roll | 40 lb | 242 | $850.00(.85 / \mathrm{ft}))$ |
| 6 Conductor |  |  |  |
| 1 to 499 ft | $6 \mathrm{lb} / 100 \mathrm{ft}$ | 191 |  |
| 500 ft roll | 30 lb | 244 | $850.00(1.70 / \mathrm{ftt}))$ |
| 1000 ft roll | 60 lb | 245 | $1,450.00(1.45 / \mathrm{ft}))$ |

## High Performance Load Cell Cable

The best available insulation resistance. The highest quality toughness and abrasion resistance. 4 Conductor and 6 Conductor 20 gage AWG stranded tinned copper. Each conductor is insulated with Teflon ${ }^{(\Omega)}$ which has the highest dielectric constant available. Shielding is tinned copper braid. Outer jacket is polyurethane for superior abrasion resistance. Consequently, the initial installation which requires stripping the jacket to expose the conductors is made more difficult with the tough polyurethane. But the long term benefits of this extremely strong jacket is worth the extra effort in installation. Resistance is 10.3 ohms per $1,000 \mathrm{ft}$.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 4 Conductor (1/4" dia) |  |  |  |
| 1 to 499 ft | $7 \mathrm{lb} / 100 \mathrm{ft}$ | 1904 | $\$ 3.50 / \mathrm{ft}$ |
| 500 ft roll | 35 lb | 1905 | $1,700.00(3.40 / \mathrm{ft})$ |
| 1000 ft roll | 65 lb | 1906 | $3,300.00(3.30 / \mathrm{ft})$ |
|  |  |  |  |
| $\mathbf{6}$ Conductor (5/16" dia) |  |  |  |
| 1 to 499 ft | $10 \mathrm{lb} / 100 \mathrm{ft}$ | 1907 | $3.85 / \mathrm{ft}$ |
| 500 ft roll | 50 lb | 1908 | $1,825.00(3.75 / \mathrm{ft})$ |
| 1000 ft roll | 100 lb | 1909 | $3,650.00(3.65 / \mathrm{ft})$ |

## Armor Braid Load Cell Cable

Prevent rodents from eating through load cell cable with this stainless steel armor braid. 4 Conductor 22 gage (AWG) and 6 Conductor 20 gage (AWG) stranded tinned copper. Each conductor is insulated with PVC and has a secondary nylon jacket. Next a Mylar ${ }^{(R)}$ sheath with a min of $35 \%$ overlap coverage. Shielding is tinned copper braided shield with $90 \% \mathrm{~min}$ coverage. Jacket is grey polyurethane. Armor braid is stainless steel for rodent and abrasion protection. 22 gage (AWG) resistance is 14.7 ohms per 1,000 ft. 20 gage (AWG) resistance is 10.3 ohms per $1,000 \mathrm{ft}$.
4 Cond : Black, white, red, green and shield.
6 Cond : Black, white, red, green, yellow, blue and shield.

| Part Number | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| 4 Conductor 22 gage (5/16" dia) |  |  |  |
| 1 to 499 ft | $7 \mathrm{lb} / 100 \mathrm{ft}$ | 1073 | $\$ 6.75 / \mathrm{ft}$ |
| 500 ft roll | 35 lb | 1074 | $3,325.00(6.65 / \mathrm{ft})$ |
|  |  |  |  |
| $\mathbf{6}$ Conductor 20 gage (7/16" dia) | $10 \mathrm{lb} / 100 \mathrm{ft}$ | 1665 |  |
| 1 to 499 ft | 50 lb | 1666 | $3,675.00(7.35 / \mathrm{ft})$ |



## Rod Ends

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thread (UNF) | Externally threaded with jam nut. |  |  |  |  |  |  |  |  |
|  | Length | Bore | Shank | Dia | Width | Capacity | Weight | Stock | Price D |
| 1/4-28 | 1.562 | 0.250 | 1.000 | 0.750 | 0.375 | 2,157 lb | 1 lb | 178 | \$ 11.00 |
| 3/8-24 | 1.938 | 0.375 | 1.250 | 1.000 | 0.500 | 4,916 lb | 1 lb | 179 | 13.70 |
| 1/2-20 | 2.438 | 0.500 | 1.500 | 1.312 | 0.625 | 8,075 lb | 1 lb | 180 | 25.20 |
| 5/8-18 | 2.625 | 0.625 | 1.625 | 1.500 | 0.750 | 9,509 lb | 1 lb | 433 | 30.60 |
| 3/4-16 | 2.875 | 0.750 | 1.750 | 1.750 | 0.875 | $13,831 \mathrm{lb}$ | 1 lb | 434 | 41.80 |
| 1-14 | 4.125 | 1.000 | 2.125 | 2.750 | 1.375 | $43,541 \mathrm{lb}$ | 2 lb | 181 | 121.00 |
| 1-12 | 4.125 | 1.000 | 2.125 | 2.750 | 1.375 | $43,541 \mathrm{lb}$ | 3 lb | 1012 | 137.00 |
| 1-1/4-12 | 4.125 | 1.250 | 2.125 | 2.750 | 1.093 | 44,500 lb | 3 lb | 1013 | 152.00 |
| 1-1/2-12 | 5.375 | 1.500 | 3.000 | 3.500 | 1.312 | $96,510 \mathrm{lb}$ | 5 lb | 1014 | 236.00 |
| 2-12 | 8.000 | 2.000 | 4.625 | 5.000 | 1.750 | 225,457 lb | 14 lb | 1015 | 420.00 |

Rod Ends with Teflon liner for electrical isolation.
Use Bonding Braid across load cell to give a parallel path for high voltage and current present in lightning strikes.


Rod End Stainless Steel

| Thread <br> (UNF) | Length | Bore | Shank | Dia | Width | Static load |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | ---: | :---: |
| Capacity |  |  |  |  |  |  |  |  |  | Weight Stock | Each |
| ---: | :--- |

## Stainless Steel Rod Ends with Teflon liner for electrical isolation.

Stainless steel for corrosion resistance. Use Bonding Braid across load cell to give a parallel path for high voltage and current present in lightning strikes.

| Thread | Length | Bore | Shank | Dia | Width | Static load | Weig | Stock | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3/8-24 | 1.938 | 0.375 | 1.250 | 1.000 | 0.500 | 8,627 lb | 1 lb | 3263 | \$ 86.80 |
| 1/2-20 | 2.438 | 0.500 | 1.500 | 1.312 | 0.625 | $15,130 \mathrm{lb}$ | 1 lb | 3264 | 105.00 |
| 5/8-18 | 2.625 | 0.625 | 1.625 | 1.500 | 0.750 | $16,922 \mathrm{lb}$ | 1 lb | 3265 | 156.00 |
| 3/4-16 | 2.875 | 0.750 | 1.750 | 1.750 | 0.875 | 25,549 lb | 1 lb | 3266 | 186.00 |

## Insulated tension mounting assembly

Forged steel, zinc plated. Each assembly includes 2 insulators, 2 threaded adapters, 2 eye nuts, 2 links, 2 eye bolts, 2 coarse jam nuts, 2 fine jam nuts. You will save $10 \%$ off the individual prices when you get the complete assembly.

|  | Load cell <br> Thread | Steelyard <br> Thread |  | Assembly <br> Length | Weight | Stock |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | Price D


|  | Tension Alignment Assembly |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Each alignment assembly includes an internally coarse threaded housing w/wrench flats which contains a Teflon insulator that mates with a spherical headed stud w/fine thread. The $3 / 4$ " and 1 " units have a Delrin insulator. Includes (1)fine jam nut and (1)coarse jam nut. Side of housing has 1/4-20 tapped hole for attaching ground strap. Grounding screw not included. Zinc and clear chromate plated. |  |  |  |  |  |
|  | Part Number | Length | Capacity | Weight | Stock | Price D |
|  | TAA-1/4-28 to 1/4-20 | $4 "$ | 300 lb | 1 lb | 3287 | \$ 117.00 |
|  | TAA-3/8-24 to 3/8-16 | 4" | 300 lb | 2 lb | 3288 | 123.00 |
|  | TAA-1/2-20 to 1/2-13 | 4" | $3,000 \mathrm{lb}$ | 2 lb | 3289 | 124.00 |
| Sep | TAA-1/2-20 to 5/8-11 | 4" | $3,000 \mathrm{lb}$ | 2 lb | 1273 | 134.00 |
|  | TAA-3/4-16 to 3/4-10 | $5.38{ }^{\prime \prime}$ | 10,000 lb | 4 lb | 3290 | 157.00 |
| Oct | TAA-3/4-16 to 1-8 | 5.38 " | $10,000 \mathrm{lb}$ | 4 lb | 2950 | 173.00 |
| $\checkmark$ | TAA-1-14 to 1-8 | $5.25 "$ | 15,000 lb | 4 lb | 3041 | 281.00 |
|  | TAA-1-14 to 1 1/4-7 | 5.25 " | $15,000 \mathrm{lb}$ | 5 lb | 2951 | 235.00 |
|  | TAA-1-1/4-12 to 1-1/2-6 | 6.6 " | 20,000 lb | 6 lb | 3203 | 257.00 |


| Eye Nuts |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Forged steel, galvanized(zinc coating) with jam nut. |  |  |  |  |
| Size Inches | Inside Dimensions |  |  |  |
| $1 / 4-20$ | $0.75 \times 1.063$ | Weight | Stock | Price D |
| $3 / 8-16$ | $1.00 \times 1.250$ | 1 lb | 447 | $\$ 18.75$ |
| $1 / 2-13$ |  | $1.25 \times 1.500$ | 1 lb | 448 |
|  |  |  | 449 | 18.75 |
| $5 / 8-11$ | $1.50 \times 2.000$ | 1 lb | 450 | 18.50 |
| $3 / 4-10$ | $1.75 \times 2.375$ | 2 lb | 451 | 26.10 |
| $1-8$ | $2.25 \times 3.063$ | 3 lb | 452 | 86.30 |

## Tension Mounting Assembly

Forged steel, zinc plated. Each assembly includes 2 eye nuts, 2 links, 2 eye bolts, 2 coarse jam nuts, 2 fine jam nuts.

|  | Load cell Thread | Steelyard Thread | Assembly Length | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1/4-28 UNF | 1/4-20 UNC | 8.5 | 1 lb | 173 | \$ 85.10 |
|  | 3/8-24 UNF | 3/8-16 UNC | 11.5 | 2 lb | 174 | 67.50 |
|  | 1/2-20 UNF | 1/2-13 UNC | 13.25 | 3 lb | 175 | 83.20 |
| Sep | 5/8-18 UNF | 5/8-11 UNC | 16.25 | 4 lb | 176 | 128.00 |
|  | 3/4-16 UNF | 3/4-10 UNC | 18.75 | 8 lb | 453 | 226.00 |
|  | 1-14 UNF | 1-8 UNC | 23.75 | 17 lb | 177 | 421.00 |



TAA Tension Alignment Assembly



Clevis


## Clevis

Stainless steel

## Clevis

Zinc plated steel with jam nut. Used to connect rod ends to threaded rod or bolts. Has 1/4-20 machine screw for termination of bonding braid (ground strap). Teflon washers provide electrical isolation for lightning protection. Electrical isolation is complete when used with Rod End that has Teflon ${ }^{8}$ liner.

| Thread | Capacity | Pin Dia | Gap at pin | Weight | Stock | Price $\mathbf{D}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $1 / 4-20$ UNC | 300 lb | $0.240^{\prime \prime}$ | 0.250 | 1 lb | 587 | $\$ 105.00$ |
| $3 / 8-16$ UNC | 300 lb | $0.365^{\prime \prime}$ | 0.375 | 1 lb | 588 | 105.00 |
| $1 / 2-13$ UNC | $3,000 \mathrm{lb}$ | $0.490^{\prime \prime}$ | 0.500 | 1 lb | 488 | 98.00 |
|  |  |  |  |  |  |  |
| $5 / 8-11$ UNC | $10,000 \mathrm{lb}$ | $0.615^{\prime \prime}$ | 0.675 | 2 lb | 589 | 120.00 |
| $3 / 4-10$ UNC | $10,000 \mathrm{lb}$ | $0.740^{\prime \prime}$ | 0.750 | 3 lb | 590 | 120.00 |

## Clevis-Stainless steel

Stainless steel with jam nut. Used to connect rod ends to threaded rod or bolts. Has 1/420 machine screw for termination of bonding braid (ground strap). Teflon washers provide electrical isolation for lightning protection. Electrical isolation is complete when used with Rod End that has Teflon liner.

| Thread | Capacity | Pin Dia | Gap at pin Weight | Stock | Price D |  |
| :--- | ---: | :---: | :---: | :---: | ---: | ---: |
| $1 / 4-20$ UNC | 300 lb | $0.240^{\prime \prime}$ | 0.250 | 1 lb | 7328 | $\$ 126.00$ |
| 3/8-16 UNC | 300 lb | $0.365^{\prime \prime}$ | 0.375 | 1 lb | 7329 | 126.00 |
| $1 / 2-13$ UNC | $3,000 \mathrm{lb}$ | $0.490^{\prime \prime}$ | 0.500 | 1 lb | 7330 | 147.00 |
|  |  |  |  |  |  |  |
| $5 / 8-11$ UNC | $10,000 \mathrm{lb}$ | $0.615^{\prime \prime}$ | 0.675 | 2 lb | 7331 | 217.00 |
| 3/4-10 UNC | $10,000 \mathrm{lb}$ | $0.740^{\prime \prime}$ | 0.750 | 3 lb | 7332 | 217.00 |

## Tension Mounting Bolt

Each mounting bolt includes a hex machine screw, mating pair of spherical washers and jam nut, zinc plated.
Recommend using a safety factor of 4 to 1 .

| Thread <br> (UNF-2) | Length | Tensile <br> Strength | Weight | Stock | Price D |
| :--- | :---: | ---: | ---: | ---: | ---: |
| TMB-1/4-28 | $1.5^{\prime \prime}$ | $5,800 \mathrm{lb}$ | 1 lb | 454 | $\$ 6.00$ |
| TMB-3/8-24 | $2^{\prime \prime}$ | $13,247 \mathrm{lb}$ | 1 lb | 455 | 10.30 |
| TMB-1/2-20 | $2.5^{\prime \prime}$ | $23,550 \mathrm{lb}$ | 1 lb | 456 | 11.00 |
|  |  |  |  |  |  |
| TMB-5/8-18 | $3^{\prime \prime}$ | $36,797 \mathrm{lb}$ | 1 lb | 457 | 13.20 |
| TMB-3/4-16 | $3.5^{\prime \prime}$ | $52,987 \mathrm{lb}$ | 1 lb | 458 | 18.40 |
| TMB-1-14 | $4^{\prime \prime}$ | $94,200 \mathrm{lb}$ | 2 lb | 459 | 52.50 |
|  |  |  |  |  |  |
| TMB-1-1/4-12 | $5^{\prime \prime}$ | $128,789 \mathrm{lb}$ | 4 lb | 1031 | 115.00 |
| TMB-1-1/2-12 | $6^{\prime \prime}$ | $185,456 \mathrm{lb}$ | 5 lb | 1032 | 149.00 |
| TMB-2-12 | $7^{\prime \prime}$ | $329,700 \mathrm{lb}$ | 14 lb | 1033 | 179.00 |


|  | Eye Bolts |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Forged steel. Externally threaded with jam nut. Zinc plated. Recommend using a safety factor of 4 to 1 . |  |  |  |  |  |  |  |  |
|  | Thread | Overall length | Shank length | Inside eye | Outside eye | Ultimate Strength | Weight | Stock | $\begin{array}{r} \text { Each } \\ \text { Price D } \end{array}$ |
|  | (UNF) Fine thread |  |  |  |  |  |  |  |  |
|  | 1/4-28 | 2.000 | 1.00 | 0.750 | 1.187 | 2,500 lb | 1 lb | 182 | \$ 9.50 |
|  | 3/8-24 | 2.875 | 1.25 | 1.000 | 1.813 | 5,200 lb | 1 lb | 183 | 15.10 |
|  | 1/2-20 | 3.125 | 1.50 | 1.187 | 2.000 | 12,000 lb | 1 lb | 184 | 17.20 |
|  | 5/8-18 | 3.687 | 1.75 | 1.375 | 2.500 | 16,000 lb | 1 lb | 185 | 24.30 |
| Sep | 3/4-16 | 4.063 | 2.00 | 1.500 | 2.813 | 20,000 lb | 1 lb | 440 | 52.20 |
|  | 1-14 | 5.187 | 2.50 | 1.813 | 3.562 | 36,000 lb | 2 lb | 186 | 50.60 |
|  | 1 1/4-12 | 7.500 | 3.00 | 2.187 | 4.438 | 75,000 lb | 5 lb | 1671 | 120.00 |
|  | 1 1/2-12 | 8.750 | 3.50 | 2.500 | 5.187 | $105,000 \mathrm{lb}$ | 8 lb | 1672 | 239.00 |
|  | 2-12 | 11.875 | 4.00 | 3.250 | 6.875 | $140,000 \mathrm{lb}$ | 18 lb | 1673 | 323.00 |
|  | (UNC) Coarse thread |  |  |  |  |  |  |  |  |
|  | 1/4-20 | 2.000 | 1.00 | 0.750 | 1.187 | 2,500 lb | 1 lb | 1112 | 8.70 |
|  | 1/2-13 | 3.125 | 1.50 | 1.187 | 2.000 | 12,000 lb | 1 lb | 583 | 13.10 |

## Stainless Steel Eye Bolts

Forged stainless steel with external threads and stainless steel jam nut.
Recommend using a safety factor of 4 to 1.

|  | Overall <br> Thread <br> Iength <br> Sength | Inside <br> eye | Outside <br> eye | Ultimate <br> Strength | Weight | Stock | Each <br> Price D |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| (UNF) Fine thread |  |  |  |  |  |  |  |  |
| $1 / 4-28$ | 2.000 | 1.00 | 0.750 | 1.187 | $2,500 \mathrm{lb}$ | 1 lb | 1763 | $\$ 43.40$ |
| $1 / 2-20$ | 3.125 | 1.50 | 1.187 | 2.000 | $12,000 \mathrm{lb}$ | 1 lb | 1764 | 71.30 |
| $3 / 4-16$ | 4.063 | 2.00 | 1.500 | 2.813 | $20,000 \mathrm{lb}$ | 1 lb | 1765 | 120.00 |


| Connecting Links |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Forged steel, zinc plated with interlocking lugs. |  |  |  |  |
| Size (Inches) | Inside Dimensions | Weight | Stock | Price $\mathbf{D}$ |
| $1 / 4$ | $0.438 \times 0.813$ | 1 lb | 441 | $\$ 13.30$ |
| $3 / 8$ | $0.563 \times 1.094$ | 1 lb | 442 | 12.10 |
| $1 / 2$ | $0.719 \times 1.469$ | 1 lb | 443 | 14.90 |
|  |  |  |  |  |
| $5 / 8$ | $0.813 \times 1.750$ | 1 lb | 444 | 17.50 |
| $3 / 4$ | $0.938 \times 2.063$ | 2 lb | 445 | 34.90 |
| 1 | $1.750 \times 2.625$ | 3 lb | 446 | 114.00 |
| $1-1 / 4$ | $1.500 \times 3.156$ | 5 lb | 736 | 297.00 |




Tension Cable with adjustable ends


TC 1/2-20/13-5.5


TC3/4-10-BALL


## Tension cable w/adjustable ends

Wire rope assembly has UNF (fine thread) on one fitting and UNC (coarse thread) on the other. The fittings on both ends of the cable will turn independently to allow for easy installation and adjustment. Threaded fittings are zinc plated steel with wrench flats. Galvanized cable with swaged stainless steel ball and shank on each end. Each end fitting has jam nut. Capacity is based on OSHA safety factor of 4 to 1 .

| Thread O | Overall Length | Rated Capacity | Ultimate Strength | End Fittings | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TC1/4-28/20 | 3.5" | 120 lb | 480 lb | 1/4-28 1"Ig | 1 lb | 752 | \$ 40.60 |
|  |  |  |  | 1/4-20 1"Ig |  |  |  |
| TC1/4-28/16 | 4.0" | 240 lb | 480 lb | 1/4-28 1"Ig | 1 lb | 1393 | 56.90 |
|  |  |  |  | 3/8-16 1.25"lg |  |  |  |
| TC3/8-24/16 | 4.25" | 230 lb | 920 lb | 3/8-24 1.25"lg | 1 lb | 753 | 70.80 |
|  |  |  |  | 3/8-16 1.25"lg |  |  |  |
| TC3/8-24/13 | 4.75" | 230 lb | 920 lb | 3/8-24 1.25"lg | 1 lb | 1394 | 57.20 |
|  |  |  |  | 1/2-13 1.5"lg |  |  |  |
| TC1/2-20/13 | 5" | 700 lb | 2,800 lb | 1/2-20 1.5" lg | 1 lb | 754 | 62.70 |
|  |  |  |  | 1/2-13 1.5"lg |  |  |  |
| All stainless steel construction |  |  |  |  |  |  |  |
| TC1/4-28/20-SS | S 3.5" | 120 lb | 480 lb | 1/4-28 1"lg | 1 lb | 872 | 115.00 |
|  |  |  |  | 1/4-20 1"lg |  |  |  |
| TC1/2-20/13-SS | 5" | 700 lb | 2,800 lb | 1/2-20 1.5"lg | 1 lb | 4893 | 120.00 |
|  |  |  |  | 1/2-13 1.5"lg |  |  |  |

## Tension cable w/swaged ends

Wire rope assembly has UNF (fine thread) on one fitting and UNC (coarse thread) on the other. Galvanized cable with swaged zinc plated threaded steel fittings on each end.
Each end fitting has jam nut. Capacity is based on OSHA safety factor of 4 to 1 .

| Thread | Length | Capacity | Strength | Fittings | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TC1/2-20/13-5.5 | 5 5.5" | $1,400 \mathrm{lb}$ | 7,000 lb | $\begin{aligned} & 1 / 2-201.5^{\prime \prime} \mathrm{lg} \\ & 1 / 2-131.5^{\prime} \mathrm{lg} \end{aligned}$ | 1 lb | 1397 | \$ 55.50 |
| TC3/4-10-BALL Used on Cardin | $\begin{aligned} & \text { L } 6.31^{\prime \prime} \\ & \text { nal FH \& } \end{aligned}$ | $\begin{aligned} & 3,600 \mathrm{lb} \\ & \mathrm{EP} \end{aligned}$ | 14,400 lb | $\begin{aligned} & 3 / 4-102^{\prime \prime} \mid g \\ & 1-1 / 4 \text { "dia ball } \end{aligned}$ | 1 lb | 1840 | 59.80 |
| Metric |  |  |  |  |  |  |  |
| All stainless steel construction |  |  |  |  |  |  |  |
| TC1/2-13-M12 | 5.5 " | $1,400 \mathrm{lb}$ | 7,000 lb | $\begin{aligned} & \mathrm{M} 121.5^{\prime \prime} \mathrm{lg} \\ & 1 / 2-131.5^{\prime \prime} \mathrm{lg} \end{aligned}$ | 1 lb | 1693 | 67.70 |

## Load cell insulators

Protect load cells from damaging high voltage and current. Electrically isolate the load cell with one insulator at each end mounted in the tension hardware. Use in areas where close lightning strikes cause load cell burnouts. Observe OSHA recommendation of 4:1 safe working load ratio.

| Thread | Capacity | Strength | Thread | Size W | Neight | Stock | Price C5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2165-1A | 150 lb | 600 lb | 1/4-20UNC | 1-1/8"x1"h | 1 lb | 427 | \$ 11.30 |
|  |  |  | x 1/4"deep |  |  |  |  |
| 5612-28 | 150 lb | 600 lb | 1/4-28UNF | 1"x1"h | 1 lb | 1048 | 14.50 |
|  |  |  | x 5/16"deep |  |  |  |  |
| 2781-16 | 750 lb | $3,000 \mathrm{lb}$ | 3/8-16UNC | $2-1 / 2$ "x2-1/2"h | h 1 lb | 428 | 17.30 |
|  |  |  | x 1/2"deep |  |  |  |  |
| 2781-24 | 750 lb | $3,000 \mathrm{lb}$ | 3/8-24UNF | 2-1/2"x2-1/2"h | ค 1 lb | 463 | 39.10 |
|  |  |  | x 1/2"deep |  |  |  |  |
| 2781-13 | 750 lb | 3,000 lb | 1/2-13UNC | 2-1/2"x2-1/2"h | h 1 lb | 429 | 23.90 |
|  |  |  | x 5/8"deep |  |  |  |  |
| 2781-20 | 750 lb | $3,000 \mathrm{lb}$ | 1/2-20UNF | 2-1/2"x2-1/2"h | h 1 lb | 462 | 61.00 |
|  |  |  | x 3/4"deep |  |  |  |  |
| 2781-20/13 | 3750 lb | $3,000 \mathrm{lb}$ | 1/2-20UNF | 2-1/2"x2-1/2"h | h 1 lb | 966 | 39.30 |
|  |  |  | \& 1/2-13UNC |  |  |  |  |
|  |  |  | x 3/4"deep |  |  |  |  |
| ST-1015 | $3,000 \mathrm{lb}$ | 12,000 lb | 1/2-13UNC | 2-13/32"x | 2 lb | 382 | 79.90 |
|  |  |  | x 9/16"deep(gr | ay) $2-13 / 32$ " |  |  |  |



## Threaded adapters

Externally threaded for connecting load cells to insulators. Also useful where mounting space is limited. Steel, zinc plated. Adapters have jam nuts at each end.

|  | Part Number | Thread | Length | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A 1/4-28/28 | 1/4-28 full length | 1.00" | 1 lb | 699 | \$ 3.20 |
|  | A 1/4-28/20 | 1/4-28x1/2"lg 1/4-20x1/2"lg | 1.00 " | 1 lb | 717 | 3.20 |
|  | A 1/4-28/16 | 1/4-28x1"lg 3/8-16x1"lg | $2.00 "$ | 1 lb | 1409 | 6.70 |
|  | A 1/4-28/24 | 1/4-28x1"lg 3/8-24x1"lg | 2.00 " | 1 lb | 1410 | 7.90 |
|  | A 3/8-24/24 | 3/8-24 full length | 1.25 " | 1 lb | 718 | 3.00 |
|  | A 3/8-24/16 | $3 / 8-24 \times 1$ " $\lg 3 / 8-16 \times 1$ " $\lg$ | 2.00" | 1 lb | 719 | 3.20 |
|  | A 1/2-20/20 | 1/2-20 full length | 1.50" | 1 lb | 720 | 5.90 |
|  | A 1/2-13/13 | 1/2-13 full length | 1.50 " | 1 lb | 2346 | 5.90 |
|  | A 1/2-20/13 | 1/2-20x1"lg 1/2-13x1"lg | 2.00 " | 1 lb | 721 | 5.70 |
| Oct | A 1/2-20/13-2.5 | 1/2-20x1-1/4"; $1 / 2-13 \times 1-1 / 4$ " | 2.50" | 1 lb | 1405 | 7.80 |
| $\downarrow$ | A3/4-16/10-3.25 | 3/4-16x2-1/8";3/4-10x1-1/8" | 3.25 " | 1 lb | 1406 | 12.10 |
|  | A $1 / 2-13 \times 12$ " | 1/2-13 full length | 12" | 1 lb | 496 | 8.90 |
|  | A 3/4-10x12" | 3/4-10 full length | 12" | 1 lb | 497 | 11.85 |



Threaded Adapter


Quick link

## Quick link

Zinc plated link easily connects mounting hardware such as shackles, eye bolts, links, eye nuts and chain.

| Size | Working <br> Load limit | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: |
| $1 / 4 "$ Quick link | 880 lb | 1 lb | 1945 | $\$ 5.40$ |
| $5 / 16^{\prime \prime}$ Quick link | $1,540 \mathrm{lb}$ | 1 lb | 1946 | 6.30 |
|  |  |  |  |  |
| $3 / 8^{\prime \prime}$ Quick link | $2,200 \mathrm{lb}$ | 1 lb | 1947 | 8.50 |
| $1 / 2^{\prime \prime}$ Quick link | $3,300 \mathrm{lb}$ | 1 lb | 1948 | 13.80 |

## Forged Shackles

Used to connect rod ends to eye bolts, eye nuts or hooks.

| Nominal <br> Size | Capacity | Pin <br> Dia. | Gap <br> Pin | Weight | Stock | Price D |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: |
| $1 / 4$ | $1,000 \mathrm{lb}$ | $5 / 16$ | 0.500 | 1 lb | 435 | $\$ 6.20$ |
| $3 / 8$ | $2,000 \mathrm{lb}$ | $7 / 16$ | 0.656 | 1 lb | 436 | 8.50 |
| $7 / 16$ | $3,000 \mathrm{lb}$ | $1 / 2$ | 0.719 | 1 lb | 437 | 10.80 |
|  |  |  |  |  |  |  |
| $1 / 2$ | $4,000 \mathrm{lb}$ | $5 / 8$ | 0.813 | 1 lb | 438 | 11.80 |
| $3 / 4$ | $7,500 \mathrm{lb}$ | $7 / 8$ | 1.250 | 1 lb | 439 | 29.00 |

Spherical Washer pair
Concave and convex pair of washers are used to provide a firm mounting surface for a rod or bolt when there is a slight off perpendicular condition.

| Part Number | I.D. | O.D. Thickness |  | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Black finish tool steel |  |  |  |  |  |  |
| 1/4" Spherical washer | $9 / 32$ | $5 / 8$ | $3 / 16$ | 1 lb | 755 | $\$ 3.80$ |
| 3/8" Spherical washer | $13 / 32$ | $7 / 8$ | $1 / 4$ | 1 lb | 756 | 9.40 |
| 1/2" Spherical washer | $17 / 32$ | $1-1 / 8$ | $5 / 16$ | 1 lb | 757 | 5.80 |
|  |  |  |  |  |  |  |
| 5/8" Spherical washer | $21 / 32$ | $1-3 / 8$ | $5 / 16$ | 1 lb | 758 | 6.90 |
| 3/4" Spherical washer | $25 / 32$ | $1-5 / 8$ | $3 / 8$ | 1 lb | 759 | 8.90 |
| 1" Spherical washer | $1-1 / 16$ | 2 | $1 / 2$ | 1 lb | 760 | 13.30 |
|  |  |  |  |  |  |  |
| 1-1/4" Spherical washer | $1-5 / 16$ | $2-5 / 8$ | $1 / 2$ | 1 lb | 761 | 27.40 |
| 1-1/2" Spherical washer | $1-9 / 16$ | $2-7 / 8$ | $9 / 16$ | 1 lb | 762 | 34.00 |
| 2" Spherical washer | $2-1 / 16$ | $3-7 / 8$ | $3 / 4$ | 2 lb | 763 | 51.90 |
|  |  |  |  |  |  |  |
| Stainless steel |  |  |  |  |  |  |
| 1/4" SS spherical washer | $9 / 32$ | $5 / 8$ | $3 / 16$ | 1 lb | 1161 | 9.20 |
| 3/8" SS spherical washer | $13 / 32$ | $7 / 8$ | $1 / 4$ | 1 lb | 1162 | 12.10 |
| 1/2" SS spherical washer | $17 / 32$ | $1-1 / 8$ | $5 / 16$ | 1 lb | 1163 | 15.10 |
| 5/8" SS spherical washer | $21 / 32$ | $1-3 / 8$ | $5 / 16$ | 1 lb | 1164 | 18.90 |
| 3/4" SS spherical washer | $25 / 32$ | $1-5 / 8$ | $3 / 8$ | 1 lb | 1165 | 22.20 |
| 1" SS spherical washer | $1-1 / 16$ | 2 | $1 / 2$ | 1 lb | 1166 | 34.60 |
|  |  |  |  |  |  |  |
| 1-1/4" SS spherical washer | $1-5 / 16$ | $2-5 / 8$ | $1 / 2$ | 1 lb | 1167 | 78.30 |
| 1-1/2" SS spherical washer | $1-9 / 16$ | $2-7 / 8$ | $9 / 16$ | 1 lb | 1168 | 75.80 |
| 2" SS spherical washer | $2-1 / 16$ | $3-7 / 8$ | $3 / 4$ | 2 lb | 1169 | 114.00 |


| Load Cup |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Load cup for use with single ended beam load cells. Heat treated and polished stainless |
| steel construction. Screw driving slot at end of stud for vertical adjustment.. Ball is not |
| included with cup. |

## Load Button

Load button for use with single ended beam load cells. Heat treated and polished stainless steel construction. Wrench flats for easy disassembly.

| Part Number | Capacity | Thread | Length | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| TLB1220 load button | 250 to 5 K | $1 / 2-20$ | $0.7^{\prime \prime}$ | 1 lb | 2915 | $\$ 35.00$ |
| TLB3416 load button | 5 to 10 K | $3 / 4-16$ | $0.9^{\prime \prime}$ | 1 lb | 2916 | 57.70 |

## Ball Cup or Cone

Bearing cup and ball or conical load button for use with TB2 and TB3 single ended beam load cells. Wrench flats on end of stud for vertical adjustment.

| Part Number | Weight | Stock | Price $\mathbf{D}$ |
| :--- | ---: | ---: | ---: |
| Bearing cup and 7/8" dia ball for TB2/TB3 beam | 1 lb | 1474 MB | $\$ 47.50$ |
| Conical load button for TB2/TB3 beam | 1 lb | 708 MB | 54.00 |

## Compression Load Button

For use with "S" type load cells. Stainless steel spherical button with nylon washer.

| Part Number | Capacity | Length | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1 / 4-28$ " S " cell load button | 25 to 300 lb | 0.50 " | 1 lb | 2459 | $\$ 58.30$ |

## Compression Load Button

For use with HBM model SB3 and RTI model SSB load cells. Includes hardened steel spherical button with bolt and washer.

| Part Number | Capacity | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: |
| LBA-5K load button | $1,2,5 \mathrm{~K}$ | 1 lb | 1910 | $\$ 80.00$ |



## Conical Load button 100-300 lb



TB2/TB3 Bearing cup and 7/8" dia ball


Load button

$3 " x 4$ "x5/8"1/2-13
Mounting plate, for welding

## Mounting plate for floor scale load beam cells

This mounting plate is $3^{\prime \prime} \times 4^{\prime \prime} \times 5 / 8^{\prime \prime}$ thick with (2) drilled and tapped $1 / 2-13$ UNC thread having 1 " spacing center to center. This plate is for welding to the underside of a floor scale to provide a convenient mounting surface for the single ended load beam cells. Plate is unpainted without any plating or finish. Must be primed and painted with the floor scale.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| $3 " \times 4^{\prime \prime} \times 5 / 8^{\prime \prime} 1 / 2-13$ Mounting plate | 2 lb | 2791 | $\$ 29.20$ |

## Spacer for Beam Cells

This Stainless steel spacer plate will provide clearance between a single ended beam cell and the mounting surface. Three thicknesses $0.080^{\prime \prime}, 1 / 4^{\prime \prime}$ and $3 / 8^{\prime \prime}$ are available. The hole size and spacing will fit typical beam load cells

| Part Number | Thickness | Size | Capacity | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TBS-80-5-SS | 0.080" | 1.25 " $\times 2.25^{\prime \prime}$ | 1K-5K SE | 1 lb | 6623 | \$ 17.90 |
| TBS-80-10-SS | 0.080" | 1.50 " $3.00^{\prime \prime}$ | 5K-10K | 1 lb | 6624 | 21.40 |
| TBS-1/8-5-SS | 1/8" | 1.25 " $\times 2.25$ " | 1k-5K SE | 1 lb | 6807 | 22.00 |
| TBS-1/4-5-SS | 1/4" | 1.25 " $\times 2.25^{\prime \prime}$ | 1K-5K SE | 1 lb | 6625 | 25.70 |
| TBS-1/4-10-SS | 1/4" | 1.50 " $\times 3.00^{\prime \prime}$ | 5K-10K | 1 lb | 6626 | 34.00 |
| TBS-1/4-20-SS | $1 / 4 "$ | 2.00 " $\times 4.00$ " | 15K-20K | 2 lb | 6627 | 45.00 |
| TBS-3/8-5-SS | 3/8" | 1.25 " $\times 2.25^{\prime \prime}$ | 1K-5K SE | 1 lb | 6628 | 30.10 |
| Spacer for beam cells, (nickel plated) |  |  |  |  |  |  |
| TBS-1/8-5-NP | 1/8" | 1.25 " $\times 2.25$ " | 1K-5K SE | 1 lb | 6800 | 16.00 |

## Foot Retainer (New installation)

Foot retainer for new installation of floor scales. The mild steel plate has 4 mounting holes and is completely under the floor scale platform. The hole diameter is $1 / 8$ " larger than the foot dia for easy installation.

|  | Part Number | r Size | Foot dia | Hole dia | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct | FR-1.875 | $4^{\prime \prime} \times 4$ " $1 / 4{ }^{\prime \prime}$ | 1-3/4" | 1-7/8" | 1 lb | 6459 | \$ 22.00 |
|  | FR-2.000 | $4^{\prime \prime} \times 4^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 1-7/8" | 2 " | 1 lb | 6607 | 22.00 |
|  | FR-2.125 | $4^{\prime \prime} \times 4^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 2 " | 2-1/8" | 1 lb | 6608 | 22.00 |
|  | FR-2.625 | $4^{\prime \prime} \times 4^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 2-1/2" | 2-5/8" | 1 lb | 6609 | 24.40 |
|  | FR-3.125 | 4.5 " $\times 4.5$ " $\times 1 / 4^{\prime \prime}$ | 3 " | 3-1/8" | 1 lb | 6610 | 25.00 |
|  | Stainless SteelFR-3.125 $4.5^{\prime \prime} \times 4.5^{\prime \prime} \times 1 / 4^{\prime \prime}$ |  |  |  |  |  | c |
|  |  |  | $3 "$ | 3-1/8" | 1 lb | 6516 | 42.80 |

## Foot Retainer (Existing installation)

Foot retainer for existing scales. When a scale cannot be removed for adding retainers, these longer two hole mild steel versions make the task easy. Simply raise each corner of the floor scale and slip the foot retainer under the beam foot. The two mounting holes extend past the edge of the floor scale platform for drilling and bolting to the floor. The whole diameter is $1 / 8^{\prime \prime}$ larger than the foot dia for easy installation.

|  | Part Number | Size | Foot dia | Hole dia | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct | FRL-1.875 | $4^{\prime \prime} \times 4^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 1-3/4" | 1-7/8" | 1 lb | 3131 | \$ 22.20 |
|  | FRL-2.000 | $3^{\prime \prime} \times 4.5^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 1-7/8" | 2 " | 1 lb | 4630 | 22.70 |
|  | FRL-2.125 | $3^{\prime \prime} \times 4.5$ " $\times 1 / 4^{\prime \prime}$ | $2 "$ | 2-1/8" | 1 lb | 4631 | 22.70 |
|  | FRL-2.625 | $4^{\prime \prime} \times 4.5^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 2-1/2" | 2-5/8" | 1 lb | 4632 | 24.40 |
|  | FRL-3.125 | $4^{\prime \prime} \times 5^{\prime \prime} \times 1 / 4^{\prime \prime}$ | $3 "$ | 3-1/8" | 1 lb | 4633 | 25.00 |
|  | FRL-3.625 | 4.5 " $\times 6$ " $\times 1 / 4^{\prime \prime}$ | $3-1 / 2^{\prime \prime}$ | $3-5 / 8$ " | 1 lb | 4795 | 41.40 |


|  | Jam Nuts |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Hex nut, zinc plated. |  |  |  |
|  | Fine Thread (UNF) | Weight | Stock | Price D |
|  | 1/4-28 | 1 lb | 1125 | \$ . 14 |
|  | 3/8-24 | 1 lb | 1126 | . 14 |
|  | 1/2-20 | 1 lb | 1127 | . 14 |
|  | 5/8-18 | 1 lb | 1128 | . 24 |
|  | 3/4-16 | 1 lb | 1129 | . 49 |
| ) | 1-14 | 1 lb | 1130 | 1.60 |
| - ( 00 | 1-12 | 1 lb | 1184 | 12.50 |
|  | 1 1/4-12 | 1 lb | 1183 | 7.20 |
| Jam nuts | 1 1/2-12 | 1 lb | 1182 | 6.20 |
|  | 2-12 | 1 lb | 1181 | 31.00 |
|  | Coarse Thread (UNC) | Weight | Stock | Price D |
|  | 1/4-20 | 1 lb | 1131 | \$ . 14 |
|  | 3/8-16 | 1 lb | 1132 | . 14 |
|  | 1/2-13 | 1 lb | 1133 | . 14 |
|  |  | 1 lb |  | . 24 |
|  | 3/4-10 | 1 lb | 1135 | . 49 |
|  | 1-8 | 1 lb | 1136 | . 64 |
|  | Jam Nuts, Stainle |  |  |  |
|  | Hex nut, stainless steel. |  |  |  |
|  | Fine Thread (UNF) | Weight | Stock | Price D |
|  | 1/4-28 UNF SS | 1 lb | 1760 | \$ 90 |
|  | 3/8-24 UNF SS | 1 lb | 1565 | 1.30 |
|  | 1/2-20 UNF SS | 1 lb | 1761 | 1.40 |
|  | 5/8-24 UNF SS | 1 lb | 1566 | 1.75 |
|  | 3/4-16 UNF SS | 1 lb | 1762 | 1.90 |
|  | Coarse Thread (UNC) | Weight | Stock | Price D |
|  | 1/4-20 UNC SS | 1 lb | 211 | \$ 90 |
|  | 1/2-13 UNC SS | 1 lb | 4892 | 1.40 |

## Bolts

| Hex head cap screws, Stainless steel. |  |  |  |
| :--- | ---: | ---: | ---: |
| Coarse Thread (UNC) | Weight | Stock | Price $\mathbf{D}$ |
| $1 / 2-13 \times 2-$ SS | 1 lb | 2102 | $\$ 8.45$ |
| $1 / 2-13 \times 2.5-S S$ | 1 lb | 2233 | 8.95 |


| Fine Thread (UNF) | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| $1 / 2-20 \times 2.5-S S$ | 1 lb | 4373 | $\$ 8.95$ |
| $1 / 2-20 \times 3-S S$ | 1 lb | 4569 | 18.00 |


| Bolts |  |  |  |
| :--- | ---: | ---: | ---: |
| Hex head cap screws, zinc plated. |  |  |  |
| Coarse Thread (UNC) | Weight | Stock | Price $\mathbf{D}$ |
| $1 / 2-13 \times 1-3 / 4$ | 1 lb | 2735 | $\$ .75$ |
|  |  |  |  |
| Fine Thread (UNF) | Weight | Stock | Price $\mathbf{D}$ |
| $1 / 4-28 \times 1.5$ "-ZP | 1 lb | 2131 | $\$ 0.40$ |
| $3 / 8-24 \times 2$ 2"-ZP | 1 lb | 2132 | 1.10 |
| $1 / 2-20 \times 2.5$ "-ZP | 1 lb | 2133 | 1.90 |
| $5 / 8-18 \times 3$ 3"-ZP | 1 lb | 2134 | 4.50 |
| $3 / 4-16 \times 3.5 "-Z P$ | 1 lb | 2135 | 6.70 |
| $1-14 \times 4$ 4"-ZP | 1 lb | 2136 | 17.90 |
|  |  |  |  |
| $1-1 / 4-12 \times 5$ "-ZP | 1 lb | 3604 | 46.70 |
| $1-1 / 2-12 \times 6^{\prime \prime}-Z P$ | 1 lb | 3605 | 100.00 |
| $2-12 \times 7$ 7"-ZP | 1 lb | 3606 | 197.00 |


| Washer |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Split lock washer, zinc plated. |  |  |  |
| Part number | Weight | Stock | Price $\mathbf{D}$ |
| $1 / 2^{\prime \prime}$ Split lock washer | 1 lb | 2747 | $\$ .33$ |



Split lock washer


EBF 1420

## Beam feet

These feet screw into the threaded load hole in single ended beam load cells.
Stainless steel captive ball bearing foot with 10 deg pivoting and 360 deg rotation.

| Part Number | Min Ht | Max Ht | Pad | Wt | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CBBF-1/2-20x1-7/8-SS | 1-3/4" | 3 " | 1-7/8" dia | 1 lb | 4864MB | \$ 55.50 |
| CBBF-1/2-20x2-SS | 1-3/4" | $3 "$ | 2" dia | 1 lb | 4865 | 55.50 |
| CBBF-1/2-20x2-1/2-SS | 1-3/4" | 3" | 2-1/2" dia | 1 lb | 4866 | 58.30 |
| CBBF-1/2-20x3-SS | 1-3/4" | $3 "$ | 3 " dia | 1 lb | 4020 | 61.10 |
| CBBF-3/4-16x3-SS | 2-1/2" | 4-1/4" | 3" dia | 2 lb | 4021 | 93.00 |
| CBBF-1-14x3-SS | 2-1/2" | 4-1/4" | 3" dia | 2 lb | 4022 | 111.00 |
| CBBF-1-12x3-SS | 2-1/2" | 4-1/4" | 3 " dia | 2 lb | 4023 | 111.00 |

Alloy steel captive ball bearing foot with 10 deg pivoting and 360 deg rotation.

| Part Number | Min Ht | Max Ht | Pad | Wt | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CBBF-1/2-20x1-7/8-AS | 1-3/4" | 3 " | 1-7/8" dia | 1 lb | 4867 | \$ 38.80 |
| CBBF-1/2-20x2-AS | 1-3/4" | $3 "$ | 2" dia | 1 lb | 4868 | 38.80 |
| CBBF-1/2-20x2-1/2-AS | 1-3/4" | $3 "$ | 2-1/2" dia | 1 lb | 4869 | 47.20 |
| CBBF-1/2-20x3-AS | 1-3/4" | $3 "$ | 3" dia | 1 lb | 4870 | 48.60 |
| CBBF-3/4-16x3-AS | 2-1/2" | 4-1/4" | 3" dia | 2 lb | 4871 | 66.60 |
| CBBF-1-14x3-AS | 2-1/2" | 4-1/4" | 3 " dia | 2 lb | 4872 | 80.00 |
| CBBF-1-12x3-AS | 2-1/2" | 4-1/4" | 3" dia | 2 lb | 4873 | 120.00 |

Rubber cap for CBBF. Molded rubber caps for harsh or wet environments.

| Part Number | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: |
| Rubber cap for 1/2-20x1-7/8" \& 2" dia | 1 lb | 4874 | $\$ 9.90$ |
| Rubber cap for 1/2-20x2-1/2" \& 3" dia | 1 lb | 4875 | 9.90 |
| Rubber cap for 3/4-16x3" dia | 1 lb | 4876 | 10.80 |

## Beam feet

Replacement feet that are commonly used on Weigh-Tronix® floor scales. They are made of solid stainless steel for hard usage. These feet screw into the threaded load hole in single ended beam load cells.

| Part Number | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: |
| WF-1/2-13x1-3/4 | 1 lb | 4877 | $\$ 51.10$ |
| WF-5/8-11x2 | 1 lb | 4878 | 75.00 |

## Beam feet - Metric

Alloy steel swivel foot with non slip rubber base. Ball and rocker socket design prevents debris from entering joint. Allows horizontal movement similar to rocker pin design. Built in hex nut for height adjustment.

| Part Number | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: |
| TBF-M12 | 1 lb | 6904 | $\$ 30.00$ |
| TBF-M18 | 2 lb | 6905 | 45.00 |

## Scale foot

For use with Pennsylvania Scales, bases and scales. Plastic end cap with 1/4-20 UNC stainless steel stud.

| Part Number | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: |
| EBF1420 Plastic SS foot 1/4-20 | 1 lb | 270 | $\$ 13.30$ |

## Beam feet

These feet screw into the threaded load hole in single ended beam load cells.
Stainless steel stud and base will resist corrosion. Uneven floors are accommodated with the oblique spheroid joint which has hex wrench flats and jam nut for height adjustment. The ball and socket joint has the ball under the socket which keeps dust and dirt from entering joint. Bottom of foot is bonded with rubber to stop slipping. 30 degree swivel and 360 degree rotation.

| Part Number | Min Ht | Max Ht | Pad | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| TBF1/2-20-SS | $2-1 / 8^{\prime \prime}$ | $3-3 / 8^{\prime \prime}$ | $3^{\prime \prime}$ dia | 2 lb | 1781 | $\$ 59.70$ |
| TBF3/4-16-SS | $2-3 / 4^{\prime \prime}$ | $4-1 / 8^{\prime \prime}$ | $31 / 2^{\prime \prime}$ dia | 3 lb | 1782 | 97.20 |



## Beam feet

Stainless steel heat treated and electropolished. Rubber insert is bonded into a recess at the bottom of the foot. This prevents the foot from sliding on the floor. 60 deg swivel and 360 deg rotation.

|  | Part Number | Min Ht | Max Ht | Pad | Wt | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct | SBF3/8-16SS | 1-3/8" | 2-1/2" | 1-1/4" dia | 1 lb | 1241 | \$ 36.50 |
|  | SBF1/2-20x1-7/8-SS | 1-3/4" | 3-1/4" | 1-7/8" dia | 1 lb | 584 | 60.30 |
|  | SBF1/2-20x3-SS | 1-3/4" | 3-1/4" | $3{ }^{\text {" dia }}$ | 2 lb | 2677 | 79.70 |
|  | SBF3/4-16-SS | 2-3/8" | 4-1/4" | 3 " dia | 2 lb | 585 | 93.30 |
|  | Scale foot SBF5/16-18SS | 1-3/8" | 2 1/2" | $11 / 4^{\prime \prime}$ dia | 1 lb | 1497 | 36.50 |

## Beam feet

Alloy steel with zinc plate finish. Rubber insert is bonded into a recess at the bottom of the foot. This prevents the foot from sliding on the floor. 60 deg swivel and 360 deg rotation.

| Part Number | Min Ht | Max Ht | Pad | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| SBF1/2-20 | $1-3 / 4^{\prime \prime}$ | $3-1 / 4^{\prime \prime}$ | $1-7 / 8^{\prime \prime}$ dia | 1 lb | 73 | $\$ 49.00$ |
| SBF3/4-16 | $2-3 / 8^{\prime \prime}$ | $4-1 / 8^{\prime \prime}$ | $3 "$ dia | 2 lb | 75 | 75.50 |

## Mettler Toledo Foot

For use with mettler toledo scale.

| Part Number | Wt | Stock | Price D |
| :--- | ---: | ---: | ---: |
| 61041769 foot | 1 lb | 555 | $\$ 127.50$ |



NBF


RBF


LFR


Fairbanks Foot Assembly
Rubber and steel with load pin and retaining bolt. For use with HR 3400.

| Part Number | Height | Wt | Stock | Price B |
| :--- | ---: | :---: | ---: | ---: |
| 638899 Foot assembly | $2.24^{\prime \prime}$ dia | 1 lb | 4007 | 90.00 |


| Rubber-Bumper |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- | :---: | :---: | :---: |
| Rubber bumper with unthreaded hole 1-1/2" OD |  |  |  |  |  |  |  |
| Part Number | Height | Wt | Stock | Price $\mathbf{D}$ |  |  |  |
| 9540 K36 Rubber Bump (10) pack | $3 / 4^{\prime \prime}$ dia | 1 lb | 4000 | $\$ 28.30$ |  |  |  |


| Beam Feet |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: |
| Used in Transcell scales. |  |  |  |  |
| Part Number | Height | Wt | Stock | Price D |
| LFR-2x1/2-20 | $2^{\prime \prime}$ dia | 1 lb | 4997 | $\$ 21.30$ |
| LFR-2Sx1/2-20 SLOT | $2^{\prime \prime}$ dia | 1 lb | 4975 | 21.30 |

## Supplies

## Press for Security Seals

Security seals comply with paragraph S.1.8. of Handbook 44. The flexible wire goes thru holes in the indicator case and then through the seal. The sealing press will lock the wire by crimping the soft metal and emboss the characters on the dies. Sealing press, $5^{\prime \prime}$ long, steel construction. Press comes with mating pair of engraved flat dies for use on lead seals. Each die can have up to 4 letters or numbers i.e., initials on one die, company or year on other die.
Allow 4 to 6 weeks for engraving dies.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 5" Bulldog seal press with engraved dies | 2 lb | 431 | $\$ 188.00$ |
| Replacement die, 4 characters, engraved | 1 lb | 432 | 45.70 |

Press has 2 dies.

## Lead Security Seals

Lead and wire seals comply with paragraph S.1.8. of Handbook 44. Lead seals are $3 / 8$ " diameter and have a cavity at one end so that when wire is doubled back through the lead it is concealed when the lead is pressed. The wire is 6 " long, 3 ply 0.018 " copper.


3/8" Lead \& wire seals

## Aluminum Security Seals

Alucast and wire seal for the applications that will not accept the traditional lead and wire seal. This seal will also comply with paragraph S.1.8. of Handbook 44. This seal is installed using the same method as the lead and wire seal using the same sealing press. The only difference is the lead is replaced with soft aluminum. It is made of $98 \% 2 \mathrm{SO}$ aluminum with a melting point of 1200 deg $F$. The wire is 12 " long, special spirally-wound galvanized steel, 0.044 " dia with approximate break strength of 17 lb .

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 911 Alucast \& wire seal (pack of 100) | 1 lb | 2338 | $\$ 68.20$ |

## Polypropylene Plastic Security Seals

Polypropylene and wire seal for the applications that will not accept the traditional lead and wire seal. This seal will also comply with paragraph S.1.8. of Handbook 44. This seal is installed without any tools. A sealing press is not required. Simply insert the wire through the sealing holes and bend it around the insert and snap the seal closed. If the seal must be marked with identification numbers or letters, the seal would be stamped with special marking pliers prior to installing the seal. The wire is 14 " long, single strand galvanized steel, 0.028 " dia. Marking pliers have two special steel dies for impressing marks in one or both faces of the seal. The dies are custom embossed. Each die can have up to 4 letters or numbers i.e., initials on one die, company or year on other die. Allow 4 to 6 weeks for embossing dies.

|  | Part Number | Weight | Stock | Price C |
| :--- | :--- | ---: | ---: | ---: |
| TIK-PP-14 poly \& wire seal (pack of 100) | 1 lb | 2342 | $\$ 67.50$ |  |
| Sep |  |  |  |  |
| TIK-A Marking pliers w/o embossed dies | 1 lb | 2343 | 131.00 |  |
| Embossed die, 4 characters | 1 lb | 2344 | 119.00 |  |




WLC100


## Sorbit-3g

NEW


## Sorbit-2

## Soldering Station

Variable power control 5 to 40 watts. 40 watt pencil iron and ST\# interchangeable tip. Replaceable heating element. Cushioned foam grip. Safety guard iron holder. On/off switch with "Power On" indicator light. 120 VAC, $50 \mathrm{~Hz}, 60 \mathrm{~Hz}$.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| WLC100 Welder soldering station | 3 lb | 230 | $\$ 111.00$ |
| WP25 Welder soldering station | 1 lb | 237 | 92.40 |

## Stop corrosion \& moisture problems!

Silica Gel, moisture absorbent and desiccant will keep moisture from causing signal changes in junction boxes and instruments. Two convenient sizes are available for large and small junction boxes. Just put one or two packets of silica gel in each junction box, instrument and printer. Avoid corrosion problems due to moisture. Packets can be reactivated and used again. An absolute necessity in every truck scale junction box. Each packet contains 2 ounces ( 56 grams) of silica gel.

| Part Number | Size | Weight | Stock | Price C |
| :--- | :---: | ---: | ---: | ---: |
| Sorbit-3g | $1^{\prime \prime} \times 2^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 1 lb | 2949 | $\$ 1.95$ |
| Sorbit-2 | $4.5^{\prime \prime} \times 5^{\prime \prime} \times 3 / 8^{\prime \prime}$ | 1 lb | 217 | 3.65 |

## Power

## Mark VII-C - Tesco

Voltage spike and transient protector. Two stage silicon avalanche device shunts over voltage to ground. If first stage is removed by severe strike, second stage will continue giving protection. If a severe second strike occurs and removes the second stage, power will be disconnected from protected equipment. Flashing light signals first stage of failure. Flashing light and no power output signals second stage failure. 6 ft line cord, (4) 115 VAC receptacles, lighted On/Off switch, indicator light, circuit breaker. 5 year warranty. Clamping 1st stage 200 VAC: 2nd stage 210 VAC. Response time is less than 5 nanoseconds.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Mark VII-C | 1 lb | 790 | $\$ 130.00$ |




PW3110 550va UPS


## Powerware Uninterruptible Power Supply

Powerware PW3110 UPS offers basic protection in a sleek unit that easily fits under a desk or mounts on a wall.. An internal battery gives continuous power to an inverter that converts DC to AC. The battery is kept fully charged by a built-in charger under normal conditions. If power is interrupted due to spikes, electrical noise, harmonic power distortion, under voltage and blackouts, the battery and inverter continue to provide clean power. User replaceable battery provides easy maintenance and upkeep. Capacity is 550 VA. Reserve time is 3 minutes at full load, and 6 minutes at half load. Transfer time is 6 ms . Recharge time is 8 hours. 6 ft line cord for 120 VAC $50 / 60 \mathrm{~Hz}$, (4) receptacles with UPS \& Surge protection and (2) receptacles with surge protection only NEMA 5-15R. $2.3^{\prime \prime} \mathrm{W} \times 15.5^{\prime \prime} \mathrm{D} \times 5.9^{\prime \prime} \mathrm{H}$.

| Part Number | Output Power | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| PW3110 550VA UPS | 425VA | 12 lb | 1402 | $\$ 107.00$ |

## Line Conditioner - Tripp Lite

Brownout protection and surge suppression in a single cost effective unit. Line conditioner will automatically adjust under and over voltages from 87 to 140 volts AC. This keeps you working through brownouts and prolonged over voltages. LC604 has indicator lights for TRIM, NORMAL, BOOST. LC1200 has indicator lights for VERY HIGH, HIGH, NORM, LOW, VERY LOW, LINE FAULT, LINE OK.
6 ft line cord for 120 VAC 60 Hz , (4) receptacles NEMA 5-15R. 2 year warranty. LS604: $4-3 / 8^{\prime \prime} \times 5-1 / 4^{\prime \prime} \times 5-3 / 4^{\prime \prime} \mathrm{H}$
LC1200: 5-3/4" x 6-3/4" x 6-3/4"H

| Part Number | Output Power | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| LS606M line conditioner | 600 watts | 6 lb | 4090 | $\$ 233.00$ |
| LC1200 line conditioner | 1200 watts | 10 lb | 4091 | 313.00 |



LS 606M
Rear view


## Bonding Braid (Ground Strap)

A flat woven braid of tinned-copper strands $7 / 16^{\prime \prime}$ wide. Bonding braid is equivalent to a solid \#6 AWG copper conductor. It has $1 / 2^{\text {" }}$ eyelets (1/4" I.D.) every 3 inches eliminating the need for punching holes. Bonding braid will provide a parallel path for high current around a load cell installation. It offers additional protection when welding or in areas of lightning activity. Connects top and bottom mounting plates in compression assemblies. Also used to shunt load cell and linkage in tension mounting.

| Part Number | Length | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| EM2025-15 | $15^{\prime \prime}$ | 1 lb | 967 | $\$ 13.90$ |
| EM2025-21 | $21^{\prime \prime}$ | 1 lb | 968 | 19.40 |
| EM2025-30 | $30 "$ | 1 lb | 969 | 27.80 |

## TS-101 Transducer Simulator

TS-101: Ultra high impact structural copolymer. Unbreakable, watertight, dustproof, chemical resistant and corrosion proof. Designed for $0.05 \%$ high accuracy testing and calibrating digital weight indicators. Ideal for setpoint, batching, or regular high accuracy simulation. 3 operation modes include load cell input selection of $1.75,2.0,3.0 \mathrm{mv} / \mathrm{V} .0$, $10,20,30,40,50,60,70,80,90,100 \% 11$ position calibration knob. 10 turn zero potentiometer. 5 position binding posts for banana plugs or timed wires. Zero adjustment capability for dead load or adjustment between steps. Built in digital volt meter for excitation voltage. $1 / 4$ " neoprene o-ring and ABS latches seal perfectly and includes an automatic purge valve for quick equalization after changes in atmospheric pressure. Floats in salt water with 7.05 lbs load. 20 VDC .
Box size 7 3/8" x 4 7/8" x 3 1/16"

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| TS-101 Simulator | 4 lb | 4113 | $\$ 729.00$ |

## XY1 Load Cell Simulator

Digital load cell simulator, excitation voltage has two ranges; DC 5-10V or 10-20V switchable. Output $0-2 \mathrm{mV} / \mathrm{V}$ with division $0.0001 \mathrm{mV} / \mathrm{V}$. This unit is perfect to bench test and do pre-calibration on batching indicators before installation. Use your indicator excitation voltage between $5-20 \mathrm{VDC}$ to power up the unit. Cable from simulator to indicator includes 7 pin connector with screw terminal and cable to DB9 connector. USB to RS232 for computer connection is DB9-RS-232 pre-wired cable is also included. Set up and even re-calibration could be done using front keypad. Basic checking stepping up/down in millivolts to test indicator response, or change setting to your need is possible with XY1. The meter also checking current temperature and display it with a push of a button. Check full scale or Zero the unit output with one single push of a button. If you wire the indicator connection cable in reverse by mistake, LED light Reverse-Con will remind you that. Accuracy is $0.01 \%$ F.S. @ Celsius temperature. Non-linearity $0.005 \%$.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| XY1 Simulator | 2 lb | 2180 | $\$ 595.00$ |

TS-101
Simulator


XY1
Simulator


## LC-II Calibrator Tester

Portable. Versatile load cell calibrator with multiple functions. 5 digit LCD display. Display, test, simulate and source all in one unit. Units for grams, newtons, ton, kilograms. Show mass, force, strain, torque; set $\mathrm{mV} / \mathrm{V}$, range, decimal point, units: zero and span trim; select tare, peak hold. SD card for data logging. USB computer connection. On screen user manual. Carrying case, charger and leads included.

Load cell Display Function: Show mass, force, strain, or torque from load cells; set $\mathrm{mV} / \mathrm{V}$, range, decimal point, and units; zero and span trim; select tare, peak hold.

Test Load Cell Function: Connect the load cell leads to spring terminals and get a readout of 4 - or 6-wire, zero balance, input and output resistance, bridge balance, etc.

Test Insulation Function: Connect the leads to screen, housing, and gage to get a 50V insulation test between each in megohms.

Measurement Function: Show mV output, excitation voltage, mA outputs for systems, etc.

Source Function: High accuracy mV injection and mA output for workshop or field calibration of amplifiers and indicators.

Convert Function: Change between different mass units; grams, Newtons, ton, kilograms, etc.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| LC-II Calibrator Tester | 1 lb | $1506 \$ 1,657.00$ |  |

## TS-8V Transducer Simulator

ABS plastic case with lid. Face plate $1 / 8^{\prime \prime}$ aluminum. Fixed rotary switch: $-0.5,0,0.5,1.0$, $1.5,2.0,2.5,3.0 \mathrm{mv} / \mathrm{v}$ in 8 steps. 10 turn potentiometer for adjusting dead load and adjustment between steps. 4 banana jacks (red, black, green, white) color coded. In/out switch for 10 turn potentiometer. Excitation voltage up to 20 VDC/VAC.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TS-8V Simulator | 1 lb | 2407 | $\$ 449.00$ |
| Service Parts <br> Replacement Case | 1 lb | 81 M | 35.00 |



## TS-350 \& DTR-304

Service parts only.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Service Parts | 1 lb | 81 M | $\$ 35.00$ |



TS-OV


TS-6


TS-7


TS-16


TS-16V

## Transducer Simulator

Simulators are used to test indicators by temporarily substituting for the load cell. The indicator can be checked that it works correctly at various loads. The switches and potentiometers on the transducer simulator are set to the desired output signal. The indicator should display a weight that corresponds to the settings on the simulator.

The simulators with " V " in the part number have a Variable potentiometer for smoothly setting the output between steps of the multiple position switch.

The simulators with variable potentiometers can be used to check set point relay operation on indicators used with batching systems.

The range of the simulator is 0 to $2 \mathrm{mv} / \mathrm{V}$ or 0 to $3 \mathrm{mv} / \mathrm{V}$ depending in the model selected.
The excitation voltage can be from 0 to 20 VDC or VAC.
Wires terminate at screw type binding posts. ABS thermoplastic case.


## TROEMNER

## Troemner Calibration Weights and Weight Sets

For over 160 years, Troemner has provided an extensive selection of precision weights and calibration services. Today Troemner is an ISO 9001 registered company and one of the world's leading suppliers of precision weights and mass standards. We manufacture and certify weights to meet or exceed the highest tolerance standards of the National Institute of Standards \& Technology (NIST), the American Society for Testing \& Materials (ASTM) and the International Organization of Legal Metrology (OIML).

## Selecting the proper weight certification

Statement of Accuracy is provided with each weight of weight set ordered without a calibration certificate. It verifies that the weight has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST. Note: There is no NIST traceability supplied with this statement. Not suitable for quality or regulatory requirements.

Traceable Calibration Certificate is designed for those laboratories and companies that require NIST traceability but are not required to meet any stringent audit or regulatory requirements.

NIST/NVLAP Weight Calibration Certificate - our most detailed certificate designed to meet your most stringent regulatory and quality control needs including all ISO, FDA, GMP, GLP, DOD, ANSI/NCSL, Z540-1 and Nuclear requirements. All procedures and processes used to generate this multi page certificate as well as its format and content are prescribed by the NIST administered National Voluntary Laboratory Accreditation Program.

The document contains: customer name, address, date of calibration, equipment and standards used in calibration, accuracy class, true mass (mass in a vacuum), "as found" mass correction (for recalibration), "as left" mass corrections for each weight, uncertainty of measurement process for each weight, environmental conditions during test, construction and density of weights, calibration procedures used, statement of traceability to NIST and a helpful list of terms and definitions.

## Selecting the proper weight class

## Accuracy Classes

## Extra Fine

ANSI/ASTM Class 0
Troemner Ultra Class ${ }^{\text {TM }}$
ANSI/ASTM Class 1

## Fine

ANSI/ASTM Class 2
ANSI/ASTM Class 3

## Medium

ANSI/ASTM Class 4 ANSI/ASTM Class 5 ANSI/ASTM Class 6 NIST Class F

## Use

Calibrate weights and special precision analytical balances, NTEP Class I

Use
Calibrate NTEP Class II balances
Working standards for precision and analytical work. External weights to calibrate . moderate precision balances

## Use

Calibrate NTEP Class III scales, dial scales, trip balances platform scales including NTEP class IIIL and IV

NIST Class F specifications and tolerances are in NIST Handbook 105-1.
These specifications and tolerances are intended to set forth minimum requirements used:

1. In the field by state and local weights and measures officials in the examination of weighing and measuring devices used in commerce.
2. By device installers and servicemen.
3. As reference standards in state weights and measures laboratories.
4. In industrial, educational and research laboratores.

Federal Grain Inspection Service approved laboratory.

ANSI - American National Standards Institute
ASTM - American Society for Testing and Materials
NIST - National Institute of Standards and Technology
NTEP - Nation Type Evaluation Program
OIML - Organization International Metrological Legal


## Stainless Steel <br> Grip handle

## TROEMNER

Metric
Individual stainless steel weights NIST Class "F"

| Grip handle stainless steel weight with Statement of Accuracy |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | ---: | ---: | ---: | :---: |
| Part No. | Weight | Diameter | Height Ship Wt | Stock | Price B5 |  |  |
| 1370 | 5 kg | $4.98^{\prime \prime}$ | $3.08^{\prime \prime}$ | 12 lb | 4998 | $\$ 283.33$ |  |
| 1371 | 8 kg | $4.98^{\prime \prime}$ | $4.27^{\prime \prime}$ | 19 lb | 4999 | 489.17 |  |
| 1372 | 10 kg | $4.98^{\prime \prime}$ | $5.09^{\prime \prime}$ | 21 lb | 5000 | 525.00 |  |
|  |  |  |  |  |  |  |  |
| 1373 | 16 kg | $5.98^{\prime \prime}$ | $5.20^{\prime \prime}$ | 36 lb | 5001 | 708.33 |  |
| 1374 | 20 kg | $5.98^{\prime \prime}$ | $6.31^{\prime \prime}$ | 46 lb | 5002 | 740.83 |  |
| 1375 | 24 kg | $5.98^{\prime \prime}$ | $7.69^{\prime \prime}$ | 55 lb | 5003 | 833.33 |  |
|  |  |  |  |  |  |  |  |
| 1376 | 25 kg | $5.98^{\prime \prime}$ | $7.70^{\prime \prime}$ | 57 lb | 5004 | 859.17 |  |
| 1378 | 30 kg | $5.98^{\prime \prime}$ | $9.06^{\prime \prime}$ | 68 lb | 5005 | $1,085.83$ |  |

Grip handle stainless steel weight with Traceable Certificate

| Part No. | Weight | Diameter | Height Ship Wt |  | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1370T | 5 kg | 4.98" | 3.08 " | 12 lb | 5006 | \$ 315.83 |
| 1371T | 8 kg | 4.98" | 4.27 " | 19 lb | 5007 | 521.67 |
| 1372T | 10 kg | 4.98" | 5.09" | 21 lb | 5008 | 557.50 |
| 1373T | 16 kg | 5.98" | 5.20" | 36 lb | 5009 | 740.00 |
| 1374T | 20 kg | $5.98{ }^{\prime \prime}$ | 6.31 " | 46 lb | 5010 | 773.33 |
| 1375T | 24 kg | 5.98" | 7.69" | 55 lb | 5011 | 867.50 |
| 1376T | 25 kg | 5.98" | 7.70" | 57 lb | 5012 | 891.67 |
| 1378T | 30 kg | 5.98 " | 9.06" | 68 lb | 5013 | 1,120.83 |

Grip handle stainless steel weight with NVLAP Certificate

| Part No. | Weight | Diameter | Height |  | Ship Wt | Stock |
| :--- | :---: | :--- | :--- | :--- | ---: | ---: |
| 1370 W | 5 kg | $4.98^{\prime \prime}$ | $3.08^{\prime \prime}$ | 12 lb | 5014 | $\$ 355.00$ |
| 1371 W | 8 kg | $4.98^{\prime \prime}$ | $4.27^{\prime \prime}$ | 19 lb | 5015 | 560.83 |
| 1372 W | 10 kg | $4.98^{\prime \prime}$ | $5.09^{\prime \prime}$ | 21 lb | 5016 | 596.67 |
|  |  |  |  |  |  |  |
| 1373 W | 16 kg | $5.98^{\prime \prime}$ | $5.20 "$ | 36 lb | 5017 | 778.33 |
| 1374 W | 20 kg | $5.98^{\prime \prime}$ | $6.31^{\prime \prime}$ | 46 lb | 5018 | 813.33 |
| 1375 W | 24 kg | $5.98^{\prime \prime}$ | $7.69^{\prime \prime}$ | 55 lb | 5019 | 908.33 |
|  |  |  |  |  |  |  |
| 1376 W | 25 kg | $5.98^{\prime \prime}$ | $7.70 "$ | 57 lb | 5020 | 931.67 |
| 1378 W | 30 kg | $5.98^{\prime \prime}$ | $9.06 "$ | 68 lb | 5021 | $1,163.33$ |

## TROEMNER

| Avoirdupois |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grip handle stainless steel weight with Statement of Accuracy |  |  |  |  |  |  |
| Part No. | Weight | Diameter | Heig | ip Wt | Stock | Price B5 |
| 1270 | 10 lb | 4.98" | 2.90" | 11 lb | 5022 | \$ 283.33 |
| 1272 | 20 lb | 4.98" | 4.72 " | 21 lb | 5023 | 473.33 |
| 1274 | 25 lb | 5.98 " | 3.90" | 26 lb | 5024 | 515.00 |
| 1275 | 30 lb | 5.98" | 4.52" | 32 lb | 5025 | 612.50 |
| 1276 | 50 lb | 5.98 " | 7.05" | 52 lb | 5026 | 807.50 |

Grip handle stainless steel weight with Traceable Certificate

| Part No. | Weight | Diameter | Heig | ip Wt | Stock | Price B5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1270T | 10 lb | 4.98" | 2.90" | 11 lb | 5027 | \$ 317.50 |  |
| 1272T | 20 lb | 4.98" | 4.72" | 21 lb | 5028 | 508.33 |  |
| 1274T | 25 lb | 5.98" | 3.90" | 26 lb | 5029 | 549.17 |  |
| 1275T | 30 lb | 5.98" | 4.52" | 32 lb | 5030 | 646.67 |  |
| 1276T | 50 lb | 5.98 " | 7.05" | 52 lb | 5031 | 842.50 | Stainless St |

Grip handle stainless steel weight with NVLAP Certificate

| Part No. | Weight | Diameter | Height Ship Wt |  | Stock | Price B5 |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| 1270 W | 10 lb | $4.98^{\prime \prime}$ | $2.90^{\prime \prime}$ | 11 lb | 5032 | $\$ 360.00$ |
| 1272 W | 20 lb | $4.98^{\prime \prime}$ | $4.72^{\prime \prime}$ | 21 lb | 5033 | 550.83 |
| 1274 W | 25 lb | $5.98^{\prime \prime}$ | $3.90^{\prime \prime}$ | 26 lb | 5034 | 591.67 |
|  |  |  |  |  |  |  |
| 1275 W | 30 lb | $5.98^{\prime \prime}$ | $4.52^{\prime \prime}$ | 32 lb | 5035 | 689.17 |
| 1276 W | 50 lb | $5.98^{\prime \prime}$ | $7.05^{\prime \prime}$ | 52 lb | 5036 | 885.00 |



## Metric <br> Cast Iron <br> Weights

NIST Class " $F$ " specifications and tolerances are listed in NIST Handbook 105-1.
These specifications and tolerances are intended to set forth minimum requirements used:

1. In the field by state and local weights and measures officials in the examination of weighing and measuring devices used in commerce.
2. By device installers and servicemen.
3. As reference standards in state weights and measures laboratories.
4. In industrial, educational and research laboratories.

Federal Grain Inspection Service approved laboratory.


## TROEMNER

Heavy Capacity \& Grip Handle Cast Iron Test Weights NIST Class "F"

| Metric |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grip handle cast iron weight with Statement of Accuracy |  |  |  |  |  |  |  |
| Part \# | Weight | Width | Length | Height | Ship Wt | Stock | Price B5 |
| 9278 | 2 kg | 2-1/2" | 3-7/8" | 2-3/4" | 5 lb | 1188 | \$ 70.75 |
| 9280 * | 5 kg | 3-1/4" | 5-3/8" | 3-7/8" | 12 lb | 821 | \$ 67.20 |
| 9282 | 10 kg | 4-5/8" | 6-3/16" | $5 "$ | 23 lb | 820 | 113.33 |
| 9284 | 20 kg | 5-1/2" | 7-5/8" | 5-7/8" | 45 lb | 819 | 116.67 |
| 9286 | 25 kg | 5-9/16" | 7-3/4" | 6-3/4" | 54 lb | 818 | 158.33 |
| 9288 | 50 kg | 7-5/16" | $9 "$ | 8-1/4" | 113 lb | 817 | 516.67 |
| 9289 | 100 kg | 9-1/2" | 9-1/2" | 10-1/2" | 225 lb | 816 | 1,183.33 |
| 9290 | 200 kg | 12-3/4" | 12-1/4" | 12" | 450 lb | 815 | 1,362.17 |
| 9291 | 250 kg | 12-3/4" | 12-1/4" | 14-3/4" | 540 lb | 814 | 1,591.67 |
| 9292 | 500 kg | 14-3/4" | 14-5/8" | 20-3/4" | 1,125 lb | 813 | 2,625.00 |
| 9294 | $1,000 \mathrm{~kg}$ | 20-5/8" | 20-1/4" | 21-5/8" | 2,250 lb | 812 | 6,842.50 |
| Grip handle cast iron weight with Traceable Certificate |  |  |  |  |  |  |  |
| Part \# | Weight | Width | Length | Height | Ship Wt | Stock | Price B5 |
| 9278T | 2 kg | 2-1/2" | 3-7/8" | 2-3/4" | 5 lb | 1189 | \$107.75 |
| 9280T * | 5 kg | 3-1/4" | 5-3/8" | 3-7/8" | 12 lb | 5037 | \$ 112.50 |
| 9282T | 10 kg | 4-5/8" | 6-3/16" | $5 "$ | 23 lb | 5038 | 140.00 |
| 9284 T | 20 kg | 5-1/2" | 7-5/8" | 5-7/8" | 45 lb | 5039 | 167.50 |
| 9286T | 25 kg | 5-9/16" | 7-3/4" | 6-3/4" | 54 lb | 5040 | 209.17 |
| 9288T | 50 kg | 7-5/16" | $9 "$ | 8-1/4" | 113 lb | 5041 | 604.17 |
| 9289T | 100 kg | 9-1/2" | 9-1/2" | 10-1/2" | 225 lb | 5042 | 1,337.08 |
| 9290T | 200 kg | 12-3/4" | 12-1/4" | 12 " | 450 lb | 5043 | 1,516.33 |
| 9291T | 250 kg | 12-3/4" | 12-1/4" | 14-3/4" | 540 lb | 5044 | 1,745.83 |
| 9292 T | 500 kg | 14-3/4" | 14-5/8" | 20-3/4" | 1,125 lb | 5045 | 2,933.33 |
| 9294 T | 1,000 kg | 20-5/8" | 20-1/4" | 21-5/8" | 2,250 lb | 5046 | 7,046.67 |
| Grip handle cast iron weight with NVLAP Certificate |  |  |  |  |  |  |  |
| Part \# | Weight | Width | Length | Height | Ship Wt | Stock | Price B5 |
| 9278W | 2 kg | 2-1/2" | 3-7/8" | 2-3/4" | 5 lb | 1190 | \$140.50 |
| 9280W * | 5 kg | 3-1/4" | 5-3/8" | 3-7/8" | 12 lb | 5047 | \$ 140.00 |
| 9282W | 10 kg | 4-5/8" | 6-3/16" | $5 "$ | 23 lb | 5048 | 176.67 |
| 9284W | 20 kg | 5-1/2" | 7-5/8" | 5-7/8" | 45 lb | 5049 | 218.33 |
| 9286W | 25 kg | 5-9/16" | 7-3/4" | 6-3/4" | 54 lb | 5050 | 260.00 |
| 9288W | 50 kg | 7-5/16" | 9" | 8-1/4" | 113 lb | 5051 | 691.67 |
| 9289W | 100 kg | 9-1/2" | 9-1/2" | 10-1/2" | 225 lb | 5052 | 1,490.83 |
| 9290W | 200 kg | 12-3/4" | 12-1/4" | 12 " | 450 lb | 5053 | 1,670.50 |
| 9291W | 250 kg | 12-3/4" | 12-1/4" | 14-3/4" | 540 lb | 5054 | 1,900.00 |
| 9292W | 500 kg | 14-3/4" | 14-5/8" | 20-3/4" | 1,125 lb | 5055 | 2,933.33 |
| 9294W | 1,000 kg | 20-5/8" | 20-1/4" | 21-5/8" | 2,250 lb | 5056 | 7,250.83 |
| * Not for Legal for Trade applications. |  |  |  |  |  |  |  |
| NIST HB105-1 2 . Finish 2.2 |  |  |  |  |  |  |  |
| "A weight $5 \mathrm{~kg} / 10 \mathrm{lb}$ or less shall not have a surface coating." |  |  |  |  |  |  |  |

For Legal for Trade weights 5 kg and below, refer to Class F stainless steel weights.

# Weights 

## TROEMNER

Heavy Capacity \& Grip Handle Cast Iron Test Weights NIST Class "F"

## Avoirdupois

Grip handle cast iron weight with Statement of Accuracy

| Part \# | Weight | Width | Length | Height | Ship Wt | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9072 * | 5 lb | 2-3/8" | 3-7/8" | 3-1/8" | 6 lb | 811 | \$ 50.00 |
| 9074 * | 10 lb | 3-1/4" | 5-3/8" | 3-9/16" | 11 lb | 810 | 68.33 |
| 9076 | 20 lb | 4" | 6-3/16" | $5 "$ | 21 lb | 809 | 81.67 |
| 9078 | 25 lb | 4-3/4" | 6-3/16" | $5 "$ | 26 lb | 808 | 108.33 |
| 9080 | 50 lb | 5-9/16" | 8" | 6-3/8" | 51 lb | 807 | 126.67 |
| 9082 | 100 lb | 7-3/8" | 9-1/8" | 7-9/16" | 101 lb | 806 | 516.67 |
| 9083 | 200 lb | 9-9/16" | 9-3/16" | 9-13/16" | 200 lb | 805 | 1,666.67 |
| 9084 | 500 lb | 12-3/4" | 12-3/8" | 13-1/2" | 500 lb | 804 | 1,466.67 |
| 9086 | 1,000 lb | 14-3/4" | 14-5/8" | 19" | 1,000 lb | 803 | 2,323.33 |
| 9087 | 2,000 lb | 20-3/8" | 20-5/8" | 19-7/8" | 2,000 lb | 802 | 6,435.00 |
| 9088 | 2,500 lb | 20-3/8" | 20-3/8" | 24-1/2" | 2,500 lb | 801 | 7,280.00 |
| 9090 | $3,000 \mathrm{lb}$ | 20-3/16" | 20-5/16" | 29-1/2" | $3,000 \mathrm{lb}$ | 800 | 8,110.00 |

Grip handle cast iron weight with Traceable Certificate

| Part \# | Weight | Width | Length | Height | Ship Wt | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9072T * | 5 lb | 2-3/8" | 3-7/8" | 3-1/8" | 6 lb | 5057 | \$ 97.92 |
| 9074T * | 10 lb | 3-1/4" | 5-3/8" | 3-9/16" | 11 lb | 5058 | 112.50 |
| 9076T | 20 lb | $4 "$ | 6-3/16" | $5 "$ | 21 lb | 5059 | 136.67 |
| 9078 T | 25 lb | 4-3/4" | 6-3/16" | $5 "$ | 26 lb | 5060 | 162.50 |
| 9080T | 50 lb | 5-9/16" | $8{ }^{\prime \prime}$ | 6-3/8" | 51 lb | 5061 | 180.83 |
| 9082T | 100 lb | 7-3/8" | 9-1/8" | 7-9/16" | 101 lb | 5062 | 587.50 |
| 9083T | 200 lb | 9-9/16" | 9-3/16" | 9-13/16" | 200 lb | 5063 | 1,320.83 |
| 9084 T | 500 lb | 12-3/4" | 12-3/8" | 13-1/2" | 500 lb | 5064 | 1,620.83 |
| $9086 T$ | 1,000 lb | 14-3/4" | 14-5/8" | 19" | $1,000 \mathrm{lb}$ | 5065 | 2,529.17 |
| 9087 T | 2,000 lb | 20-3/8" | 20-5/8" | 19-7/8" | 2,000 lb | 5066 | 6,960.83 |
| 9088T | 2,500 lb | 20-3/8" | 20-3/8" | 24-1/2" | 2,500 lb | 5067 | 7,854.17 |
| 9090T | 3,000 lb | 20-3/16" | 20-5/16" | 29-1/2" | 3,000 lb | 5068 | 8,780.83 |
| Grip handle cast iron weight with NVLAP Certificate |  |  |  |  |  |  |  |
| Part \# | Weight | Width | Length | Height | Ship Wt | Stock | Price B5 |
| 9072W * | 5 lb | 2-3/8" | 3-7/8" | 3-1/8" | 6 lb | 5070 | \$ 128.33 |
| 9074W * | 10 lb | 3-1/4" | 5-3/8" | 3-9/16" | 11 lb | 5071 | 147.50 |
| 9076W | 20 lb | $4 "$ | 6-3/16" | $5 "$ | 21 lb | 5072 | 169.17 |
| 9078W | 25 lb | 4-3/4" | 6-3/16" | $5 "$ | 26 lb | 5073 | 169.17 |
| 9080W | 50 lb | 5-9/16" | $8{ }^{\prime \prime}$ | 6-3/8" | 51 lb | 5074 | 230.00 |
| 9082W | 100 lb | 7-3/8" | 9-1/8" | 7-9/16" | 101 lb | 5075 | 658.33 |
| 9083W | 200 lb | 9-9/16" | 9-3/16" | 9-13/16" | 200 lb | 5076 | 1,475.00 |
| 9084W | 500 lb | 12-3/4" | 12-3/8" | 13-1/2" | 500 lb | 5077 | 1,775.00 |
| 9086W | 1,000 lb | 14-3/4" | 14-5/8" | 19" | 1,000 lb | 5078 | 2,683.33 |
| 9087W | 2,000 lb | 20-3/8" | 20-5/8" | 19-7/8" | 2,000 lb | 5079 | 7,058.33 |
| 9088W | 2,500 lb | 20-3/8" | 20-3/8" | 24-1/2" | 2,500 lb | 5080 | 8,008.33 |
| 9090W | 3,000 lb | 20-3/16" | 20-5/16" | 29-1/2" | 3,000 lb | 5081 | 8,985.00 |

* Not for Legal for Trade applications.

NIST HB105-1 2. Finish 2.2
"A weight $5 \mathrm{~kg} / 10 \mathrm{lb}$ or less shall not have a surface coating."


NIST Class "F" specifications and tolerances are listed in NIST Handbook 105-1.
These specifications and tolerances are intended to set forth minimum requirements used:

1. In the field by state and local weights and measures officials in the examination of weighing and measuring devices used in commerce.
2. By device installers and servicemen. 3. As reference standards in state weights and measures laboratories.
3. In industrial, educational and research laboratories.

Federal Grain Inspection Service approved laboratory.

For Legal for Trade weights 10 lb and below, refer to Class F stainless steel weights.


Stainless Steel Individual Weights


## TROEMNER

Metric
Individual stainless steel weights NIST Class "F"

| Part No. | Weight | Diameter | Height | Ship Wt | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1334 | 1 g | 0.20" | 0.24" | 1 lb | 1436 | \$ 27.75 |
| 1332 | 2 g | 0.28" | $0.29 "$ | 1 lb | 1435 | 27.75 |
| 1328 | 5 g | 0.37 " | 0.38 " | 1 lb | 1434 | 27.75 |
| 1326 | 10 g | 0.42 " | 0.57 " | 1 lb | 1433 | 33.68 |
| 1324 | 20 g | 0.59" | 0.60 " | 1 lb | 1432 | 33.68 |
| 1320 | 50 g | 0.74" | 0.90 " | 1 lb | 1431 | 36.67 |
| 1318 | 100 g | 0.99" | $1.03 "$ | 1 lb | 1430 | 42.62 |
| 1316 | 200 g | 1.24 " | $1.36 "$ | 1 lb | 1429 | 45.58 |
| 1312 | 500 g | 1.48" | 2.35 " | 2 lb | 1428 | 66.38 |
| 1310 | 1,000 g | 1.84" | 2.98" | 3 lb | 1427 | 71.67 |
| 1308 | 2,000 g | 2.48 " | 3.32 " | 5 lb | 1426 | 123.33 |
| 1302 | $5,000 \mathrm{~g}$ | 3.20" | 4.90 " | 12 lb | 1425 | 205.83 |

Cylindrical stainless steel satin finish with Traceable Certificate

| Part No. | Weight | Diameter | Height | Ship Wt | Stock | Price B5 |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: |
| 1334T | 1 g | $0.20^{\prime \prime}$ | $0.24^{\prime \prime}$ | 1 lb | 5083 | $\$ 45.00$ |
| 1332T | 2 g | $0.28^{\prime \prime}$ | $0.29^{\prime \prime}$ | 1 lb | 5084 | 45.00 |
| 1328T | 5 g | $0.37^{\prime \prime}$ | $0.38^{\prime \prime}$ | 1 lb | 5085 | 45.00 |
|  |  |  |  |  |  |  |
| 1326T | 10 g | $0.42^{\prime \prime}$ | $0.57^{\prime \prime}$ | 1 lb | 5086 | 50.83 |
| 1324T | 20 g | $0.59^{\prime \prime}$ | $0.60^{\prime \prime}$ | 1 lb | 5087 | 50.83 |
| 1320T | 50 g | $0.74^{\prime \prime}$ | $0.90^{\prime \prime}$ | 1 lb | 5088 | 54.17 |
|  |  |  |  |  |  |  |
| 1318T | 100 g | $0.99^{\prime \prime}$ | $1.03^{\prime \prime}$ | 1 lb | 5089 | 59.17 |
| 1316T | 200 g | $1.24^{\prime \prime}$ | $1.36^{\prime \prime}$ | 1 lb | 5090 | 71.67 |
| 1312T | 500 g | $1.48^{\prime \prime}$ | $2.35^{\prime \prime}$ | 2 lb | 5091 | 90.00 |
|  |  |  |  |  |  |  |
| 1310T | $1,000 \mathrm{~g}$ | $1.84^{\prime \prime}$ | $2.98^{\prime \prime}$ | 3 lb | 5092 | 95.00 |
| 1308T | $2,000 \mathrm{~g}$ | $2.48^{\prime \prime}$ | $3.32^{\prime \prime}$ | 5 lb | 5093 | 155.83 |
| 1302T | $5,000 \mathrm{~g}$ | $3.20^{\prime \prime}$ | $4.90^{\prime \prime}$ | 12 lb | 5094 | 238.33 |

Cylindrical stainless steel satin finish with NVLAP Certificate

| Part No. | Weight | Diameter | Height | Ship Wt | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1334W | 1 g | 0.20" | 0.24" | 1 lb | 5095 | \$ 66.67 |
| 1332W | 2 g | 0.28 " | 0.29" | 1 lb | 5096 | 66.67 |
| 1328W | 5 g | 0.37" | 0.38 " | 1 lb | 5097 | 66.67 |
| 1326W | 10 g | 0.42" | 0.57 " | 1 lb | 5098 | 71.67 |
| 1324W | 20 g | 0.59 " | 0.60 " | 1 lb | 5099 | 71.67 |
| 1320W | 50 g | 0.74" | 0.90" | 1 lb | 5100 | 75.00 |
| 1318W | 100 g | 0.99" | 1.03 " | 1 lb | 5101 | 79.17 |
| 1316W | 200 g | 1.24" | 1.36 " | 1 lb | 5102 | 103.33 |
| 1312W | 500 g | 1.48 " | 2.35 " | 2 lb | 5103 | 118.33 |
| 1310W | 1,000 g | 1.84" | 2.98" | 3 lb | 5104 | 123.33 |
| 1308W | 2,000 g | 2.48 " | 3.32 " | 5 lb | 5105 | 195.83 |
| 1302W | 5,000 g | $3.20 "$ | 4.90" | 12 lb | 5106 | 277.50 |

## TROEMNER

## Avoirdupois <br> Individual stainless steel weights NIST Class "F"

Cylindrical stainless steel satin finish with Statement of Accuracy

| Part No. | Weight | Diameter | Height Ship Wt | Stock | Price B5 |  |
| :--- | :---: | :--- | :--- | :--- | ---: | ---: |
| 1222 | $1 / 2 \mathrm{oz}$ | $0.50^{\prime \prime}$ | $0.58^{\prime \prime}$ | 1 lb | 839 | $\$ 35.67$ |
| 1220 | 1 oz | $0.61^{\prime \prime}$ | $0.78^{\prime \prime}$ | 1 lb | 838 | 35.67 |
| 1217 | 2 oz | $0.87^{\prime \prime}$ | $0.90^{\prime \prime}$ | 1 lb | 837 | 38.65 |
|  |  |  |  |  |  |  |
| 1215 | 4 oz | $0.99^{\prime \prime}$ | $1.16^{\prime \prime}$ | 1 lb | 836 | 40.83 |
| 1213 | 8 oz | $1.23^{\prime \prime}$ | $1.55^{\prime \prime}$ | 1 lb | 835 | 46.67 |
| 1211 | 1 lb | $1.48^{\prime \prime}$ | $2.16^{\prime \prime}$ | 1 lb | 834 | 56.67 |
|  |  |  |  |  |  |  |
| 1209 | 2 lb | $1.84^{\prime \prime}$ | $2.71^{\prime \prime}$ | 3 lb | 833 | 66.67 |
| 1203 | 5 lb | $2.48^{\prime \prime}$ | $3.75^{\prime \prime}$ | 6 lb | 832 | 123.33 |
| 1201 | 10 lb | $3.22^{\prime \prime}$ | $4.42^{\prime \prime}$ | 11 lb | 831 | 195.83 |

Cylindrical stainless steel satin finish with Traceable Certificate

| Part No. | Weight | Diameter | Height |  | Ship Wt | Stock |
| :--- | :---: | :--- | :--- | :--- | ---: | ---: |
| 1222T | $1 / 2 \mathrm{oz}$ | $0.50 "$ | $0.58^{\prime \prime}$ | 1 lb | 5107 | $\$ 51.67$ |
| 1220T | 1 oz | $0.61^{\prime \prime}$ | $0.78^{\prime \prime}$ | 1 lb | 5108 | 51.67 |
| 1217T | 2 oz | $0.87^{\prime \prime}$ | $0.90^{\prime \prime}$ | 1 lb | 5109 | 55.00 |
|  |  |  |  |  |  |  |
| 1215T | 4 oz | $0.99^{\prime \prime}$ | $1.16^{\prime \prime}$ | 1 lb | 5110 | 57.50 |
| 1213T | 8 oz | $1.23^{\prime \prime}$ | $1.55^{\prime \prime}$ | 1 lb | 5111 | 62.50 |
| 1211T | 1 lb | $1.48^{\prime \prime}$ | $2.16^{\prime \prime}$ | 1 lb | 5112 | 84.17 |
|  |  |  |  |  |  |  |
| 1209T | 2 lb | $1.84^{\prime \prime}$ | $2.71^{\prime \prime}$ | 3 lb | 5113 | 94.16 |
| 1203T | 5 lb | $2.48^{\prime \prime}$ | $3.75^{\prime \prime}$ | 6 lb | 5114 | 153.33 |
| 1201T | 10 lb | $3.22^{\prime \prime}$ | $4.42^{\prime \prime}$ | 11 lb | 5115 | 230.00 |

Cylindrical stainless steel satin finish with NVLAP Certificate

| Part No. | Weight | Diameter | Height Ship Wt |  | Stock | Price B5 |
| :--- | :---: | :--- | :--- | :--- | ---: | ---: |
| 1222 W | $1 / 2 \mathrm{oz}$ | $0.50 "$ | $0.58^{\prime \prime}$ | 1 lb | 5116 | $\$ 71.67$ |
| 1220 W | 1 oz | $0.61^{\prime \prime}$ | $0.78^{\prime \prime}$ | 1 lb | 5117 | 71.67 |
| 1217 W | 2 oz | $0.87^{\prime \prime}$ | $0.90^{\prime \prime}$ | 1 lb | 5118 | 75.00 |
|  |  |  |  |  |  |  |
| 1215 W | 4 oz | $0.99 "$ | $1.16 "$ | 1 lb | 5119 | 77.50 |
| 1213 W | 8 oz | $1.23^{\prime \prime}$ | $1.55^{\prime \prime}$ | 1 lb | 5120 | 82.50 |
| 1211 W | 1 lb | $1.48^{\prime \prime}$ | $2.16^{\prime \prime}$ | 1 lb | 5121 | 118.33 |
|  |  |  |  |  |  |  |
| 1209 W | 2 lb | $1.84 "$ | $2.71^{\prime \prime}$ | 3 lb | 5122 | 128.33 |
| 1203 W | 5 lb | $2.48^{\prime \prime}$ | $3.75^{\prime \prime}$ | 6 lb | 5123 | 200.83 |
| 1201 W | 10 lb | $3.22^{\prime \prime}$ | $4.42^{\prime \prime}$ | 11 lb | 5124 | 272.50 |



TPC Hard Cases - Totalcomp
TPC hard shell case is perfect for test weights, delicate tools and digital equipment. Case is watertight, dust proof and crush proof. Made of Ultra high impact Fiber Reinforced Polymer. Working Temp; -40 to 194 F. Fold down comfortable rubberized handles, ABS double throw latches, built in purge valve. Comes with pre-cubed interior foam for easy customization. Clear PVC front Tag-it yourself tag cover. Comes in three different sizes to accommodate a variety of test weight configurations.

| Part Number | Size | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| TPC11-8-7 | $11^{\prime \prime} \times 8^{\prime \prime} \times 7^{\prime \prime}$ | 9 lb | 6540 | $\$ 109.00$ |
| TPC12-9-5 | $12^{\prime \prime} \times 9^{\prime \prime} \times 5^{\prime \prime}$ | 6 lb | 6541 | 102.00 |
| TPC15-10-7 | $15^{\prime \prime} \times 10^{\prime \prime} \times 7^{\prime \prime}$ | 5 lb | 6542 | 140.00 |

## Weights



## TROEMNER

Troemner Test Weights are the highest quality available. They are backed by a reputation known throughout the industry. Troemner has years of experience in making precision weights. NIST Class "F" satin finish stainless steel. Heavy duty rugged case with steel reinforced corners. Foam insert keeps weights in place. Small weights are in a smaller leatherette case inside the large case.

| Metric NIST Class "F" |  |  |  |
| :--- | ---: | ---: | ---: |
| Statement of Accuracy |  |  |  |
| Weight Set | Weight | Stock | Price B5 |
| TW-100-01 | 2 lb | 824 | $\$ 266.00$ |
| TW-5000-01 | 31 lb | 827 | 857.00 |
|  |  |  |  |
| Traceable Certificate | Weight | Stock | Price B5 |
| Weight Set | 2 lb | 5125 | $\$ 396.00$ |
| TW-100-01T | 31 lb | 5126 | 939.00 |
| TW-5000-01T |  |  |  |
|  |  |  |  |
| NVLAP Certificate | Weight | Stock | Price B5 |
| Weight Set | 2 lb | 5127 | $\$ 490.00$ |
| TW-100-01W | 31 lb | 5128 | $1,143.00$ |



TW-100-01 set

| (1) | 1 mg |
| :--- | ---: |
| (2) | 2 mg |
| (1) | 5 mg |
| (1) | 10 mg |
| (2) | 20 mg |
| (1) | 50 mg |
| (1) | 100 mg |
| $(2)$ | 200 mg |
| $(1)$ | 500 mg |
| $(1)$ | 1 g |
| (2) | 2 g |
| (1) | 5 g |
| (1) | 10 g |
| (2) | 20 g |
| (1) | 50 g |
| (1) | 100 g |
| Total | 211.11 g |
| $4 " \times 2-7 / 8^{\prime \prime} \times 1-1 / 4 " \mathrm{~h}$ |  |



TW-5000-01 set
(1) TW-100-01 set
(2) $\quad 200 \mathrm{~g}$
(1) $\quad 500 \mathrm{~g}$
(1) $\quad 1,000 \mathrm{~g}$
(2) $\quad 2,000 \mathrm{~g}$
(1) $\quad 5,000 \mathrm{~g}$

Total $\quad 11,111.11 \mathrm{~g}$
$14-1 / 2^{\prime \prime} \times 9-1 / 4^{\prime \prime} \times 8-1 / 4^{\prime \prime} \mathrm{h}$


TW-15 Decimal set


TW-30 Fraction set

TW-15 Decimal set
(1) $\quad 0.001 \mathrm{lb}$
(2) $\quad 0.002 \mathrm{lb}$
(1) $\quad 0.005 \mathrm{lb}$
(1) $\quad 0.01 \mathrm{lb}$
(2) $\quad 0.02 \mathrm{lb}$
(1) $\quad 0.05 \mathrm{lb}$
(1) $\quad 0.1 \mathrm{lb}$
(2) $\quad 0.2 \mathrm{lb}$
Total $\quad 0.610 \mathrm{lb}$
$4 " x 2-7 / 8 " \times 1-1 / 4$ "

TW-30 Fraction set
(2) $\quad 1 / 32 \mathrm{oz}$
(1) $1 / 16 \mathrm{oz}$
(1) $1 / 8 \mathrm{oz}$
(1) $1 / 4 \mathrm{oz}$
(1) $1 / 2 \mathrm{oz}$
(1) 1 oz
(1) 2 oz
(1) 4 oz

Total 8 oz
$4-1 / 4 " x 2-1 / 4 " \times 1-1 / 4 " \mathrm{~h}$


TW-50D Decimal set
(1) TW-15D set
(1) $\quad 0.5 \mathrm{lb}$
(5) $\quad 1 \mathrm{lb}$
(5) $\quad 5 \mathrm{lb}$

Total $\quad 31.11 \mathrm{lb}$
14-1/2"x9-1/4"x8-1/4" $h$

## 2 <br> TROEMNER

Troemner Test Weights are the highest quality available. They are backed by a reputation known throughout the industry. Troemner has years of experience in making precision weights. NIST Class "F" satin finish stainless steel. Heavy duty rugged case with steel reinforced corners. Foam insert keeps weights in place. Small weights are in a smaller leatherette case inside the large case.

| Avoirdupois NIST Class "F" |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Statement of Accuracy |  |  |  |  |
| Weight Set | Total | Weight | Stock | Price B5 |
| TW-15 Decimal set | 0.61 lb | 1 lb | 276 | \$ 176.66 |
| TW-30 Fraction set | 8 oz | 1 lb | 828 | 166.67 |
| TW-50 Fraction set | 31.00 lb | 38 lb | 829 | 947.50 |
| TW-50D Decimal set | 31.11 lb | 38 lb | 277 | 971.67 |
| TW-50COMBO Combination | 31.61 lb | 39 lb | 830 | 971.67 |

Fraction \& Decimal set
Traceable Certificate

| Weight Set | Total | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: |
| TW-15T Decimal set | 0.61 lb | 1 lb | 5129 | $\$ 255.33$ |
| TW-30T Fraction set | 8 oz | 1 lb | 5130 | 247.33 |
|  |  |  |  |  |
| TW-50T Fraction set | 31.00 lb | 38 lb | 5132 | $1,210.50$ |
| TW-50DT Decimal set | 31.11 lb | 38 lb | 5131 | $1,252.33$ |
| TW-50COMBOT Combination | 31.61 lb | 39 lb | 5133 | $1,252.33$ |
| Fraction \& Decimal set |  |  |  |  |

NVLAP Certificate

| Weight Set | Total | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: |
| TW-15W Decimal set | 0.61 lb | 1 lb | 5134 | $\$ 373.33$ |
| TW-30W Fraction set | 8 oz | 1 lb | 5135 | 368.33 |
|  |  |  |  |  |
| TW-50W Fraction set | 31.00 lb | 38 lb | 5137 | $1,605.00$ |
| TW-50DW Decimal set | 31.11 lb | 38 lb | 5136 | $1,673.33$ |
| TW-50COMBOW Combination | 31.61 lb | 39 lb | 5138 | $1,673.33$ |

## Fraction \& Decimal set



TW-50 Fraction set
(1) TW-30 set
(1) 8 oz
(5) $\quad 1 \mathrm{lb}$
(5) $\quad 5 \mathrm{lb}$

Total $\quad 31 \mathrm{lb}$
14-1/2"x9-1/4"x8-1/4" $h$


TW-50COMBO Combination set
(1) TW-15D set
(1) TW-30F set
(1) 8 oz
(5) 1 lb
(5) $\quad 5 \mathrm{lb}$

Total $\quad 31.61 \mathrm{lb}$
14-1/2"x9-1/4"x8-1/4"h

## TROEMNER

## Electronic Balance Calibration Weights

Stackable grip handle and cylindrical stainless steel weights for calibration and adjustment of all electronic balances and scales. Constructed of highly polished stainless steel. Made in strict accordance with standard specifications for laboratory weights and precision mass standards ANSI/ASTM E617.
Weights from 10 g thru 5 kg include a glove and a hinged carrying case with foam interior. Optional cases and gloves are available for weights 8 kg thru 30 kg .
Also available in ASTM Class 2, 3 and 4 as well as Troemner Ultra Class.
Traceable Certificate will certify that the weights are proven as tested against the standard. Certificate is a computer printout including test information.

| Part \# | Weight | Ship Wt | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: |
| 8158T | 10 g cyl | 1 lb | 1376 | \$ 101.92 |
| 8156 T | 20 g cyl | 1 lb | 1375 | 101.92 |
| 8154 T | 30 g cyl | 1 lb | 1374 | 101.92 |
| 8153T | 40 g cyl | 1 lb | 1373 | 101.92 |
| 8152T | 50 g cyl | 1 lb | 1372 | 101.92 |
| 8150T | 60 g cyl | 1 lb | 1371 | 123.54 |
| 8148 T | 70 g cyl | 1 lb | 1370 | 123.54 |
| 8146T | 80 g cyl | 1 lb | 1369 | 123.54 |
| 8144 T | 100 g cyl | 1 lb | 1368 | 106.04 |
| 8142 T | 150 g cyl | 1 lb | 1367 | 155.45 |
| 8140T | 160 g cyl | 1 lb | 1366 | 155.45 |
| 8138 T | 200 g cyl | 2 lb | 1365 | 153.40 |
| 8136T | 300 g cyl | 2 lb | 1364 | 156.48 |
| $8134 T$ | 400 g cyl | 2 lb | 1363 | 172.96 |
| 8132T | 500 g cyl | 2 lb | 1362 | 176.04 |
| 8130 T | 600 g cyl | 2 lb | 1361 | 198.69 |
| 8128 T | 1,000 g cyl | 5 lb | 1360 | 202.81 |
| 8126 T | 1,500 g cyl | 6 lb | 1359 | 261.00 |
| 8124 T | 2 kg cyl | 7 lb | 1358 | 259.00 |
| 8122T | 3 kg cyl | 9 lb | 1357 | 362.00 |
| 8120 T | 4 kg cyl | 11 lb | 1356 | 455.00 |
| 8118T | 4 kg grip | 11 lb | 1355 | 672.00 |
| 8116T | 5 kg cyl | 13 lb | 1354 | 487.00 |
| 8114 T | 5 kg grip | 13 lb | 1353 | 737.00 |
| 8112 T | 8 kg grip | 19.1b | 1352 | 983.00 |
| 8110T | 10 kg grip | 24 lb | 1351 | 1,040.00 |
| 8108T | 16 kg grip | 36 lb | 1350 | 1,369.00 |
| $8106 T$ | 20 kg grip | 48 lb | 1349 | 1,509.00 |
| 8104 T | 24 kg grip | 53 lb | 1348 | 1,741.00 |
| 8102T | 25 kg grip | 58 lb | 1347 | 1,777.00 |
| 8100 T | 30 kg grip | 68 lb | 1346 | 2,173.00 |




## Calibration weights

Grip handle and Cylindrical


## Optional cases




## TROEMNER

## Electronic Balance Calibration Weights

Stackable grip handle and cylindrical stainless steel weights for calibration and adjustment of all electronic balances and scales. Constructed of highly polished stainless steel.
Made in strict accordance with standard specifications for laboratory weights and precision mass standards ANSI/ASTM E617.
Weights from 10 g thru 5 kg include a glove and a hinged carrying case with foam interior. Optional cases and gloves are available for weights 8 kg thru 30 kg .
Also available in ASTM Class 2, 3 and 4 as well as Troemner Ultra Class.
Statement of Accuracy will come with Troemner weights. It verifies that the weight has been manufactured to meet all specifications for its class and has been calibrated using standards traceable to NIST. Note: There is no NIST traceability supplied with this statement. Not suitable for quality or regulatory requirements

| Part \# | Weight | Ship Wt | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: |
| 8158 | 10 g cyl | 1 lb | 1345 | \$ 68.98 |
| 8156 | 20 g cyl | 1 lb | 1344 | 68.98 |
| 8154 | 30 g cyl | 1 lb | 1343 | 68.98 |
| 8153 | 40 g cyl | 1 lb | 1342 | 68.98 |
| 8152 | 50 g cyl | 1 lb | 1341 | 68.98 |
| 8150 | 60 g cyl | 1 lb | 1340 | 74.12 |
| 8148 | 70 g cyl | 1 lb | 1339 | 78.24 |
| 8146 | 80 g cyl | 1 lb | 1338 | 86.48 |
| 8144 | 100 g cyl | 1 lb | 1337 | 77.12 |
| 8142 | 150 g cyl | 1 lb | 1336 | 88.54 |
| 8140 | 160 g cyl | 1 lb | 1335 | 96.77 |
| 8138 | 200 g cyl | 2 lb | 1334 | 91.63 |
| 8136 | 300 g cyl | 2 lb | 1333 | 101.92 |
| 8134 | 400 g cyl | 2 lb | 1332 | 123.54 |
| 8132 | 500 g cyl | 2 lb | 1331 | 125.60 |
| 8130 | 600 g cyl | 2 lb | 1330 | 145.16 |
| 8128 | 1,000 g cyl | 5 lb | 1329 | 154.43 |
| 8126 | 1,500 g cyl | 6 lb | 1328 | 175.02 |
| 8124 | 2 kg cyl | 7 lb | 1327 | 193.55 |
| 8122 | 3 kg cyl | 9 lb | 1326 | 284.00 |
| 8120 | 4 kg cyl | 11 lb | 1325 | 365.00 |
| 8118 | 4 kg grip | 11 lb | 1324 | 624.00 |
| 8116 | 5 kg cyl | 13 lb | 1323 | 428.00 |
| 8114 | 5 kg grip | 13 lb | 1322 | 678.00 |
| 8112 | 8 kg grip | 19.Ib | 1321 | 889.00 |
| 8110 | 10 kg grip | 24 lb | 1320 | 921.00 |
| 8108 | 16 kg grip | 36 lb | 1319 | 1,288.00 |
| 8106 | 20 kg grip | 48 lb | 1318 | 1,382.00 |
| 8104 | 24 kg grip | 53 lb | 1317 | 1,609.00 |
| 8102 | 25 kg grip | 58 lb | 1316 | 1,657.00 |
| 8100 | 30 kg grip | 68 lb | 1315 | 1,943.00 |

## Optional case and glove

## TROEMNER

## Electronic Balance Calibration Weights

Stackable grip handle and cylindrical stainless steel weights for calibration and adjustment of all electronic balances and scales. Constructed of highly polished stainless steel. Made in strict accordance with standard specifications for laboratory weights and precision mass standards ANSI/ASTM E617.
Weights from 10 g thru 5 kg include a glove and a hinged carrying case with foam interior. Optional cases and gloves are available for weights 8 kg thru 30 kg .
Also available in ASTM Class 2, 3 and 4 as well as Troemner Ultra Class.
NVLAP Certificate will include the Traceable Certificate statements plus all the readings of calibration.
ASTM Class 1

| Part \# | Weight | Ship Wt | Stock | Price B |
| :---: | :---: | :---: | :---: | :---: |
| 8158W | 10 g cyl | 1 lb | 5139 | \$ 155.45 |
| 8156W | 20 g cyl | 1 lb | 5140 | 155.45 |
| 8154W | 30 g cyl | 1 lb | 5141 | 155.45 |
| 8153W | 40 g cyl | 1 lb | 5142 | 155.45 |
| 8152W | 50 g cyl | 1 lb | 5143 | 155.45 |
| 8150W | 60 g cyl | 1 lb | 5144 | 155.45 |
| 8148W | 70 g cyl | 1 lb | 5145 | 155.45 |
| 8146W | 80 g cyl | 1 lb | 5146 | 155.45 |
| 8144W | 100 g cyl | 1 lb | 5147 | 155.45 |
| 8142W | 150 g cyl | 1 lb | 5148 | 224.43 |
| 8140W | 160 g cyl | 1 lb | 5149 | 226.49 |
| 8138W | 200 g cyl | 2 lb | 5150 | 207.96 |
| 8136W | 300 g cyl | 2 lb | 5151 | 223.40 |
| 8134W | 400 g cyl | 2 lb | 5152 | 236.79 |
| 8132W | 500 g cyl | 2 lb | 5153 | 249.14 |
| 8130W | 600 g cyl | 2 lb | 5154 | 270.00 |
| 8128W | $1,000 \mathrm{~g} \mathrm{cyl}$ | 5 lb | 5155 | 260.00 |
| 8126W | $1,500 \mathrm{~g} \mathrm{cyl}$ | 6 lb | 5156 | 334.00 |
| 8124W | 2 kg cyl | 7 lb | 5157 | 322.00 |
| 8122W | 3 kg cyl | 9 lb | 5158 | 446.00 |
| 8120W | 4 kg cyl | 11 lb | 5159 | 530.00 |
| 8118W | 4 kg grip | 11 lb | 5160 | 798.00 |
| 8116 W | 5 kg cyl | 13 lb | 5161 | 574.00 |
| 8114 W | 5 kg grip | 13 lb | 5162 | 842.00 |
| 8112W | 8 kg grip | 19.1b | 5163 | 1,035.00 |
| 8110W | 10 kg grip | 24 lb | 5164 | 1,092.00 |
| 8108W | 16 kg grip | 36 lb | 5165 | 1,420.00 |
| 8106W | 20 kg grip | 48 lb | 5166 | 1,552.00 |
| 8104 W | 24 kg grip | 53 lb | 5167 | 1,770.00 |
| 8102W | 25 kg grip | 58 lb | 5168 | 1,841.00 |
| 8100W | 30 kg grip | 68 lb | 5169 | 2,303.00 |



Optional case and glove


7228


7221

## Analytical Weight Sets <br> Alloy 8 material for Precision Analytical Weights

Designed for your most precise weighing needs, Troemner's Precision Analytical Reference Weights and Weight Sets utilize a specially developed austenitic stainless steel, Alloy 8, available exclusively from Troemner. Alloy 8 is similar to the material originally specified for the state primary standards. Alloy 8 possesses closely controlled density, extremely low magnetic susceptibility, excellent stability and resistance to corrosion, assuring a very stable mass over time.

Weights 1 g to 1 kg are manufactured using Alloy 8 and come in cylindrical shapes with knobs on top for easy handling. Weights from 1 mg to 30 mg are aluminum and flat, with one side turned up to form a handle for non slip gripping with forceps. Weights from 50 mg to 500 mg are stainless steel and flat with one side turned up to form a handle. Weight sets 200 g and above are supplied in oak cases while weight sets below 200 g are supplied in strong polypropylene cases. All weight sets are marked with serial number, accuracy class and date of calibration. Forceps are included

Weight sets are designed to achieve any total mass by combining smaller masses. Weight sets are supplied in a 5-2-2-1 series meaning that weights beginning with a 2 are doubled in each decade and weights beginning with a 5 or 1 are single in each decade. The exception applies when a set begins with a 2 . In that case the first weight is single, unless otherwise noted, and the remaining 2's in the set are doubled in each decade.

Weight set with Statement of Accuracy

| Part \# | Weight Set | Class | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | :---: | ---: |
| $7228-1$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 1 | 2 lb | 1377 | $\$ 1,088.00$ |
| $7228-3$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 3 | 2 lb | 1378 | 822.00 |
| $7228-4$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 4 | 2 lb | 1379 | 551.00 |
|  |  |  |  |  |  |
| $7221-0$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | Troemner Ultra Class | 4 lb | 5170 | $1,459.00$ |
| $7221-1$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 1 | 4 lb | 5171 | $1,256.00$ |
| $7221-4$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 4 | 4 lb | 5172 | 679.00 |

Weight set with Traceable Certificate

| Part \# | Weight Set | Class | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $7228-1 \mathrm{~T}$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 1 | 2 lb | 5173 | $\$ 1,604.00$ |
| $7228-3 \mathrm{~T}$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 3 | 2 lb | 5174 | $1,190.00$ |
| $7228-4 \mathrm{~T}$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 4 | 2 lb | 5175 | 936.00 |
|  |  |  |  |  |  |
| $7221-0 \mathrm{~T}$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | Troemner Ultra Class | 4 lb | 5176 | $2,202.00$ |
| $7221-1 \mathrm{~T}$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 1 | 4 lb | 5739 | $2,020.00$ |
| $7221-4 \mathrm{~T}$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 4 | 4 lb | 5740 | $1,109.00$ |

Weight set with NVLAP Certificate

| Part \# | Weight Set | Class | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $7228-1 \mathrm{~W}$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 1 | 2 lb | 5177 | $\$ 2,239.00$ |
| $7228-3 \mathrm{~W}$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 3 | 2 lb | 5178 | $1,825.00$ |
| $7228-4 \mathrm{~W}$ | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 4 | 2 lb | 5179 | $1,537.00$ |
|  |  |  |  |  |  |
| $7221-0 \mathrm{~W}$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | Troemner Ultra Class | 4 lb | 5738 | $2,996.00$ |
| $7221-1 \mathrm{~W}$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 1 | 4 lb | 5180 | $2,585.00$ |
| $7221-4 \mathrm{~W}$ | (2) $200 \mathrm{~g} \times 1 \mathrm{mg}$ | ANSI/ASTM Class 4 | 4 lb | 5181 | $1,734.00$ |

TROEMNER

## Metric Gram Mass Sets - Stainless Steel

311-01S stainless steel weights, bottle shape, one piece construction, ANSI/ASTM Class 7 (Also meets OIML Class M2), 5-2-2-1 series. Milligram weights are aluminum and stainless steel. Covered box. Durable inert polypropylene with integral hinge. Milligram weights have individual compartments with clear cover. Forceps included.

3415 stainless steel weights for school and industrial use. Weight set is reasonably priced and accurate. Fractional weights are satin finished aluminum and grouped in one compartment. Total capacity is 101 grams. ANSI/ASTM Class 7 (Also meets OIML Class M2).


311-01S
Mass set with Statement of Accuracy

| Part No. | Weight Set | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: |
| $311-01 S$ | 100 g x 1 mg | 2 lb | 1380 | $\$ 86.48$ |
| 341 S | 50 g x 10 mg | 1 lb | 1381 | 66.92 |

Mass set with Traceable Certificate

| Part No. | Weight Set | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: |
| 311-01ST | $100 \mathrm{~g} \times 1 \mathrm{mg}$ | 2 lb | 5182 | $\$ 228.55$ |
| 341ST | $50 \mathrm{~g} \times 10 \mathrm{mg}$ | 1 lb | 5183 | 185.31 |



## Weights



Brass Mass, Cylindrical, Pound/Ounce
Individual cylindrical weights. OIML accuracy Class M-2. Polished brass.

| Part No | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| $1 / 4$ oz Brass mass | 1 lb | 766 | $\$ 5.95$ |
| $1 / 2$ oz Brass mass | 1 lb | 1585 | 6.45 |
|  |  |  |  |
| 8 oz Brass mass | 1 lb | 1590 | 15.00 |
| 2 lb Brass mass | 3 lb | 1592 | 49.00 |



Ohaus Stainless Steel Mass, Cylindrical, Gram
Individual cylindrical weights. Class ASTMG. Polished stainless steel.

| Part No | Weight | Ship Wt | Stock | Price A |
| :--- | ---: | ---: | ---: | ---: |
| 80850118 | 1 g | 1 lb | 1075 | $\$ 14.00$ |
| 80850119 | 1 g | 1 lb | 1076 | 14.00 |
| 80850120 | 5 g | 1 lb | 1077 | 15.00 |
| 80850121 | 10 g | 1 lb | 1078 | 16.00 |
| 80850122 | 20 g | 1 lb | 1079 | 19.00 |
| 80850123 | 50 g | 1 lb | 1080 | 21.00 |
| 80850124 |  |  |  |  |
| 80850125 | 100 g | 1 lb | 2705 | 30.00 |
| 80850127 | 200 g | 1 lb | 2706 | 40.00 |
| 80850128 |  |  |  |  |
|  | 500 g | 2 lb | 2707 | 63.00 |
|  | $1,000 \mathrm{~g}$ | 3 lb | 2708 | 111.00 |


| $\mathbf{1 4 6 1 7}$ Fairbanks battery |  |  |  |
| :--- | ---: | ---: | ---: |
| Intrinsically safe CL1, 11, 111, Div 1, Groups ABCDEFG. Battery for use with | H90-3052, |  |  |
| H90-3052R, H90-3052DR or IND-HR5001-1. Recharge in safe area only. |  |  |  |
| Part Number | Weight | Stock | Price C |
| 14617 Battery ACC 352 | 2 lb | 416 | $\$ 209.00$ |

## Hazardous

## SPECIFICATIONS

| LOAD CELL | . 5 or 8 VDC <br> (4) 350 ohm load cells Remote sense for long cable runs |
| :---: | :---: |
| ANALOG INPUT | . $0.4 \mu \mathrm{~V}$ to $1.0 \mu \mathrm{~V}$ per div |
| CONVERSION | Update 60 times/sec 100,000 display div 1,000,000 internal div, |
| ACCURACY | . $0.01 \%$ of full scale |
| OUTPUT | (2) RS232 communication ports <br> * (2) Logic level open collector drain setpoints <br> * (1) Input TARE, PRINT or ZERO momentary dry contact closure. <br> * Analog output <br> * RS485 <br> * Ethernet |
|  | * Options |

(4) 350 ohm load cells Remote sense for long cable runs

60 times/sec 100,000 display div 1,000,000 internal div,


| KEYS | .350-IS: ZERO, PRINT, UNITS, TARE, SELECT <br> 355-IS: 0-9 keyboard, ON, OFF, ZERO, PRINT, SELECT, TARE, START, STOP, TARGET, UNITS, SAMPLE, ENTER |
| :---: | :---: |
| ANNUNCIATORS | (12) for operational status |
| DISPLAY | .LED $0.8^{\prime \prime}$ high 6 digit LCD 1.0" high 6 digit Decimal point selectable |
| POWER | .85-265 VAC @ 0.5 amp Option: Battery operation |
| SIZE | .350: 11 "W x 2.13 "D x 7.25 " H, 10 lb <br> 355: 11 "W x 2.4 "D x 9"H, 10 lb <br> 304 Stainless steel NEMA 4X IP66 |

## 355-IS Weight Indicators - GSE

Intrinsically safe indicators. 350 -IS is the basic indicator and the 355-IS has keyboard for numeric entry and function keys. Units are lb, kg, oz, g, lb-oz. Time \& date with battery back up. Nema 4X stainless steel enclosure, IP66.

| Part Number | Weight | Stock | Price A3 |
| :--- | :---: | ---: | ---: |
| Display Only |  |  |  |
| GSE-355-IS LCD display only | 7 lb | 6743 | $\$ 1585.00$ |
| AC Power |  |  |  |
| GSE-355-IS LED display w/ AC power module | 10 lb | 3430 | $\$ 2,450.00$ |
|  |  |  |  |
| Battery Power <br> GSE-355-IS LED display w/ battery power module | 10 lb | 6192 | $2,460.00$ |
| Service Parts |  |  |  |
| Battery operation for 355-IS <br> 24H3501-200CI Power module | 5 lb | 3431 M | 955.00 |
|  | 1 lb | 3757 M | 955.00 |



GSE-355 IS


## Hazardous



## SPECIFICATIONS

LOAD CELL
.(4)350 or (8)700 ohm load cells
ANALOG INPUT $\qquad$ $.0 .3 \mu \mathrm{~V}$ per div
CONVERSION
.10 updates per sec
20 ms integration time
80,000 display div
100,000 internal div
OUTPUT
. . . . . . . . . . Optional 20ma current loop serial *

* Requires I/O Isolation Barriers

DISPLAY $\qquad$ 0.56" LED

6 digit 999999
Decimal point selectable
Division 1,2,5,10
ACCURACY
0.01\% full scale

POWER
120 VAC $+/-10 \%, 50 / 60 \mathrm{~Hz}, 6$ watts
SAFE AREA . . . . . . .7VDC output
SIZE
9"W x 4"D x 6"H, 9 lb
NEMA 4 stainless steel enclosure

## Explosion Proof Junction Box

Summing junction cards are mounted in enclosures rated Class I, Group D; Class II, Groups E,F \& G; NEMA 7 \& NEMA 9. Each box has 5 holes drilled and tapped for $1 / 2^{\prime \prime}$ conduit size. Screw on cover has O-Ring for NEMA 4 watertight. Also complies with UL Standard 886 and CSA Standard C22.2 No. 301970.
$1250-4-$ EXP contains a summing junction card 1200 Series. It is behind a flat screw on lid for fast access and adjustment. Summing card will connect 2 to 4 load cells.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | :---: | ---: |
| $1250-4-E X P$ | 29 lb | $1267 \$ 1,308.00$ |  |

## Intrinsic Safety Barrier

Approved by Factory Mutual, for use with 1 to 4 load cells in a clear covered polycarbonate junction box. Load cells can have resistance between 350 ohms and 800 ohms. Indicator can have excitation voltage of 10 to 20 VDC and must have remote sense ability. The Instrument Society of America (ISA) in their latest publication ANSI/ISARP12.6 defines load cells with wheatstone bridge circuits as Nonenergy Storing Simple Apparatus since it is a device which will neither generate nor store more than $1.2 \mathrm{~V}, 0.1 \mathrm{~A}$, 25 mW , or $20 \mu \mathrm{~J}$. Simple Apparatus require no approvals when connected to certified intrinsically safe associated apparatus such as Intrinsic Safety Barriers. This means that any load cell in this catalog may be used with these Intrinsic Safety Barriers. 4 lb , $8 " \times 8$ "x6"h.

|  | Part Number | Weight | Stock | Price C |
| :--- | :--- | ---: | ---: | ---: |
| Sep | MTL-7700 Std configuration -6 to +6 VDC | 5 lb | 1561 | $\$ 1,184.00$ |
| MTL-7700 Optional configuration 0 to +12 VDC | 5 lb | 1539 | $1,184.00$ |  |
| Service Parts |  |  | C |  |
| MTL-7766PAC | 1 lb | 510 | 282.00 |  |
| MTL-764AC | 1 lb | 511 | 282.00 |  |
| MTL-7761PAC | 1 lb | 512 | 282.00 |  |
| MTL-7715+ | 1 lb | 291 | 282.00 |  |

Standard configuration (AD4321,AD4323)
Indicator power supply +6 VDC \& -6 VDC ( 12 VDC ) and +10 VDC \& -10VDC ( 20 VDC)
$\begin{array}{llrr}\text { Excitation } & \text { MTL-766 } & \text { 185 ohms max } & \text { 11.2 VDC max } \\ \text { Sense } & \text { MTL-764ac } & 1075 \text { ohms max } & \text { 11.2 VDC max }\end{array}$
Signal MTL-761 $\quad 145$ ohms max $\quad$ 7.5 VDC max
Optional configuration(AD4316,AN5316,ITG3030)
Indicator power supply +12 VDC \& 0 VDC ( 12 VDC) Grounded power supply.

| Excitation | MTL-715+ | 155 ohms max | 13.0 VDC max |
| :--- | :--- | ---: | ---: |
| Sense | MTL-764ac | 1075 ohms max | 11.2 VDC max |
| Signal | MTL-761 | 145 ohms max | 7.5 VDC max |

## Totalcomp



| Hazardous Floor Base |  |  |  |
| :---: | :---: | :---: | :---: |
| High performance powder coated heavy duty floor scale for hazardous environment. |  |  |  |
| Already configured with FM Approved summing box, load cells and hazardous home run cable. Standard features include: Top access FM Approved signal trim junction box. 20 ft blue jacket hostile environment load cell cable. 4 NTEP FM Approved alloy steel shear beam load cells. Heay powder coated diamond safety deck. 4 adjustable mild steel foot. Threaded eye bolt holes for easy lifting. Top holes for easy leveling. NTEP 16-016 Class III 5,000 div |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Part Number | Weight | Stock | Price C |
| T3x3-2.5K | 240 lb | 8142 | \$ 1,229.00 |
| T3x3-5K | 240 lb | 8143 | 1,229.00 |
| T3x3-10K | 245 lb | 8144 | 1,536.00 |
| T3x4-2.5K | 280 lb | 8145 | 1,331.00 |
| T3x4-5K | 280 lb | 8146 | 1,331.00 |
| T3x4-10K | 285 lb | 8147 | 1,690.00 |
| T4×4-2.5K | 370 lb | 8148 | 1,311.00 |
| T4x4-5K | 370 lb | 8149 | 1,311.00 |
| T4x4-10K | 375 lb | 8150 | 1,311.00 |
| T4×5-2.5K | 430 lb | 8151 | 1,433.00 |
| T4x5-5K | 430 lb | 8152 | 1,677.00 |
| T4x5-10K | 435 lb | 8153 | 1,579.00 |
| T5x5-2.5K | 540 lb | 8154 | 1,579.00 |
| T5x5-5K | 540 lb | 8155 | 1,872.00 |
| T5x5-10K | 545 lb | 8156 | 1,872.00 |
| Service Parts |  |  | c |
| (1) FM J Box \& (20)ft FM cable blue | 1 lb | 7114 | 272.00 |

*Both items shipped in same box

## Totalcomp

## TCM1 Power Supply

These chassis mountable supplies are ideal for use as a bridge excitation source, or for instrument design and test equipment. Unique clamp type barrier strip. Four molded-in threaded inserts. Four through holes for easy mounting. The TCM1 units can also be used as supplemental bench or laboratory power supplies. The special clamp type barrier strip secures the wire without twisting. Note the protected, recessed, barrier strip facing the top of the case. This allows all connections to be made in tight quarters while protecting the barrier strip from physical damage.

| Part Number | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: |
| TCM1.12.500-115 12 VDC power supply | 2 lb | 6445 | $\$ 248.92$ |
| TCM1.24.240-115 24 VDC power supply | 2 lb | 6446 | 248.92 |



TCM1.12.500-115 Power Supply

## Pushbutton Station

Heavy duty oil tight assembled pushbutton station with one standard black button and one NO-NC contact block. NEMA 4 enclosure, 3.75 " $\times 3.75$ " $x 2$ ". Cast steel painted light gray. Surface mounting with 4 thru holes hidden under cover. One 3/4"NPT entry hole at bottom for $3 / 4$ " conduit fitting. Legend plates in stock are engraved TARE, ZERO, PRINT. Custom legend plates are available.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| T3540 Single pushbutton station, does not | 3 lb | 825 | $\$ 318.00$ |
| include legend plate. Order below. | 1 lb | 999 | 32.30 |
| Legend plate engraved TARE | 1 lb | 1000 | 32.30 |
| Legend plate engraved ZERO | 1 lb | 1001 | 32.30 |
| Legend plate engraved PRINT | 1 lb | 826 | 40.40 |



Legend Plates

## Power Supplies

For use with process control setpoint indicators for relay control. Can also be used as an external load cell 12VDC power supply. Does not have remote sense. Should be used with a indicator that has signal adjust rather than power supply adjust on the sense amplifier. Will power (36)350 ohm load cells. Note: When using AD-4321 or AD-4323 do not connect the $+E X$ from indicator.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 12 VDC power supply $1.3 \mathrm{amp}, 3-3 / 4 " \times 4-1 / 4 " \times 1-1 / 2^{\prime \prime}$ | 1 lb | 660 | $\$ 129.00$ |
| 24 VDC power supply $700 \mathrm{ma}, 3-3 / 4 " \times 4-1 / 4 " \times 1-1 / 2^{\prime \prime}$ | 1 lb | 1400 | 170.00 |



12VDC Power Supply

## Process



## Process control weight indicator

When process control does not require the extreme high accuracy necessary for commercial weighing, this indicator is the choice. It is a high quality low cost digital weight indicator for strain gauge load cells. Zero and span calibration is done with fine potentiometers and coarse Dip switches. Sealed metal front bezel (NEMA 4) for wash down and dusty environments. Panel gasket and mounting clips are included for panel mounting.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| APLSG Process control weight indicator | 3 lb | 1938 | $\$ 326.00$ |
| NEMA 4 enclosure, steel, $4.75^{\prime \prime W} \times 8^{\prime \prime} \mathrm{D} \times 3^{\prime \prime} \mathrm{H}$ | 5 lb | 1939 | 145.00 |

with rubber feet and tilt brackets


NEMA 4 enclosure
for use with APLSG
for wash down and dust

## SPECIFICATIONS

LOAD CELL . . . . . . . .1.3 VDC to 10 VDC at 120ma
(4) 350 or (8)700 ohm load cells

ANALOG INPUT . . . . $5 \mu \mathrm{~V}$ to $1000 \mu \mathrm{~V}$ per div
CONVERSION ..... .Differential input amplifier with single ended output.

OUTPUT $\qquad$ .N.A.

| LOAD CELL | .1.3 VDC to 10 VDC at 120 ma <br> (4) 350 or (8) 700 ohm load cells |
| :---: | :---: |
| ANALOG INPUT | . $5 \mu \mathrm{~V}$ to $1000 \mu \mathrm{~V}$ per div |
| CONVERSION | .Differential input amplifier with single ended output. |
| OUTPUT . . | .N.A. |

VISHAY.

## Web Tension Transmitter

Web tension transmitter for applications that require a small, full function indicator/controller. DIN Rail-mount. RS-485 serial point interfaces with PLS/DCS systems using ASCII or Modbus RTU protocol. A high speed $4-20 \mathrm{~mA}$ analog output provides input for a brake/clutch motor controller. May be easily calibrated using the integral LCD display and keypad. Applications include paper machines, Film/foil/filament converting, textile web measurement and roofing machines.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| PS-2010T-2-2-1 | 10 lb | $74 \$ 2,908.00$ |  |



PS-2010T

## SPECIFICATIONS

| LOAD CELL | 10 VDC <br> (2) 350 ohm load cell |
| :---: | :---: |
| REMOTE INPUT | TTL or Dry contact closure Total tension, zero and print 0.0 to 0.4 vdc Low 4.0 to 24 vdc High |
| CONVERSION | 7.5 to120 updates per second 700,000 display divisions <br> 1,048,576 internal divisions |
| OUTPUT | . 4-20mA-500 ohm max RS485/422 |


| DISPLAY | LCD display, 0.24 " high |
| :---: | :---: |
| POWER | .117/230 VAC +/- 15\% @ 50/60Hz <br> 24 VDC @1A <br> 12 watts typical, 18 watts max |
| SIZE | .DIN-rail mount <br> 3.0 "W x $4.3^{\prime \prime D} \times 5.8^{\prime \mathrm{L}}, 3 \mathrm{lb}$ (Standard) <br> $9.85^{\prime \prime} \mathrm{W} \times 6.13^{\prime \prime} \mathrm{D} \times 11.73^{\prime \prime} \mathrm{L}$ (Single NEMA 4X) <br> $11.8^{\prime \prime} \mathrm{W} \times 6.5^{\prime \prime} \mathrm{D} \times 137^{\prime \prime} \mathrm{L}$ (Double NEMA 4X) |

## Process



## CPJ Analog Transmitter - Scaime

Signal Conditioner and analog transmitter will work with all strain gauge type inputs (load cells, pressure transmitters, etc.). CPJ output is $4-20 \mathrm{ma}$ or $0-10 \mathrm{VDC}$. Works with load cells having 120 to 1000 ohm input and 2 to $3 \mathrm{mv} / \mathrm{V}$ output. Potentiometers for adjustment of zero and span.

| Part Number | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: |
| CPJ-Card Analog output board | 1 lb | 4017 | $\$ 252.00$ |
| CPJ-DIN analog output DIN mount | 1 lb | 6245 | 289.00 |
| CPJ-2S-DIN 2S Analog output w/ 2 relays | 1 lb | 4018 | 546.00 |

Analog output board


## SPECIFICATIONS

| LOAD CELL | 10 VDC 95 ma <br> (4) 350 or (8)700 ohm load cells |
| :---: | :---: |
| ANALOG INPUT | 2 \& $3 \mathrm{mv} / \mathrm{V}$ load cells |
| CONVERSION | Differential input amplifier with single ended output |
| OUTPUT | .4-20ma, 0-10VDC <br> 2 set points w/3A/250V relays |

DISPLAY $\qquad$ None for weight 3 digit display for setpoint

ACCURACY $\qquad$ . $0.1 \%$ of full scale
POWER $\qquad$ . 12 VDC (11.5 to 27 VDC), 190 ma
SIZE $\qquad$ Card: $105 \mathrm{mmW} \times 98 \mathrm{mmD} \times 28 \mathrm{mmH}, 0.5 \mathrm{lb}$
DIN: $130 \mathrm{mmW} \times 107 \mathrm{mmD} \times 28 \mathrm{mmH}, 0.7 \mathrm{lb}$

## Process

## Totalcomp

## Analog to Digital Converter

Signal conditioner with analog to digital converter, DIN-Rail mount. For use with strain gauge load cells. The ADC will convert the analog signal to digital using Advanced Load Cell Protocol. Input and output terminal blocks are lever type that assure good low voltage connections. Circuit card with components can be easily disconnected from main printed circuit card for convenient serviceability.

The TDLC-DIN provides a fast RS485 digital output for use with computers and PLC's. Baud rate is selectable, $19,200,38,400,57,600$ and 115,200 . Requires a 12 VDC power supply.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TDLC-Din | 1 lb | 128 | $\$ 175.00$ |
| Options |  |  | C |
| USOTL4 adapter RS485 to USB | 1 lb | 423 | 285.00 |
| Service Parts |  |  | C |
| TDLC Card w/ connectors | 1 lb | 2776 | 132.00 |



## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VAC (3) 350 or (6) 700 ohm load cells
ANALOG INPUT . . . . . 2 \& $3 \mathrm{mv} / \mathrm{V}$ load cells
CONVERSION ...... Delta sigma A/D conversion Crystal Semiconductor 60 conversions per second

OUTPUT $\qquad$ RS485, 0 to +/- 400,000 Count load cell addresses up to 255 Baud rate 19,200 to 115, 200

DISPLAY . . . . . . . . . . . None
ACCURACY . . . . . . . $0.1 \%$ full scale
POWER . . . . . . . . . . . 12 VDC, 125 ma each load cell.
SIZE . . . . . . . . . . . . . .1.7" x $3.4^{\prime \prime} \times 4.0^{\prime \prime}$
DIN-rail mount

## Process



## TSC Totalcomp Signal conditioner

TSC signal conditioner signal card is mounted inside a Stainless Steel IP67 box. Inside you will have a regular signal trim summing card (max. 4 load cells), second portion of the card is analog output module that is switchable between $4-20 \mathrm{~mA}$ and $0-10 \mathrm{VDC}$. Surface mounted micro switches for calibration procedure allow for quick and easy setup. Provide power from your equipment requires $12-24 \mathrm{VDC}$. A multi-meter is required for set up.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 1-AD103C Digital transducer amplifier | 3 lb | 1050 | $\$ 379.00$ |


| SPECIFICATIONS |  |
| :---: | :---: |
| LOAD CELL . . . . . . . . 5 VDC <br> (4) 350 ohm load cells | DISPLAY . . . . . . . . . . . None ACCURACY . . . . . . . $0.1 \%$ of full scale |
| ANALOG INPUT . . . . -3.2 mV/V to +3.2mV/V | POWER . . . . . . . . . .12-24 VDC |
| CONVERSION ...... . Differential input amplifier with single ended | SIZE . . . . . . . . . . .8.5"W $\times 6.75$ "D $\times 1.6$ "H, 3 lb |
| OUTPUT . . . . . . . . . . Current4-20ma <br> Voltage 0-10V |  |



## Calex Load cell summing transmitter

AC or DC powered summing transmitter that has a four load cell capacity. Inclided is a NEMA 4 enclosure witha complete strain gage bridge signal conditioner. The three way isolation, input to output and power feature eliminates any unwanted ground loop problems. Capable of taring up to $80 \%$ of the output of a $3 \mathrm{mV} / \mathrm{V}$ load cell. Applications include precision weighing, process control add-on loop, and can be used with all types of low output sensors.

| Part Number | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: |
| 4800SA summing board | 3 lb | 192 | $\$ 845.50$ |

Calex 4800

## SPECIFICATIONS

LOAD CELL . . . . . . . . 10 VDC
(4) 350 ohm load cells

ANALOG INPUT . . . . . 5 mV to 50 mV Full Scale

CONVERSION . . . . . . 2 Hz to 10 Hz
OUTPUT . . . . . . . . . . . 0 or 4-20m
Voltage 0-20V

DISPLAY . ........... . . None
ACCURACY . . . . . . . .+- 0.01\% of full scale
POWER . . . . . . . . . . 115 VAC (90 to 130V)
11-30 VDC (8W)
SIZE . . . . . . . . . . . . . $12.5 " \mathrm{~W}$ x 9"D x 4.4"H, 3 Ib

## Process

## Oct

## HBM DC Amplifier

HBM's RM4220 is a strain gage amplifier. Because it simply snaps on to standardized support rails, the RM 4220 amplifier is easy to install. A service-friendly snap-in terminal block is used to make the electrical connection. Individual strain gage transducers as well as several strain gages connected in parallel (>80 Ohms) can be connected to the measuring amplifier. This amplifier offers a very simple and practical calibration of the zero point and the final value by using DIP

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| RM4220 DC amplifier | 2 lb | 715 | $\$ 84.40$ |



RM4220

SPECIFICATIONS

LOAD CELL $\qquad$ 5 VDC (4) 350 ohm load cell
ANALOG INPUT . . . . . 2 \& $3 \mathrm{mv} / \mathrm{V}$ load cells
CONVERSION
Delta sigma A/D conversion
OUTPUT
-10 to +10 VDC
0 to 10 VDC.
4 to 20 ma

DISPLAY $\qquad$ .None

ACCURACY $\qquad$ $0.1 \%$ of full scale

POWER .24 VDC, 200 NAQ

SIZE
$.3 .9^{\prime \prime} \times 4.5^{\prime \prime} \times 0.9^{\prime \prime}$ DIN-rail mount

## Heading

## Process

## HBM

## AD103C Digital Transducer Amplifier - HBM

Complete bridge transducer amplifier with RS232 interface. Patented error-free high speed integrating A/D conversion. Extensive command set makes it easy to setup and communicate. Built-in user selectable digital low pass filters. User adjustable system zero and span scaling factors. User configurable linearization correction. Automatic background calibration. On-board EEPROM to store setup parameters.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 1-AD103C Digital transducer amplifier | 1 lb | 2218 | $\$ 704.00$ |
| 1-AED 9101D Housing | 1 lb | 76 | 620.00 |



## SPECIFICATIONS

LOAD CELL . . . . . . . 5 VDC
(1) 350 ohm cell(AD101)
(4)350 ohm load cells(AED9001)

6 wire remote sense
ANALOG INPUT . . . . -3.2 mV/V to $+3.2 \mathrm{mV} / \mathrm{V}$
CONVERSION .......Update rate 150 Hz nominal 24 bit remote display div

OUTPUT
.RS232 bidirectional
Baud rates 1200, 2400, 4800. $9600,19.2 \mathrm{~K}, 38.4 \mathrm{~K}, 76.8 \mathrm{~K}$ bps 1 start bit, 8 data bits, 1 stop bit, Even parity, XON/XOFF handshake.

| DISPLAY | Remote display only(by others) |
| :---: | :---: |
| ACCURACY | .0.025\% of full scale |
| POWER | . 7.8 to $15 \mathrm{VDC}, 60 \mathrm{ma}(\mathrm{AD} 101)$ |
|  | 10 to 30VDC, 120ma(AED9001) |
|  | Nominal: 12 VDC, 1.5 watts |
| SIZE | .3.7"L $\times 2.1$ " $\mathrm{W} \times 0.7{ }^{\prime \prime} \mathrm{H}, 3 \mathrm{lb}$ |

## 4059G Signal Conditioner - Absolute Process Instruments

Plug in signal conditioner will work with all strain gauge type inputs. Output is switch settable to 16 Current or Voltage ranges including the popular 4-20 ma analog. Setup is done with rotary switches and easy to use tables. Works with load cells having 120 to 1000 ohm input and 2 to $3 \mathrm{mv} / \mathrm{V}$ output. Functional field test pushbutton. Switches and potentiometers for adjustment of zero and span.

| Part Number | Weight | Stock | Price $\mathbf{C}$ |
| :--- | ---: | ---: | ---: |
| 4059 G Signal Conditioner 115 VAC | 2 lb | 1626 | $\$ 521.00$ |
| 11pin surface mount socket | 1 lb | 1630 | 21.20 |

## SPECIFICATIONS

LOAD CELL . . . . . . . . 1 to 10 VDC(1 volt steps) 125 ma
(4) 350 or (8) 700 ohm load cells

ANALOG INPUT . . . . . $0-5 \mathrm{mV}$ to $0-1200 \mathrm{mV}$
CONVERSION ..... .Differential input amplifier with single ended output

OUTPUT $\qquad$ .Current 0-2ma,0-10ma,2-10ma,0-16ma, 4-20ma,0-20ma
Voltage $0-1 \mathrm{~V}, 0-2 \mathrm{~V}, 0-4 \mathrm{~V}, 0-5 \mathrm{~V}, 1-5 \mathrm{~V}$,
$-/+5 \mathrm{~V},-/+10 \mathrm{~V}, 0-8 \mathrm{~V}, 2-10 \mathrm{~V}, 0-10 \mathrm{~V}$


4059G

| SPECIFICATIONS |  |  |  |
| :---: | :---: | :---: | :---: |
| LOAD CELL . | .1 to 10 VDC( 1 volt steps) 125 ma (4) 350 or (8) 700 ohm load cells | DISPLAY | None |
| ANALOG INPUT | . $0-5 \mathrm{mV}$ to $0-1200 \mathrm{mV}$ | ACCURACY |  |
| CONVERSION | .Differential input amplifier with single ended output | POWER | . 1115 VAC $50 / 60 \mathrm{~Hz}, 2.5$ watts |
| OUTPUT | ```.Current 0-2ma,0-10ma,2-10ma,0-16ma, 4-20ma,0-20ma Voltage 0-1V,0-2V,0-4V,0-5V,1-5V, -/+5V,-/+10V,0-8V,2-10V,0-10V``` | SIZE ... | . 1.75 "W x 2.38 " $\times 2.75$ " $\mathrm{H}, 1 \mathrm{lb}$ |

## Process



## 433 \& 463 Bridgesensor Signal Conditioner

Self contained signal conditioner will work with all strain gauge load cells. Output is either voltage or current. One model has 0-10 VDC analog and the other is an isolated 4-20 ma or 0-20 ma analog which allows daisy chained indicators in multiple locations. AC powered. Capable of driving (4) 350 ohm load cells. Bridge balance with $80 \%$ tare offset capability. Rugged epoxy encapsulated design.

| Part Number | Input | Output | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 433 Bridgesensor | 115 VAC | $4-20 \mathrm{ma}$ or $0-20 \mathrm{ma}$ | 2 lb | 132 | $\$ 548.50$ |
| 463 Bridgesensor | 115 VAC | $0-10 \mathrm{VDC}$ | 2 lb | 1271 | 548.50 |
| 437 Bridgesensor | $10-36$ VDC | $4-20 \mathrm{ma}$ or 0-20 ma | 2 lb | 1627 | 524.75 |
| 460 Bridgesensor | 115 VAC | -10 VDC to +10 VDC | 2 lb | 1824 | 461.00 |

## SPECIFICATIONS

LOAD CELL $\ldots \ldots .5$ to 10 VDC 120 ma
(4)350 or (8)700 ohm load cells
Remote sense for long cable runs

DISPLAY . . . . . . . . . . . None
ACCURACY . . . . . . . . $0.01 \%$ of full scale
POWER . . . . . . . . . . 433: 115 VAC +/-10V 50/60 Hz, 7 VA
463: 115 VAC +/-10V 50/60 Hz, 7 VA 437: 10 to 36 VDC

SIZE
$3.75 " \mathrm{~W}$ x 2"D x 2.87"H, 2 lb

## Totalcomp

## T4710 \& T4720 Bridgesensor

Self contained, DC powered Din-Rail mount module designed for strain gage load cells. Output of 4-20ma or 0-10VDC. Precision instrumentation amplifier, filtered output and a built-in 10 V excitation supply capable of driving a 350 ohm bridge. The $0-30 \mathrm{mV}$ input range makes it compatible with most strain gage based load cell or pressure transducer outputs. Includes 6 " of Din rail. Needs external 24 VDC power supply. Connections are made via easily accessible screw clamp terminal blocks. Zero and Span adjustment potentiometers are located externally for easy access.

| Part Number | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: |
| T4710-D Bridgesensor Din Rail 0-10V | 1 lb | 3731 | $\$ 213.80$ |
| T4720-D Bridgesensor Din Rail 4-20ma | 1 lb | 3798 | 213.80 |



NEW


201
Weight Transmitter

| SPECIFICATIONS |  |  |  |
| :---: | :---: | :---: | :---: |
| LOAD CELL | .11.72 VDC 120 ma (8)350 ohm load cells Remote sense for long cable runs | DISPLAY . | .(6) digit 7 segment $0.5^{\prime \prime}$ high, LCD, backlight Annunciators OVER, UNDER, ACCEPT $\mathrm{IN} 1, \mathrm{IN} 2, \operatorname{IN} 3, \operatorname{IN} 4$, OUT1, OUT2, OUT3, OUT4 |
| ANALOG INPUT | . 2 \& $3 \mathrm{mv} / \mathrm{V}$ load cells 0.5 mV min to 35 mV max | ACCURACY | . $0.01 \%$ of full scale |
| CONVERSION . | .Precision differential input amplifier with isolated, filtered output | POWER | .12-24 VDC 6 watts |
| OUTPUT | .RS232, RS485, <br> (4)Digital inputs, (4)Digital outputs <br> 4-20ma, 0-10VDC analog <br> Modbus, Ethernet, USB, Web page |  |  |

## Remote



TSR-2L
Weathertight


TSR-0.4L
Panel Mount


## TSR-L Smart Remote display - Totalcomp

Bright digits, L.E.D. seven segments, 6 digit, max 999999. For indoor use away from direct sunlight for best viewing. Displays that will mount outdoors in direct sunlight should use the Model TSR-M for sharpest contrast and maximum clarity. Serial input RS232C, 20 ma serial current loop, active or passive. 1200, 2400, 4800, 9600 baud, 7 or 8 data bits, odd, even or no parity, 1 or 2 stop bits. No setup is required. Just connect the signal wires. Press the LEARN button and the Smart Remote sets itself up. Rugged enclosure is weathertight for harsh environments. Available in painted steel or stainless steel. Mounting is either panel, desk or $U$ Bracket which allows a full 360 degree swivel and easy tilting for the optimum viewing angle. -40 deg C to +75 deg C . $115 \mathrm{VAC}, 60 \mathrm{~Hz}$. Other operating voltages such as $12 \mathrm{VDC}, 24 \mathrm{VDC}, 230 \mathrm{VAC}, 50 \mathrm{~Hz}$ are available as a special order at no additional charge.

| Part No | Height | Dist | Case" | Watt | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U-Bracket mount Weathertight |  |  |  |  |  |  |  |
| TSR-2L | 2 " | 80' | 16x5x6h | 12 | 15 lb | 1766 | \$ 891.00 |
| Panel mounting only. 1/8 DIN size. NEMA 1 (Not weathertight) |  |  |  |  |  |  |  |
| Power cord (120VAC) is not included. |  |  |  |  |  |  |  |
| TSR-0.4L | 0.4 " | 16' | $5.5 \times 3.75 \times 2 \mathrm{~h}$ | 6 | 2 lb | 1564 | \$ 428.00 |
| Explosion Proof |  |  |  |  |  |  |  |
| TSR-0.4L-EXP | 0.4" | 16' | $8 \times 5 \times 5 \mathrm{~h}$ | 6 | 8 lb | 2631 | 1,183.00 |
| Desk mount or panel mount NEMA 1 (Not weathertight) |  |  |  |  |  |  |  |
| TSR-1L | $1 "$ |  | 7.5x6.5x3.5h | 6 | 4 lb | 1756 | 535.00 |


| Recommended distances for data transmission |  |  |
| :---: | :---: | :---: |
| Output | No. Conductors | Max distance |
| BCD | 25 | 10 ft |
| RS232 | 4 | 50 ft |
| 20 ma | 4 | $2,000 \mathrm{ft}$ |

© Totalcomp
TSR-1L
Desk or panel mount

## 8Brecknell

## RD-65 Remote Display - Salter Brecknell

Highly durable. Powder coated mild steel enclosure, IP56, with wall mount swivel bracket or easy to install hanging rings. Adjustable sunvisor included. Double row, ultra bright large 5 ", 6 digit LED display visible up to 150 ft . Displays up to 999,999 or down to 999,999. Annunciators: kg, lb, g, n. Serial ports for RS-232, RS-485 or current loop with selection to five protocols. Three data formats and 8 types of baud rates; 150, 300, 600, $1200,2400,4800,9600,19200$ baud. $120 \mathrm{VAC}, 60 \mathrm{~Hz}$.

| Part Number | Weight | Stock | Price B |
| :--- | ---: | ---: | ---: |
| RD-65 5" Remote display | 41 lb | 2283 | $\$ 1,075.00$ |



## Remote



Aurora 45 lighted


Aurora 65 lighted


## Aurora 45 SL

 w/ stop light

Aurora 20 lighted


GSR-6L

## WESTERN

WEIGHING TECHNOLOGIES

## Remote Display - Western Weighing

Tough, dependable and weatherproof. Mild steel with powder coated finish. 6 digit 7 segment, no glare lens LED display. Annunciator lights for: GR, NT, lb, kg. 5 standard communication protocols. Selectable day and night brightness levels. Power save mode. Built-in relay for external traffic light control (except 2"). Leading zero suppression. Optically isolated port for lighting protection. Switch selectable configuration and options. RS 232, RS 422, RS 485 multi drop. 20 mA current loop active and passive. 90 to 240 VAC. 2 year warranty.

| Part Number D | Digital Height | Dist | Weight | Stock | Price B5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aurora 45 lighted | 4.5 " | 180' | 30 lb | 6983 | \$ 1,115.00 |
| Aurora 65 lighted | 6.5 " | 260' | 55 lb | 6984 | 1,289.00 |
| Aurora 45 SL w/ stop light | 4.5 " | 180' | 30 lb | 6985 | 1,329.00 |
| Aurora 20 lighted | 2" | 80' | 15 lb | 6986 | 649.00 |
| Options |  |  |  |  | B5 |
| Wireless RF module for Au | urora |  | 1 lb | 6987 | 185.00 |
| Scale link wireless transce for scale indicator. |  |  | 3 lb | 6988 | 510.00 |
| Service Parts |  |  |  |  | B5 |
| 112169 Mainboard for Auro | rora 45 |  | 2 lb | 6910 | 163.00 |
| 112155 Digital Board for Au | Aurora 45 |  | 1 lb | 6911 | 238.00 |

# CENERALSENSDR 

## Remote Display, lighted - General Sensor

Lighted high intensity LED remote display with auto configuring for determining the baud rate from 300 through 9600,7 or 8 data bits. odd, even or no parity, 1 or 2 stop bits. Interface choices are RS232, 20 ma current loop (active or passive) and optional RS422/485. 150 deg viewing angle. High Intensity LED digits have high visibility digits for both indoor and outdoor use. LEDs have a high life with no moving parts to repair or replace. If a decimal point is transmitted, it will be displayed in the correct position. If a minus sign is transmitted, the minus sign will be displayed in front of the next 5 digits.. Enclosure is NEMA 4X non-metallic for harsh environments. 120 VAC 120 watts. 23 " W x 5"D x 12 "H.

| Part Number | Digit Height | Dist | Weight | Stock | Price C |
| :--- | :---: | ---: | ---: | ---: | ---: |
| GSR-3L Remote display | $3^{\prime \prime}$ | $120^{\prime}$ | 8 lb | 3860 | $\$ 865.00$ |
| GSR-6L Remote display | $6 "$ | 240 | 12 lb | 3861 | $1,255.00$ |
|  |  |  |  |  |  |
| Service Parts |  |  | 1 lb | 3888 | $\$ 320.00$ |
| GSR-3L-MAIN mainboard |  |  | 1 lb | 3889 | 320.00 |

## Remote

## Intercomp

## S400HI \& SA2000 Remote display - Intercomp

The S 400 HI remote display is clearly readable in pouring rain, bright sun, pitch dark, inside or out, without additional lighting or shielding. The SA2000 is for indoor use only. They will interface with any digital indicator, terminal, or computer with standard output. The display features light emitting diodes (LED's) which can withstand temperatures ranging from -50 deg F to 120 deg F . The $2^{\prime \prime}$ display has 8 digits $5 \times 7$ dot matrix alphanumeric LED. The 4.5 " display has 6 digits, 7 segments each, max 999,999. Decimal point is selectable. One or two fixed zeros. RS232 or 20ma current loop active or passive. Baud rates 50 to 9600 . Power required is 9 to 12 VAC or VDC at 3 mps provided by power supply (included) UL listed, plug in wall transformer, 120VAC, 60Hz, 1 amp with 6 ft 3 cond cable to display. Easily extended in the field. S400HI is NEMA 4 X moisture tight 32.5 "W $\times 3.5$ " $\mathrm{D} \times 11.5^{\prime \prime} \mathrm{H}$. SA2000 is NEMA 1 for indoor use, 16 "W x 4 "D $\times$ 5 "H. Power supply wall transformer 2 " $\times 2^{\prime \prime} \times 3$ ".

| Part Number | Height | Dist | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| SA2000 Alpha-numeric display | $2^{\prime \prime}$ | $60^{\prime}$ | 8 lb | 1028 | $\$ 895.00$ |
| S400HI Numeric High Intensity | $4.5^{\prime \prime}$ | $180^{\prime}$ | 17 lb | 794 | $1,495.00$ |



S400

## Sardinal. <br> Cardinal Scale Manufacturing Co.

## SB500 Remote Display - Cardinal

6 digit 5" high LED display. 140 deg viewing angle. Enclosure is NEMA 4/IP65 with mounting tabs. Either painted steel or stainless steel enclosures are available. 120 VAC 120 watts. 32.1 " $\mathrm{W} \times 5.5$ " $\mathrm{D} \times 16.75$ " H .


## Remote



TWLC
Wireless Load Cell Transmitter/Receiver


## TWLC Wireless Load Cell Transmitter/Receiver - Totalcomp

Receiver is powered by indicator excitation voltage. Transmitter has internal rechargeable battery. 270 hour battery life with one 350 ohm load cell. Up to (12) 350 ohm cells can be connected to one set up. Up to 150 sets can be used in the same area without interference.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TWLC Wireless load cell transmitter/receiver | 2 lb | 799 | $\$ 499.00$ |

A\&D WEIGHING DIVISION

## AD-8920 Remote digital display - A\&D

Remote display for A\&D Electronic balances. Connects to either the RS232 or the Current loop interface. Bright 7 digit VFD is easy to read. $4.72^{\prime \prime} \mathrm{W} \times 2.99^{\prime \prime} \mathrm{D} \times 3.54$ " H . Powered by 115 AC adapter which is included

| Part Number | Weight | Stock | Price B5 |
| :--- | ---: | ---: | ---: |
| AD-8920 Remote display | 2 lb | 1160 M | $\$ 270.00$ |

TRANSCELL TECHNOLOGY, INC.

## TI-500EP Remote Display - Transcell

This remote display is a standard TI-500EP indicator which has a selectable feature to be a remote display. LED display with 0.6 " digit height. 120 VAC 0.5 watts.

| Part Number | Digit Height | Dist | Weight | Stock | Price C |
| :--- | :---: | ---: | ---: | ---: | ---: |
| TI-500EP Remote display | $0.6^{\prime \prime}$ | $24^{\prime}$ | 4 lb | 6437 M | $\$ 275.00$ |

Argox

## Empower the Barcode

## Direct Thermal Printer - Argox

Compact. High performance and cost effective solution for your barcode and labeling requirements. Direct thermal desktop barcode printer that offers outstanding features and exceptional value. Easy to operate, space saving and reliable. Internal Real Time Clock (RTC) with buzzer for error warning function when printer runs out of paper or paper jams. The internal RTC facilitates time and date marking for stand alone operation. Ideal for low to medium volume printing needs. Ideal for applications such as point of sale, weight scales, mailing, banking, ticketing, patient tracking, kiosks and document labeling. 2.83 inch printing width. 203 dpi print resolution and up to 4 ips printing speed. 32 bit CPU and 4MB flash; 8MB SD RAM memory standard. Communication interfaces: RS232, USB, Cash Drawer, Ethernet (optional) to fit in various systems. Tear off bar built in. Windows 7 OS. Power adapter 100-240 VAC, $1.5 \mathrm{amps}, 24$ VDC output.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| OS-213OD | 3 lb | 1716 M | $\$ 325.00$ |
| Service Parts |  |  | C |
| 10015342 Labels $2.25 " \mathrm{~W} \times 2$ 2"H, case (12) | 11 lb | 3709 | 192.00 |



OS-213OD


## Direct Thermal Printer - Zebra

Best in class speed and performance. From the basic GK model to the feature rich GX model, the G-Series printers are reliable, durable and flexible to fit almost any low to midvolume printing application and budget. Providing ease of use, the G-Series and GX models are reliable desktop printing solutions that are always a perfect fit. Both GK and GX models are equipped with EPL and ZPL programming languages, you can switch between languages depending on desired label format.

GK: The Zebra GK model is your best value in a basic desktop thermal printer. It's enhanced performance delivers fast print speeds of up to 5 inches per second and fast first label out. USB and serial connectivity interfaces come standard, or use the ZebraNet 10/100 Print Server option for distributed printing.

GX: The Zebra GX model is the best in class with the widest range of features in a desktop thermal printer. It delivers even faster first label out and, at 6 inches per second. offers the fastest desktop printer speed on the market. More connectivity choices; USB/serial/parallel, 10/100 Ethernet and wireless, ensure easy system integration. An LCD panel, included with wireless options, displays prompts and wireless status.


Label width $0.75^{\prime \prime}$ to 4.25 ". Max print width 4.09 ". Print speed 5 " $/$ sec.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| GK420D | 7 lb | 6926 | $\$ 595.00$ |
| GK420T | 7 lb | 6927 | 695.00 |
|  | 7 lb | 6928 | 844.00 |
| GX420D | 7 lb | 6929 | 944.00 |

## Eltron

| LP-2022/2042 Bar Code Label Printer - Eltron |  |  |  |
| :--- | ---: | ---: | ---: |
| Service parts only. |  |  |  |
| Part Number | Weight | Stock | Price C |
| Service Parts for LP2022 | 1 lb | 489 | $\$ 205.00$ |
| Print head for LP2022 | 1 lb | 4074 | 122.50 |
| Feed switch assy for LP2022, pack of 5 | 1 lb | 4075 | 47.90 |
| Gap sensor kit for Eltron LP2022 | 1 lb | 491 | 245.00 |
|  | 1 lb | 3707 | 37.15 |
| Main board for LP2022 | 1 lb | 1551 | 77.00 |
| Eprom for LP2022 | 1 lb | 4138 | 7.90 |
| Plastic cover for roll labels | 11 lb | 4477 | 83.70 |
| 2.25"W x 2"H label roll (735) | 11 lb | 3709 | 192.00 |
| 2.25"W x 0.75"H label rolls case of (12) |  |  |  |
| 2.25"W x 2"H label rolls case of (12) | 1 lb | 3705 | 285.00 |
|  |  |  |  |
| Service Parts for LP2042 |  |  |  |
| Print head for LP2042 | 20 lb | 4478 M | 146.00 |
|  | 20 lb | 3710 M | 322.00 |
| Labels for direct thermal only | 20 lb | 1538 M | 342.00 |



LP 2844

## Bar Code

| Ovation! 2 Bar Code Label Printer |  |  |  |
| :---: | :---: | :---: | :---: |
| Thermal transfer and direct thermal. RS232 and parallel interface. High quality 203 dpi resolution. Prints 2 " per second. 4.16 " maximum print width. Prints code 39 , interleaved 2 of 5, Code 128 (subsets A, B and C), Codabar, UPC-A, UPC-E UPC 2 \& 5 digit addendums, EAN-8, Ean-13, Code 93, UCC/EAN Code 128, Postnet, PDF417, Code 128 MOD 43, and UPS Maxicode. Comes with Windows driver. Dimensions, $8.8^{\prime \prime} \mathrm{W} \times 10.1^{\prime \prime} \mathrm{D}$ x 6.2"H. 115VAC $50 / 60 \mathrm{~Hz}$. |  |  |  |
| Part Number | Weight | Stock | Price C |
| Ovation! 2 direct thermal label printer | 7 lb | 4133 | \$ 795.00 |
| Ovation! 2 thermal transfer label printer | 7 lb | 4134 | 845.00 |
| Options |  |  | C |
| Interface cable 6' to PC | 1 lb | 4135 | 49.00 |

## Prodigy Plus \& Prodigy Max Bar Code Label Printer

Service parts only for Prodigy thermal transfer and direct thermal.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Service Parts |  | C |  |
| Print head for Prodigy Max \& Plus | 1 lb | 490 | $\$ 454.55$ |
| Service Manual for Prodigy Plus | 1 lb | 3781 | 95.00 |



Ovation! 2


Prodigy Plus
Bar Code printer Thermal transfer and direct thermal


Prodigy Max
Bar Code printer Thermal transfer and direct thermal


| Serial to 20ma current loop converter |  |  |  |
| :---: | :---: | :---: | :---: |
| This adapter allows RS232 input printers to be used with indicators that have only 20 ma serial output. RS232 side has 25 pin connector and 20 ma serial side has terminal blocks. If the 20 ma loop needs a power supply to make it active, use the optional power supply. $2 " \mathrm{~W} \times 2.5^{\prime \prime} \mathrm{D} \times 0.6^{\prime \prime} \mathrm{H}$. |  |  |  |
| Part Number | Weight | Stock | Price C |
| 232CL4 Converter RS232/20ma \& 20ma/RS232 | 1 lb | 3274 | \$ 208.00 |
| Options |  |  | C |
| 232PS2 Power supply for 20ma active | 1 lb | 3275 | 36.00 |



## OHAUS ${ }^{\circ}$

## CBM-910 Palm sized Printer

Light weight, palm sized dot matrix roll paper printer. Desktop or wall mountable. Ultra compact and perfect for a wide array of applications. Paper near end detection.
AC power adapter included. 4.17 " $\mathrm{W} \times 7$ " $\mathrm{D} \times 3.5 \mathrm{H}$

| Part Number | Weight | Stock | Price A |
| :--- | ---: | ---: | ---: |
| CMB-910 Ticket printer | 2 lb | 7426 MB | $\$ 495.00$ |
| Options |  |  |  |
| 80251932 Roll paper | 1 lb | 7427 | 15.00 |
| 80251933 Ink ribbon | 1 lb | 7428 | 44.00 |
| 80500570 RS232 Cable \& adapter, Voy/Exp | 1 lb | 7429 MB | 155.00 |
|  |  |  |  |
| 80252571 RS232 Cable \& adapter, Disc/Pion/MB | 1 lb | 7430 | 155.00 |
| 80252573 RS232 Cable \& adapter, CD Troop | 1 lb | 7431 | 155.00 |
| 80252574 RS232 Cable \& adapter, CW/CKW/T | 1 lb | 7432 | 172.00 |
| 80251934 adapter | 1 lb | 7433 MB | 27.00 |

## -Totalcomp

## TYJ-360-D Tape Printer, serial input

Dot matrix tape printer. 30 column. RS232 input. 12 VDC operation for use on mobile
Dot matrix tape printer. 30 column. RS232 input. 12 VDC operation for use on mobile
equipment such as vans or trucks. Uses standard adding machine tape $2-1 / 4$ " wide with diameter 2-3/8". Plastic lid protects roll paper. Baud rates 2400, 9600, 19,200, 115,200, none/odd/even parity, 7/8 data bits 1 stop bit, X-ON/X-OFF protocol. Power On/Off switch, FEED key, ON LINE key. 12 VDC, 5 watts, 4.5 "W x 6.5 "D $\times 3.5$ " H .
Buy AC adapter separately.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TYJ-360-D Ticket printer, 12VDC | 5 lb | 4570 | $\$ 427.00$ |
|  |  |  |  |
| Service Parts |  |  | C |
| WP:PP137 Roll paper, pack of 5 | 1 lb | 1596 M | 25.70 |
| ET:ERC-09 ink ribbon * | 2751 | 18.80 |  |
| $\quad$ * Also used in Toledo SQC-14, NCI 1220 and Weightronix WP-223, 230, 231, 233 |  |  |  |



| Option |  | D |
| :--- | ---: | ---: | ---: |
| AC adapter 100-240VAC/12VDC | $1 \mathrm{lb} \quad 6362 \mathrm{MB}$ | 23.80 |

## Printers



## St@liw

## SP298 Ticket Printer - Star

42 column dot matrix ticket printer will accept RS232 input. Has 512 byte data buffer. 9 pin shuttle impact dot matrix. Print speed 3.1 lines $/ \mathrm{sec}$. Max paper thickness 0.2 mm
Original and 2 copies. One color cartridge ribbon. Characters are $1.2 \times 2.42 \mathrm{~mm}, 42$
characters/line, 16.9 CPI. Order mating connector DB25P separately. 115/230VAC 50/60
Hz , 15 watts, $180 \times 190 \times 138 \mathrm{mmH}$.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| SP298 Ticket Printer w/power supply | 8 lb | 3282 | $\$ 558.00$ |
| Service Parts |  |  | C |
| SP298 Printer w/o power supply <br> Power supply 100-240VAC to 24VDC 2A <br> w/power cord | 6 lb | 3283 | 451.00 |
| RC200B Ink ribbon cartridge, <br> black for SP200, SP298, SP500, SP700 | 2 lb | 2224 M | 83.95 |

black for SP200, SP298, SP500, SP700

| GODEX |  |  |  |
| :--- | ---: | ---: | ---: |
| Part Number | Weight | Stock | Price C |
| $Z \times 1300$ i printer w/ rewind. | 28 lb | 653 | $\$ 950.00$ |

DATAMAX DPT Printer

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| $1-4212 \mathrm{E}-203$ | 28 lb | $686 \$ 1,808.00$ |  |

## DATAMAX M-Class Mark II

The M-Class is a perfect solution for warehouse, healthcare, logistics or retail applications. The modular design of the M-Class makes maintainence and part replacement easy, and the flexible design allows a variety of options to be upgraded in the field. With an easy-to-navigate LCD graphics display for menu and printer function control, it is designed for any level of user. Support of UHF or HF RFIP configurations for current or future requirements protects your printer investments. The high quality features, performance, and rugged reliablity ake the M-Class II the best value of any printer on the market. Dimensions are 10.21" H x 10.10" W X $18.1^{\prime \prime} \mathrm{D}(249 \mathrm{~mm} \mathrm{H} \mathrm{x}$ 257 mm W x 462 mm D)

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| DMX-M-4206 Thermal Prime | 28 lb | 679 | $\$ 950.00$ |

## DMX-M-4000

Prices are subject to change without notice. Please call for current prices.
Other items are available from the manufacturers, please call for prices

## TM-U295 Ticket Printer - Epson

35 column dot matrix ticket printer will accept RS232 input, Has 4K data buffer. 7 pin shuttle impact dot matrix. Print speed 2.1 lines $/ \mathrm{sec}$. Max paper thickness 0.35 mm . One color cartridge ribbon. Characters are $1.6 \times 2.9 \mathrm{~mm}, 35$ characters/line, $13.5 \mathrm{CPI}, 2.6$ " print line. Order mating connector DB25P separately. 115/230VAC $50 / 60 \mathrm{~Hz}, 15$ watts, 180 x $190.5 \times 101.5 \mathrm{mmH}$.

| Part Number | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: |
| TM-U295 Ticket Printer w/power supply | 8 lb | 2225 | \$ 565.00 |
| Options |  |  | C |
| 4 ft cable to indicator, assembled w/connector | 1 lb | 710M | 80.00 |
| Additional serial cable per foot | 1 lb | 711M | 1.50 |
| TPC time \& date printer controller (RS232 input) | 5 lb | 265M | 714.00 |
| 12 V battery converter to operator printer w/12 V battery | 1 lb | 2415 | 172.00 |
| Service Parts |  |  | C |
| ERC-27 Ink ribbon cartridge, purple | 1 lb | 2223 | 20.20 |
| ERC-27 Ink ribbon cartridge, black | 1 lb | 7162 | 12.90 |
| Also used in the following printers: |  |  |  |
| Fairbanks 50-3930 |  |  |  |
| GSE Syntest |  |  |  |
| Toledo 8807 |  |  |  |
| TM-U295 Printer w/o power supply | 6 lb | 2222 | 480.00 |
| Power supply 100-240VAC to 24VDC 2A w/power cord | 2 lb | 2224M | 83.95 | w/power cord

## TM-U590 Ticket Printer - Epson

88 column dot matrix ticket printer with RS232 input. Has 4K byte data buffer. 9 pin shuttle impact dot matrix. Print speed 311 char/sec. Max paper thickness 0.3 mm .
Original and 4 copies. One color cartridge ribbon. Characters are $1.3 \times 3.1 \mathrm{~mm}$ and 1.6 x $3.1 \mathrm{~mm}, 12.5$ and 16.7 CPI. Order mating connector DB25P separately. 120VAC 50/60 $\mathrm{Hz}, 43$ watts, 9.9 "W x 10.5 "D $\times 7.3$ " H .

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| TM-U590 Ticket Printer w/power supply | 13 lb | 2546 | $\$ 945.00$ |
|  |  |  |  |
| Service Parts | 1 lb | 2729 | 19.70 |
| ERC-31 Ink ribbon cartridge, purple | 2 lb | 2224 M | 83.95 |
| Power supply 100-240VAC to 24VDC 2A |  |  |  |
| $\quad$ w/power cord |  |  |  |



TM-U590
Ticket printer

## Printers



# DATAMAX 

| I-4208 Printer - Datamax |  |  |  |
| :---: | :---: | :---: | :---: |
| Direct thermal, optional thermal transfer printer. Die-cast aluminum frame. Metal construction, clear side window to easily monitor media supply levels. Keys are: PAUSE, FEED, CANCEL, MENU, TEST. Ten alphanumeric fonts. Fonts expandable vertically. and horizontally up to $24 x$, fonts and graphics can be printed in four directions: $0,90,180$, 270 deg. .PCX, .BMP, .IMG graphic files supported. Data Programming Language(DPL). Dual locking printhead. Auto-resetting board fuses. Split ribbon supply hub. Improved fanfold capability. Color coded component cues. Flash memory. RS232C and Centronics Parallel ports included for host communication. 32 bit processor with 8MB of memory. Accelerated formatting and fast first label outputs. Resolutions up to 600 dpi. Print speeds up to twelve inches per second. Windows driver used for creating label formats using any Windows based program. Centronics Parallel port, IEEE 1284 compliant. RS232 at 2,400 to 38,400 BPS, optional Ethernet, USB and Twin/Coax. 120 VAC, $47 / 63 \mathrm{~Hz}$. $12.70^{\prime \prime} \mathrm{H} \times 12.62^{\prime \prime} \mathrm{W} \times 18.60$ " $D$ |  |  |  |
| Part Number | Weight | Stock | Price C |
| 1-4208 Printer | 45 lb | 6776 | \$ 1,784.00 |
| I-4208 Printer w/ Rewind | 45 lb | 6777 | 1,994.00 |
| I-4208 Printer w/ Rewind/Peel/Present | 45 lb | 6778 | 2,153.00 |
| Options |  |  | C |
| Datamax Peel/Present mechanism | 1 lb | 6779 | 245.00 |
| Service Parts |  |  | C |
| PHD20-2181-01 printhead I4206 + I4208 | 1 lb | 4139 | 496.00 |
|  | 1 lb | 5480 | 642.00 |



SSI-ICLASS-203Q

4206, 4208, 4212 Printer Parts - Datamax
Service parts only.

| Part Number | Weight | Stock | Price C |
| :--- | :---: | ---: | ---: |
| SSI-ICLASS-203Q Print head for 42xx | 1 lb | 4139 | $\$ 339.00$ |
| PHD20-2278-01 Datamax printhead | 1 lb | 5480 | 500.00 |
| DPR78-2902-01 display board | 1 lb | 3253 | 198.00 |
| DPR32-2674-01 cable front panel | 1 lb | 3254 | 43.00 |



TRANSCELL TECHNOLOGY, INC.

## MP-20 Printer

Direct thermal printer for roll paper 2" wide or labels $2^{\prime \prime} \times 2$ ". RS232 input 9600 baud power 9VDC, 2.8A. 4.72"W x 3.62"H x 6.77"L

| Part Number | Weight | Stock | Price C |
| :--- | :---: | ---: | ---: |
| MP-20 printer | 6 lb | 5482 | $\$ 262.50$ |
| Service parts |  |  |  |
| Roll paper, thermal, 2"W (10)pk | 2 lb | 5504 | 32.85 |
| Labels, thermal, 2" x 2" (10)pk | 2 lb | 5729 | 97.40 |



## OHAUS

## STP-103 Compact Thermal Printer

Light weight, compact thermal printer. Never needs a printer ribbon. Easy paper loading Paper near end sensor. AC power adapter included. $3.9^{\prime \prime W} \times 7.5^{\prime \prime} \mathrm{D} \times 3.5$ " H

| Part Number | Weight | Stock | Price A |
| :--- | ---: | ---: | ---: |
| STP-103 Compact thermal printer | 2 lb | 7419 MB | $\$ 622.00$ |
| Options |  |  | A |
| 80251931 Thermal paper | 1 lb | 7420 | 16.00 |
| 80252580 RS232 Cable \& adapter, Voy/Exp | 1 lb | 7421 | 155.00 |
| 80252581 RS232 Cable \& adapter, Disc/Pion/MB | 1 lb | 7422 | 155.00 |
|  |  |  |  |
| 80252583 RS232 Cable \& adapter, CD Troop | 1 lb | 7423 | 155.00 |
| 80252584 RS232 Cable \& adapter, CW/CKW/T | 1 lb | 7424 | 172.00 |
| 12120799 SF40A Roll Paper 2/pk | 1 lb | 5230 | 14.00 |
|  | 11 lb | 5232 | 44.00 |
| 12120798 SF40A Ink ribbon | 1 lb | 5244 | 155.00 |
| 12122603 SF40A Cable kit Disc/MB/Pion/Troop | 1 lb | 5253 | 142.00 |
| 80500552 SF40A Cable kit CW/CKW/T | 1 lb | 5287 | 21.00 |
|  |  |  |  |
| 12120762 SF40A Power supply |  |  |  |




## OHAUS

## SF40A - Impact Printer

Multi-language printing in 13 languages. Print speed is 1.2 lines per second. Status indicator, 40 characters per line, compatible with continuous label paper, perform zero and tare operations directly from printer. Date and time. Equipped with statistics and totalization modes that provide additional functionality that is of use to your weight determination and reporting process. RS232 with GLP/GMP data output can help meet traceability and compliance requirements. $12 \mathrm{VDC}, 2.5 \mathrm{~A} .5 .5 " \mathrm{~W} \times 8.7^{\prime \prime} \mathrm{D} \times 2.95$ " H .

| Part Number | Weight | Stock | Price A |
| :--- | ---: | ---: | ---: |
| SF40A | 2 lb | 1754 MB | $\$ 760.00$ |



## Printers



CBM-910II Dot-matrix printer - Citizen
Palm size dot-matrix printer. RS232 input 4800, 9600 baud, 8 bits, 2 stop bits. Paper end sensor. Bit image graphics. 24 column print width at 5 lines per second. 2 K bytes input buffer. 8 data bits. Dimensions, $4.2^{\prime \prime} \mathrm{H} \times 7.1$ "W x 3.5 "D. 115VAC $50 / 60 \mathrm{~Hz}$.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| CBM-910II Tape Printer w/power supply | 5 lb | 3417 | $\$ 350.00$ |
| Options |  |  | C |
| 4' custom interface cable | 1 lb | 710 M | 80.00 |
| Service Parts |  |  | C |
| C-0843-3 Ink ribbon cartridge, purple | 1 lb | 3782 | 18.30 |
| 1 ply roll paper 2.25" wide, case of (50) | 1 lb | 3783 | 78.10 |

## CBM-910II



## iDP-3550 Roll paper tape printer - Citizen

Service parts only for iDP-3550 printer.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Service Parts | 1 lb | 130 | 14.00 |
| IR-61RB ink ribbon cartridge for iDP-3535 | 50 lb | 131 | 139.00 |
| P3.001 roll paper 3" wide, case of 50 rolls |  |  |  |

iDP-3550

## iDP-562 Service parts only - Citizen

Service Parts only for iDP-562 printer.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Service Parts |  |  |  |
| 6N721-6 ink ribbon cartridge for iDP-562 | 1 lb | 690 | $\$ 16.90$ |
| P2.75-1 roll paper 2.75" wide | 1 lb | 691 | 3.50 |

## Printers

## TM-U220 Roll Paper Tape Printer - Epson

Dot matrix tape printer has friction feed drive and will print on paper 3" wide with max dia $31 / 4^{\prime \prime}$. Has 1 K data buffer. Includes separate 120 VAC power supply to provide the smallest printer size. RS232 input, 4800, 9600 baud rates only, bidirectional printing, 40 columns at 13.4 CPI, character size $1.2 \times 3.1 \mathrm{~mm}, 6$ lines $/ \mathrm{inch}, 3.5$ lines $/ \mathrm{sec}$. * Order DB25P input connector separately *. 120 VAC $50 / 60 \mathrm{~Hz}, 43$ watts, $5 \mathrm{lb}, 180 \times 248 \mathrm{x}$ $133 \mathrm{mmH}, 7^{\prime \prime} \times 9.8^{\prime \prime} \times 5.2^{\prime \prime} \mathrm{H}$.

| Part Number | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: |
| TM-U220 Tape Printer w/power supply | 10 lb | 2219 | \$ 385.00 |
| Options |  |  | C |
| DB-25P Input connector | 1 lb | 631M | 20.00 |
| 4 ft cable to indicator, assembled w/connector | 1 lb | 710M | 80.00 |
| Additional serial cable per foot |  | 711M | 1.50 |
| TPC time \& date printer controller (RS232 input) | 5 lb | 265M | 714.00 |
| 12 V battery converter to operator printer w/12 V battery | 2 lb | 2273 | 200.00 |
| Service Parts |  |  | C |
| ERC-30 Ink ribbon cartridge for TM-U220 and SRP-270 | 1 lb | 1839M | 17.10 |
| Power supply 100-240VAC to 24VDC 2A for TM-U220 w/power cord | 3 lb | 5709 | 87.20 |
| 1 ply roll paper $3^{\prime \prime} \times 3^{\prime \prime}$ dia | 1 lb | 2221 | 4.60 |
| 2 ply roll paper $3^{\prime \prime} \times 3^{\prime \prime}$ dia | 1 lb | 2228 | 6.80 |
| Service Parts for old Model TM-U200 |  |  | C |
| Power supply 100-240VAC to 24VDC 2A for TM-U200 w/power cord | 3 lb | 2224M | 83.95 |
| Service Parts for old Model TRP265 |  |  | C |
| ERC-23 Ink ribbon cartridge for TRP-265 | 1 lb | 2220 | 16.90 |

## SRP-270 Roll paper tape printer - Samsung

Dot matrix tape printer has friction feed drive and will print on paper $3^{\prime \prime}$ wide with max dia 3-1/4". Has 6K data buffer. Includes separate 120 VAC power supply to provide the smallest printer size. RS232 input, 7 or 8 data bits, $2400,4800,9,600,19,200$ baud rates only, bidirectional printing, 40 columns at 13.4 CPI , character size $1.2 \times 3.1 \mathrm{~mm}, 3.2$ lines/sec. Order DB25P input connector separately. 120 VAC $50 / 60 \mathrm{~Hz}, 25$ watts, 177 W x $277 \mathrm{D} \times 141 \mathrm{mmH}$.

| Part Number | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: |
| SRP-270A Tape Printer w/power supply | 10 lb | 3208 | \$ 305.00 |
| SRP-270C Tape printer w/power supply \& auto-cutter | 6 lb | 3712 | 349.00 |
| SRP-270D Tape printer w/ps, take-up spool \& auto-cutter | 7 lb | 3713 | 371.00 |
| Options |  |  | C |
| TPC time \& date printer controller (RS232 input) | 5 lb | 265M | 714.00 |
| 4 ft cable to indicator, assembled w/connector | 1 lb | 710M | 80.00 |
| Additional serial cable per foot |  | 711M | 1.50 |
| Service Parts |  |  | C |
| ERC-30 Ink ribbon cartridge for TM-U220 and SRP-270 | 1 lb | 1839M | 28.30 |
| Use roll paper for Model TM-U200 |  |  |  |
| Service Parts (OId SPR-200) |  |  | C |
| Ink cartridge for SRP-200 printer | 1 lb | 4039 | 11.00 |
| AC-1000A Power supply for SRP-200 series | 3 lb | 1707 | 30.00 |

## Printers



A\&D WEIGHING DIVISION

## AD-1192 Compact Printer

Compact, palm sized, light weight. High speed printing. Paper near end detection function. Balance and scale data. Weighing slips. Dot matrix printing method. Uses standard 2-1/4" paper. 1.8 lines/second print speed. 2.4 mm high characters. Unidirectional printing. RS232C interface. Low power consumption. Wall mountable. Power cord included. Connecting cables not included. 4.2"W x 7.5"D x 3.5 " H .

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-1192 Printer | 2 lb | 4833 | $\$ 476.00$ |
|  |  |  | A |
| Service Parts | 1 lb | 1596 M | 13.00 |
| WD-PP137 Roll paper pack of 5 | 3 lb | 4834 | 31.00 |
| AD-1192-1 Ribbon | 1 lb | 4835 | 64.00 |
| AD-1192-2 Power cord |  |  |  |
|  | 1 lb | 221 | 42.00 |
| KO:1131 RS232 Cable, 25 pin to 25 pin | 1 lb | 4836 | 47.00 |
| KO: WW9/25 RS232 Interface cable | 1 lb | 4837 | 45.00 |



A\&D WEIGHING DIVISION

## AD-8127 Multi Function Printer

The AD-8127 multi printer is compatible with and A\&D electronic balance, scale, counting, moisture analyzer and/or weighing indicator. Use of dot matrix allows for records to be stored for I ong periods of time. Can be easily transported due to its light weight and compact size. With RS232 or current loop interface inputs. Built in clock display. The liquid crystal display provides easy conditions confirmation and settings of the printer. Weighing data can be printed without touching the balance by pressing the key switch.
6.85 "W x $5.55^{\prime \prime} \mathrm{D} \times 3.42^{\prime \prime} \mathrm{H}$

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-8127 multi function printer | 3 lb | 202 | $\$ 850.00$ |
| AX-ERC-22B ink ribbon | 1 lb | 203 | 150.00 |



## AD-8115 Ticket Printer - Service Supplies

Service Parts for Model AD-8115 Ticket Printer

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| ERC-03 Ink cartridge * <br> * Also | 1 lb | 42 | $\$ 15.40$ |

* Also used in Sterling 1100


A\&D WEIGHING DIVISION

## A \& D Printer - Service Supplies

| Service Parts for Model AD-8118/AD-1191 Printer |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Part Number | Weight | Stock | Price C |
| ET:ERC-P09 ink ribbon | 1 lb | 71 | $\$ 55.70$ |

AND
A\&D WEIGHING DIVISION

## AD-8121 Multi-Function printer - A\&D

This printer is built for A\&D Electronic Balances, Counting Balances, Platform Scales \& Weighing Indicators(except the AD-4321). It prints charts and offers a full range of statistical functions on either AC or battery power. Serial impact dot matrix printing for superior readability. $5 \times 7$ dot, $0.1 " \mathrm{H}, 16$ characters per line, 1 line/second. Uses 45 mm wide 65 mm dia 50 m long roll of printer paper. A full range of statistical functions: Weight data, Total weight data, Counting data, Total counting data, Number of operations, Standard deviation, Chart, Year, Month, Date, Hour, Minute and Second. Interval printing with built-in Timer/Clock function: $5 \mathrm{~s}, 10 \mathrm{~s}, 30 \mathrm{~s}, 1 \mathrm{~m}, 5 \mathrm{~m}, 10 \mathrm{~m}, 30 \mathrm{~m}$. Charting selectable to show change in weight, interval time, Start time and Stop time. Battery operation permits use anywhere. Includes AC adapter. Desk top mounting for convenience. Input is RS232 or 20 ma current loop serial at 600 or 2400 baud. Includes RS232 cable, roll paper, (4) alkaline batteries, manual.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AD-8121 Multi-Function Printer | 5 lb | 1974 M | $\$ 891.00$ |
| Options |  |  |  |
| KO:1080-100 Current loop cable | 1 lb | 1989 | 60.00 |
| Service Parts |  |  |  |
| WP:PP143 Roll paper, 2-5/8"dia $\times 1-3 / 4 " w i d e, ~$ | 2 lb | 1990 | 13.00 |
| pack of 5 for AD-8121 |  |  |  |
| ET:ERC-P05 Ink ribbon for AD-8121 | 1 lb | 1991 | 20.00 |
| TB:174 Adapter 120VAC-DC | 1 lb | 4611 | 43.00 |

## 186 Printer - Okidata

Versatile dot matrix printer will handle loose pages, roll paper or fanfold pin feed forms. Sprocket pins are spaced 9" apart. Multiple copies with adjustable head. Centronics interface. IBM compatible, Optional RS 232C with adjustable baud rate will support X-on/X-off.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 186 Okidata Printer | 13 lb | 72 | $\$ 488.00$ |
| RS 232C Interface | 1 lb | 1637 | 151.00 |
| Service Parts |  |  |  |
| Ink cartridge | 1 lb | 788 | 18.80 |
| Print head for 182 | 1 lb | 1638 | 175.00 |


| 320 Printer - Okidata |  |  |  |
| :--- | ---: | ---: | ---: |
| Heavy duty high speed dot matrix printer. | Optional RS 232C. |  |  |
| Part Number | Weight | Stock | Price C |
| 320 Okidata turbo dot matrix printer | 10 lb | 1567 | $\$ 615.00$ |
| Options |  |  |  |
| RS 232C Interface | 1 lb | 1568 | 135.00 |



## Printers



99003376 Ribbon


| 250, 260 \& 1200 Printers - Control Logic |  |  |  |
| :--- | ---: | ---: | ---: |
| Service parts only |  |  |  |
| Part Number | Weight | Stock | Price C |
| Service Parts for Model 250 Ticket Printer |  |  |  |
| R05-101-03 ink ribbon, purple | 1 lb | 1613 M | $\$ 14.00$ |
| Print/Tare switch assy w/connector | 1 lb | 1628 | 25.00 |
| Switch alone, solder tabs | 1 lb | 1629 | 9.00 |
| Service Parts for Model 260 Tape Printer |  |  |  |
| S-311 ink ribbon, black, 1 Red | 1 lb | 1631 | 12.10 |
| Print/Tare switch alone, solder tabs | 1 lb | 1629 | 9.00 |
| Roll paper tape, 3" wide, 1 ply, 3" diameter, case of (50) | 1 lb | 1633 | 97.70 |
|  |  |  |  |
| Service Parts for Model 1200 Ticket Printer | 1 lb | 1613 M | 14.00 |

## R05-101-03 Ribbon



## 694TM Ribbon

| Matrix II printers - Fargo |  |  |  |
| :---: | :---: | :---: | :---: |
| Service parts only. |  |  |  |
| Part Number Description | Weight | Stock | Price C |
| 694TM Ink ribbon Matrix II ticket | 1 lb | 713 | \$ 10.00 |
| Also used in the following printers: |  |  |  |
| Eaton 7000,7040 Fairbanks 152 |  |  |  |
| Electroscale 330, 331 Toledo 8805 |  |  |  |
| C-0864 Ink ribbon SP-2000, 2000 ticket | 1 lb | 1615 | 52.10 |
| Also used in the following printers: |  |  |  |
| Sterling 1500 |  |  |  |
| Weightronix WP-240 |  |  |  |

## 543 Tape Printer - Hecon

| Service parts only for 543 Hecon tape printer. |  |  |  |
| :--- | ---: | ---: | ---: |
| Part Number | Weight | Stock | Price $\mathbf{C}$ |
| Service Parts |  |  |  |
| 99003376 ink ribbon, black | 1 lb | 706 | $\$ 12.10$ |

## C-0864 Ribbon

## Ticket Printer - Toledo

Ink cartridge ribbon 115534300A for Toledo Printer Model 8806
$7 / 16$ " x 12 yds purple matrix.

New style with plastic ribbon guides

| C-0692-5 (257) | Ink ribbon | 1 lb | 704 |
| :--- | :--- | :--- | :--- |

In an emergency, the new style ink ribbon cartridge can be used with the old style Toledo 8806 printer. The new style plastic guides can be removed by snapping them off. The new style ink ribbon without the guides is the same as the old style EC867 ink ribbon and will work with the old style Toledo 8806 printer.

Ink ribbons and cartridges for other makes and models of printers are available.


| $\mathbf{1 5 0 / 1 5 2}$ Ticket printer Serial input - Industrial Data Systems |  |  |  |
| :--- | :---: | ---: | ---: |
| Service parts only |  |  |  |
| Part Number | Weight | Stock | Price C |
| Service Parts | 1 lb | 1613 M | $\$ 20.20$ |

Ticket Printer - Toledo
Ink cartridge ribbon for Toledo Printer Model 8857
$7 / 16 " \times 12$ yds purple matrix.

| Part Number | Description | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| $229 B$ | Ink ribbon, black | 1 lb | 703 | $\$ 28.30$ |




## SJC-4 Card only with Exitation Trim

Circuit card is arranged for parallel summing of 2 to 4 load cells. Ideal for making corner sensitivity adjustments for scales. Convenient, lugless connections for load cell and readout. Two pots provided for each load cell to minimize interaction between span trimming and zero shift. Separate terminal block for each cable. Internal connection of sense to excitation leads. Common shield connection provided for each cable. Low resistance ( 10 ohm ), 20 turn pots for good resolution.
Size 3.5 "W x $0.5^{\prime \prime} \mathrm{H} \times 4.5^{\prime \prime} \mathrm{L}$

| Part Number | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| SJC-4 Summing card only | 1 lb | 461 | $\$ 176.00$ |

## J-box with Excitation trim - UniBridge

Compact, stainless steel junction box with summing card. Box is $9.5^{\prime \prime \mathrm{L}} \times 2.5^{\prime \prime \mathrm{W}} \times 2.5^{\prime \prime} \mathrm{H}$. Card is $6.5^{\prime \prime} \mathrm{L} \times 1.5^{\prime \mathrm{W}} \times 1.25^{\prime \prime} \mathrm{H}$. Up to four cells will be summed. Two cable strain reliefs.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| J-box w/summing card UniBridge | 4 lb | 998 | $\$ 660.00$ |
| J-box only w/o card UniBridge (1.8 lb) | 3 lb | 997 | 460.00 |
| Summing card only (4 cell) UniBridge | 1 lb | 996 | 200.00 |



TJB61 9.5"L x 4.375"W x $1.5^{\prime \prime} \mathrm{H}$


TJB62 Summing box w/ card
$7.75^{\prime \prime} \mathrm{L} \times 2 . \mathrm{S}^{2} \mathrm{~W} \times 1.75^{\prime \prime} \mathrm{H}-1 \mathrm{lb} \quad 3578-177.90$
SS-Enclosure only for TJB62
Circuit card only for TJB61/TJB62

## TJB61 Summing box with Card - Totalcomp

Stainless steel enclosure. The 61 and 62 Summing Card is $1-3 / 8^{\prime \prime} \times 5-3 / 4^{\prime \prime}$. It has four 5 position terminal strips for load cell inputs and one 7 position terminal strip with internally jumped sense terminals for output to the instrument. Terminal strips are screw operated cage clamp design or optional lever type design.
Trimming of signal output is accomplished with four 25 turn trim pots with an operating temperature range of -55 to +125 degrees C. The board will sum 2 to 4 load cells and can be mounted with the four $11 / 16^{\prime \prime}$ mounting holes provided with a spacing of $2-1 / 2 \times 3-$ $1 / 2^{\prime \prime}$ on center.

| Part Number | Size W | Weight | Stock | Price C |
| :---: | :---: | :---: | :---: | :---: |
| TJB61 Summing box w/ card | 9.5"L x 4.375"W x 1.5"H | 1 lb | 4593 | \$ 177.90 |
| SS-Enclosure only for TJB61 | 9.5 L $\times 4.375$ "W $\times 1.5$ " H | 1 lb | 4592 | 135.72 |
| TJB62 Summing box w/ card | 7.75"L $\times 2.5$ "W $\times 1.75$ " H | 1 lb | 3578 | 177.90 |
| SS-Enclosure only for TJB62 | 7.75 "L x 2.5 "W $\times 1.75$ " H | 1 lb | 3579 | 135.72 |
| Circuit card only for TJB61/TJB62 | 5.75 " $\mathrm{x} \times 1.375$ "W $\times 0.5$ " H | H 1 lb | 4591 | 63.36 |

## Signal Trim Series 1200 Summing Junction Box

Stainless steel Nema 4 enclosure contains printed circuit card specifically designed to adjust each load cell span without effecting zero. One multiturn potentiometer per load cell shunts the output and two series output isolation resistors limit zero interaction.
Terminal blocks are lever type that simplify wire connection. Strip the wire, push the lever, insert the wire and release the lever. Accepts wire size 26 to 14 AWG. One terminal block for each load cell and one terminal block for the indicator. Expansion terminal block is on models 1250, 1251 and 1260 for expansion to another summing box. Span adjustments is $3 \%$ for 350 ohm load cells: $5 \%$ for 700 ohm load cells. Corrosion proof nylon strain reliefs are provided for cable $0.197^{\prime \prime}-0.354^{\prime \prime}$ dia. Enclosure size is $6-1 / 2^{\prime \prime} \times 8$ $3 / 8^{\prime \prime} \times 1-3 / 4^{\prime \prime} \mathrm{H}$. Circuit card size is $4-7 / 8^{\prime \prime} \times 6-3 / 4^{\prime \prime} \times 5 / 8^{\prime \prime} \mathrm{H}$.


1250 card only


1250-4-SS

## Section Adjustment

1251, 1260, 1280, 12100 circuit cards have section adjust pots for ease in scale calibration. First the two cells in each section are matched, then the sections are matched with the additional section pots. Both cells in a section should have load cells. If one load cell is not wired to a section, resistors should be connected that have an equivalent resistance.

|  | Part Number | \# Cells | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stainless Steel NEMA 4 enclosure w/summing card |  |  |  |  |
| Oct | 1250-4-SS | 2 to 4 | 4 lb | 1007 | \$ 428.00 |
|  | 1251-4-SS | 2 to 4 | 4 lb | 1051 | 455.00 |
|  | 1260-6-SS | 5 to 6 | 4 lb | 1008 | 509.00 |
|  | 1280-8-SS | 7 to 8 | 5 lb | 1009 | 536.00 |
|  | 12100-10-SS | 9 to 10 | 5 lb | 2955 | 589.00 |
|  | Summing card only |  |  |  |  |
|  | 1250 Card only | 2 to 4 | 1 lb | 620 | 201.00 |
|  | 1251 Card only | 2 to 4 | 1 lb | 1049 | 227.00 |
|  | 1260 Card only | 5 to 6 | 1 lb | 622 | 254.00 |
|  | 1280 Card only | 7 to 8 | 1 lb | 624 | 281.00 |
|  | 12100 Card only | 9 to 10 | 1 lb | 667 | 353.00 |
|  | Stainless Steel NEMA 4 enclosure w/summing card w/surge protection |  |  |  |  |
|  | 1250-4-SS-SP | 2 to 4 | 4 lb | 4229 | 550.00 |
|  | 1251-4-SS-SP | 2 to 4 | 4 lb | 4230 | 577.00 |
|  | 1260-6-SS-SP | 5 to 6 | 5 lb | 4231 | 631.00 |
|  | 1280-8-SS-SP | 7 to 8 | 5 lb | 4232 | 658.00 |
|  | 12100-10-SS-SP | 9 to 10 | 5 lb | 4233 | 711.00 |
|  | Summing card only w/surge protection |  |  |  |  |
|  | 1250-SP Card only | 2 to 4 | 1 lb | 4234 | 322.00 |
|  | 1251-SP Card only | 2 to 4 | 1 lb | 4235 | 349.00 |
|  | 1260-SP Card only | 5 to 6 | 1 lb | 4236 | 376.00 |
|  | 1280-SP Card only | 7 to 8 | 1 lb | 4237 | 403.00 |
|  | 12100-SP Card only | 9 to 10 | 1 lb | 4238 | 475.00 |
|  | Enclosure without card |  |  |  |  |
|  | 1250B/1251B Enclosu | 5) strain reliefs | 4 lb | 1310 | 254.00 |
|  | 1260B Enclosure only | n reliefs | 4 lb | 1313 | 294.00 |
|  | 1280B Enclosure only | n reliefs | 4 lb | 1314 | 321.00 |
| $\checkmark$ | 12100B Enclosure on | rain reliefs | 5 lb | 2956 | 353.00 |



12100-10-SS

## Surge Protection spare parts

For use with 1250-SP Surge protection summing cards and boxes.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| GT-B675L Lumex tube surge protector | 1 lb | 575 | $\$ 10.70$ |

GT-B675L
Lumex Tube

## J Box



E250 card only


E260 card only


E280 card only


E2100 card only


E250-4-SS


E260-6-SS


E280-8-SS


[^1]
## E200 Signal Trim Economy Summing Junction Box

For the application that is not extreme with high pressure washdown, and does not require a rugged box that has large cables and is not submerged in dirt, mud and water. This series of summing junction box will perform adequately at a reasonable price. NEMA 12 stainless steel enclosure contains a component card designed to adjust each load cell span without effecting zero. One potentionmeter per load cell shunts the output and two series output isolation resistors limit zero interaction. Section adjustment on E251, E260, E280, E2100 have potentiometers for ease in scale calibration. First the two cells in each section are matched and then the sections are matched with the additional section pots. Terminal blocks are screw type. One terminal block for each load cells and one for the indicator. Nylon strain reliefs for each load cell and indicator.
Enclosure size $6-1 / 2^{\prime \prime} \times 8-3 / 8^{\prime \prime} \times 1-3 / 4 " H$. Card size $4-7 / 8^{\prime \prime} \times 6-3 / 4 " \times 5 / 8^{\prime \prime} H$

| Part Number | \# Cells | Weight | Stock | Price D |
| :---: | :---: | :---: | :---: | :---: |
| Stainless Steel NEMA 4 enclosure w/summing card |  |  |  |  |
| E250-4-SS | 2 to 4 | 4 lb | 7814 | \$ 290.40 |
| E251-4-SS | 2 to 4 | 4 lb | 7815 | 290.40 |
| E260-6-SS | 5 to 6 | 4 lb | 7816 | 341.00 |
| E280-8-SS | 7 to 8 | 5 lb | 7817 | 369.60 |
| E2100-10-SS | 9 to 10 | 5 lb | 7818 | 466.40 |
| Summing card only |  |  |  |  |
| E250 Card only | 2 to 4 | 1 lb | 7819 | 147.40 |
| E251 Card only | 2 to 4 | 1 lb | 7820 | 147.40 |
| E260 Card only | 5 to 6 | 1 lb | 7821 | 187.00 |
| E280 Card only | 7 to 8 | 1 lb | 7822 | 213.40 |
| E2100 Card only | 9 to 10 | 1 lb | 7823 | 286.00 |


| Stainless Steel | ure w/s | ge pr |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 to 4 | 4 lb | 7824 | 343.20 |
| E260-6-SS-SP | 5 to 6 | 5 lb | 7825 | 378.40 |
| E280-8-SS-SP | 7 to 8 | 5 lb | 7826 | 404.80 |
| E2100-10-SS-SP | 9 to 10 | 5 lb | 7827 | 502.7 |


| Summing card only w/surge protection |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| E251-SP Card only | 2 to 4 | 1 lb | 7828 | 187.00 |
| E260-SP Card only | 5 to 6 | 1 lb | 7829 | 224.40 |
|  |  | 7 to 8 | 1 lb | 7830 |
| E280-SP Card only | 9 to 10 | 1 lb | 7831 | 253.00 |
| E2100-SP Card only |  |  |  |  |
|  |  | 4 lb | 7832 | 158.40 |
| Enclosure without card | 4 lb | 7833 | 158.40 |  |
| E250B/1251B Enclosure only w/(5) strain reliefs | 4 lb | 7834 | 163.90 |  |
| E260B Enclosure only w/(7) strain reliefs | 5 lb | 7835 | 169.40 |  |

## CBS-40 Compact Summing Junction Box

Compact junction box with Signal trim for 4 load cells. Signal trim has one multiturn potentiometer per load cell that shunts the output and two series output isolation resistors that limit zero interaction. Optional Excitation trim is available. Excitation trim has one potentiometer per load cell in the excitation circuit for adjusting the load cell input voltage. Terminal blocks are lever type that simplify wire connection. Strip the wire, push the lever, insert the wire and release the lever. Accepts wire size 26 to 14 AWG. Five nylon strain reliefs are included for load cells \& instrument cables. Two screws that hold the cover have drilled heads for lead and wire sealing. Stainless steel NEMA 4 box and gasketed lid for corrosion resistance. The small size of this box makes it a good replacement for low profile warehouse scales. In many cases the box will fit under the platform.
7 " x $4.625^{\prime \prime} \times 1.75$ "h, 2 lb .

| Part Number | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| CSB-40 w/Signal trim | 3 lb | 1787 | $\$ 244.00$ |
| CSB-40E w/Excitation trim | 3 lb | 2434 | 244.00 |
|  |  |  |  |
| CSB Summing card only, signal trim | 1 lb | 1584 | 148.00 |
| CSB-E Summing card only, Excitation trim | 1 lb | 285 | 148.00 |

## Nikkei Summing Junction Box

Compact junction box with Signal trim for 4 load cells, plus external ground connectivety bolt. Signal trim has one multiturn potentiometer per load cell that shunts the output and two series output isolation resistors that limit zero interaction. Optional Excitation trim is available. Excitation trim has one potentiometer per load cell in the excitation circuit for adjusting the load cell input voltage. Terminal blocks are lever type that simplify wire connection. Strip the wire, push the lever, insert the wire and release the lever. Accepts wire size 26 to 14 AWG. Five nylon strain reliefs are included for load cells \& instrument cables. Two screws that hold the cover have drilled heads for lead and wire sealing. Stainless steel NEMA 4 box and gasketed lid for corrosion resistance. The small size of this box makes it a good replacement for low profile warehouse scales. In many cases the box will fit under the platform.
7 " x $4.625^{\prime \prime} \times 1.75 " \mathrm{~h}, 2 \mathrm{lb}$.

| Part Number | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| NJB-4-SS w/ signal trim | 2 lb | 4839 | $\$ 215.00$ |
| NJBE-4-SS w/ exitation trim | 2 lb | 4840 | 215.00 |


| Anyload Summing Box 12 cell |  |  |  |
| :---: | :---: | :---: | :---: |
| Stainless steel, 2-12 cell, excitation trim, section trim, $7.8^{\prime \prime} \times 6.9$ " $\times 1.8^{\prime \prime} \mathrm{h}, 3 \mathrm{lb}$. |  |  |  |
| Part Number | Weight | Stock | Price C |
| J12ES w/ signal trim, section trim | 2 lb | 1751 | \$ 325.00 |



CSB Summing card only


NJB-4-SS


NJB-4-SS
Summing Box w/ Internal view


J12ES
Summing box

## J Box



## Coti Glabal Sensars <br> MANUFACTURING <br> Weighing Products Worldwide

## SS-334/45 Stainless Steel Summing Junction Box

The load cell summing junction boxes are intrinsically safe for Class I, Division 1, Groups A-D and intrinsically safe for Class I, Zone 0 , Group IIC and intrinsically safe for Class I, Division 1, Groups C and D and intrinsically safe for Class I, Zone 0, Group IIB

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| SS-34AS | 2 lb | 8088 | $\$ 215.00$ |
| SS-34AE | 2 lb | 8089 | 215.00 |
| SS-45AS | 2 lb | 8090 | 305.00 |
| SS-45AE | 2 lb | 8091 | 305.00 |
|  |  |  |  |
| 34 is standard |  |  |  |
| 45 has electrical surge protection |  |  |  |
| S= signal trim |  |  |  |
| E= Excitation trim |  |  |  |



TRANSCELL TECHNOLOGY, INC.


## JB-FI Junction Box - Transcell

Load cell summing junction box for up to 4 load cells. ABS inclosure, Signal trim.
6" x 4" x 2".

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| JB-FI W/PG7 | 2 lb | 6647 | $\$ 128.00$ |

## Summing Card for floor scales

Replacement part for use in floor scales. Includes velcro mounting tape for attaching to junction box cover. Excitation trim with one potentiometer for each load cell. Screw terminals for secure wire connections. Dimensions 1 " $\times 4.5$ " x 0.75 "

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| 10500 Summing Card excitation trim | 1 lb | 682 | $\$ 91.00$ |



## IDS950 Stainless Steel Compact Summing Junction Box

Stainless steel summing box with signal trim card inside replacement summing box for LP7620 floor scale suming box. Box is rubber gasketed for corrosion resistance. Summing Junction Box size: 6 " $\mathrm{L} \times 4.5^{\prime \prime W} \times 1.375^{\prime \prime} \mathrm{H}$ with screw terminals. $4 \times 10$ turn potentionmeters for load cell adjustments. 4 slotted mounting holes.

| Part Number | Weight | Stock | Price $\mathbf{D}$ |
| :--- | ---: | ---: | ---: |
| IDS950-4 Summing Junction Box | 1 lb | 3942 | $\$ 100.00$ |



IDS950-4 Signal Trim Card


## J Box



GS-JB-4-FRP


GS-SC card only


DS-JB-4-SS

## GS-JB compact summing junction box - General Sensor

Extremely small junction boxes with Signal trim for 4 load cells. One multiturn potentiometer per load cell that shunts the output and two series output isolation resistors that limit zero interaction. Screw terminals simplify wire connection. Accepts wire size 26 to 14 AWG. Five nylon strain reliefs are included for load cells \& instrument cables. Both boxes are NEMA 4X and gasketed for corrosion resistance. The GS-JB-4-SS is made of stainless steel and the GS-JB-4-FRP is made of fiberglass reinforced plastic. The small size of these boxes make them a good replacement for low profile warehouse scales. In many cases the box will fit under the platform. $7^{\prime \prime} \times 4.625^{\prime \prime} \times 1.75^{\prime \prime} \mathrm{h}$.

| Part Number | Weight | Stock | Price D |
| :--- | :---: | ---: | ---: |
| Signal trim |  |  |  |
| GS-JB-4-SS stainless steel | 1 lb | 4013 | $\$ 244.00$ |
| GS-JB-4-FRP fiberglass reinforced plastic | 1 lb | 4014 | 174.00 |
|  |  |  |  |
| Excitation trim | 3 lb | 4790 | 244.00 |
| GS-JB-4-E-SS stainless steel | 1 lb | 4791 | 174.00 |
| GS-JB-4-E-FRP fiberglass reinforced plastic |  |  |  |
| Summing card only | 1 lb | 4015 | 93.00 |
| GS-SC Sum card only, 4 channel, signal trim | 1 lb | 635 | 93.00 |
| GS-SC-E Sum card only, 4 channel, excitation trim |  |  |  |
|  | 1 lb | 4047 | 201.00 |

## DS-JB compact summing junction box - Diamond

Extremely small stainless steel junction boxes with Signal trim for 4 load cells. One multiturn potentiometer per load cell that shunts the output and two series output isolation resistors that limit zero interaction. Screw terminals simplify wire connection. Accepts wire size 26 to 14 AWG. Five nylon strain reliefs are included for load cells \& instrument cables. The small size of these boxes make them a good replacement for low profile warehouse scales. In many cases the box will fit under the platform. $7^{\prime \prime} \times 5.5$ " $\times 1.25$ " h .

| Part Number | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| Signal trim | 3 lb | 32 MB | $\$ 100.00$ |



## JB4SS Rice Lake summing box

Stainless steel, 4 channel, signed trim with expansion, W/PG7 cord grips for laod cells. Nema 4x, FM approved. $5.75^{\prime \prime} \times 4.00$ " $\times 1.60$ "h.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| Signal trim | 2 lb | 530 | $\$ 316.00$ |

[^2]
## Fairbanks

Smart sectional controller. Multiplex and digitizing two analog load cells onto a multi-drop RS-485 bus. Each cell is provided with 6.3 VDC excitation voltage. the ouput is connected to its own load cell input circuit that contains a separate gain stage and analog filter circuits. The filtered outputs are multiplexed into the input of a 24 bit A/D converter that is monitored by a micro-processor, which controls the multiplex. applies additional signal processing such as digital filtering. The processed load cell signals are then available on the RS-485 bus via a special protocol. .

| Part Number | Weight | Stock | Price D |
| :--- | ---: | ---: | ---: |
| 26168 Smart Sectional Controller | 4 lb | 4112 | $\$ 593.00$ |



Smart Sectional Controller

## J-Box

## Strain reliefs

Used to connect load cell cable to summing junction boxes or instrument enclosure. 1/2" hub size for $7 / 8$ " dia hole. Aluminum with rubber cable bushing, "O" ring gasket and locknut. Connector is installed with "O" ring gasket on outside of box for watertight fit. Lock nut holds from inside. Knurled collar compresses bushing around cable for watertight fit and relief of strain on cable inside box.

| Part Number | Cable Diameter | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| CG-1250 | $0.125^{\prime \prime}-0.187^{\prime \prime}$ | 1 lb | 625 | $\$ 9.10$ |
| CG-1850 | $0.187^{\prime \prime}-0.312^{\prime \prime}$ | 1 lb | 626 | 9.10 |
| CG-3150 | $0.312^{\prime \prime}-0.437^{\prime \prime}$ | 1 lb | 627 | 9.10 |



CG-1250

## Corrosion proof strain reliefs

Nylon strain relief with neoprene gland resists salt water, weak acids, gasoline, alcohol, oil, grease and common solvents. 1/2" hub size for $7 / 8$ " dia. hole. Sealing washer and lock nut.

| Part Number | Cable Diameter | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: | ---: |
| 3231 | $0.170^{\prime \prime}-0.470^{\prime \prime}$ | 1 lb | 1010 | $\$ 7.10$ |
| Service Parts |  |  |  |  |
| Sealing Washer 1/2" |  | 1 lb | 1170 | 1.50 |
| Lock Nut $1 / 2^{\prime \prime}$ electrical | 1 lb | 1171 | 0.50 |  |



## Hole plug

Seals unused $7 / 8^{\prime \prime}$ dia. holes in summing junction box or instrument enclosure. Cover disk is gasketed with internal washer and wing nut for tight seal.

| Part Number | Weight | Stock | Price C |
| :--- | ---: | ---: | ---: |
| AS050 epoxy painted steel | 1 lb | 194 | $\$ 12.20$ |
| AS050SS stainless steel | 1 lb | 414 | 23.00 |


| Conduit adapter |  |  |  |
| :--- | ---: | ---: | ---: |
| Mount on the cable fitting on Sensortronics Tank Mount and Truck load cells. The external <br> $1 / 2 "$ NPT will connect to standard conduit and adapters. | Weight | Stock | Price C |
| Part Number | 1 lb | 348 | $\$ 22.00$ |

## International Wire Transfers

| Beneficiary Bank | Wells Fargo |
| :--- | :--- |
| Beneficiary Bank Address | 1266 Market St San Francisco CA 94102 |
| Beneficiary Bank Swift \# | WFBIUS6WFFX |
|  |  |
| Beneficiary Name | ConnectOne Bank |
| Beneficiary Address | 301 Sylvan Ave Englewood Cliffs NJ 07632 |
| Beneficiary Customer \# | 4124911215 |
|  |  |
| To Further Credit |  |
| Customer Name | Totalcomp Inc |
| Customer Address | 99 Reagent Ln Fair Lawn, NJ 07410 |
| Cust Account \# | xxxxxxxxxxx |
|  |  |
| * Please contact us for Customer Account \#. |  |

## DOMESTIC ACH (Automated Clearing House)

| Bank Name | ConnectOne Bank |
| :---: | :---: |
| Bank Address | 301 Sylvan Ave Englewood Cliffs NJ 07632 |
| Bank ABA \# | 021213944 |
| Beneficiary Name | Totalcomp Inc |
| Beneficiary Address | 99 Reagent Ln Fair Lawn, NJ 07410 |
| Beneficiary Account \# | x $x$ x $x \times x \times x \times x$ x |
| * Please contact us for Customer Account \#. |  |
| Tarjetas d | rédito |

El despacho se hará el mismo día
Solo aceptamos VISA y MASTERCARD

Nota: Proveer siempre el número de cuenta y la Fecha de Vencimiento.
Estimado cliente tener en cuenta que: Mastercard y Visa cobran el 3.15\% mas $\$ 1.15$ por transacción. Estos costos serán agregados a su factura.

## Con Cheque

Cheque de banco de USA o Money Order.

Despachamos cuando el cheque arribe a nuestras oficinas. Por ejemplo si lo envián por servicio courier como DHL o FedEx, el cheque llegaría en 2 ó 3 días a Totalcomp.

Cheque a nombre de: Totalcomp Inc
Enviarol a: Totalcomp Inc.
99 Reagent Ln
Fair Lawn NJ 07410
USA

## Cheque por fax/email

Agilizan sus ordenes de compras
En Totalcomp ahora tenemos el nuevo sistema de cheques por fax que permitira el despacho de los productos el mismo día. Tambien agiliza los pagos de facturas vencidas, y ahorra gastos de transferencia y de courier cuando envian un cheque a nuestras oficinas.
¿Como trabaja?
Ustedes consiguen un cheque de un banco local con nexos bancarios Norteamericanos en Dólares Americanos y lo envían vía fax a Totalcomp, con una autorización firmada por el dueño de la cuenta que diga lo siguiente:

Este cheque autoriza cargar a nuestra cuenta la suma de \$ $\qquad$
Una vez que lo tengamos tomaremos el número de cuenta del cheque, el número de tránsito y el número MICR que identifica el banco original. Luego imprimimos un cheque con esos datos y lo depositamos normalmente. Esta transaccion es completamente legal y es permitida en los Estados Unidos.

Una vez que tengamos el cheque por fax podremos despachar el mismo día. Ustedes se ahorran los gastos de DHL, FEDEX, tranferencia, o cargos del $2.8 \%$ cuando pagan con Visa o MasterCard.

## Terms

Your choice of payment.

1. Check or money order with order.
2. Net 30 days for approved credit customers. If you desire a Totalcomp charge account, simply request a credit application with your next order (or at any time) and we will ship your order when your credit is approved
3. C.O.D. will be delivered by UPS or Federal Express. They will collect total charges which will include merchandise, freight and handling.

Prices are FOB Fair Lawn, New Jersey or FOB Factory and are subject to change without notice. Orders will be filled with prices in effect at the date of shipment.
Minimum order is $\$ 20.00$ excluding shipping charges.

## Stock

Your components will be shipped within 24 hours from when we receive your order.
We normally carry an ample supply of every item on our stock shelf. It is very infrequent that our supply is depleted to zero due to unusual requests from our other customers.

## Shipping

| U.P.S. | .Your order will be shipped U.P.S. whenever possible, unless you request a different method of shipment. Maximum 150 lbs per carton. |
| :---: | :---: |
| U.P.S. 2nd day air | .Air freight via U.P.S. It is a guaranteed 2day delivery not including Saturday or Sunday. |
| U.P.S. Next day air | .Air freight via U.P.S. It is a guaranteed 1day delivery not including Sunday. |
| R.P.S | .Roadway Parcel Service is similar to UPS with a maximum weight of 150 per carton. |
| Express mail | .Air freight via U.S. Postal Service. Guaranteed next day delivery not including Sunday. |
| Air Freight | .Air freight via Federal Express, Emery Express, AirBorne and other independent air cargo service. Normally next day service. Extra cost for Saturday delivery. No Sunday deliveries. |
| Truck | When shipping load cells and other parts by truck specify shipping class as SCALES NOI CLASS 85. |

## Warranty

Your Customer Warranty is the standard manufacturer's warranty, which is normally 1 year from date of shipment.

No prior return authorization is required.
Return to us the defective items. Enclose a note with the model number, serial number, invoice number and date of purchase and a brief description of defect.

Defective part will be forwarded to the manufacturer for evaluation.
Customer will be advised of the status.
No credit will be issued unless offered by the manufacturer.

## Return Policy

All merchandise must be authorized prior to return. No return will be accepted without a Return Authorization Number, except for warranties.

If the wrong part was ordered:

1. A $20 \%$ restocking charge plus shipping charges will apply.
2. The merchandise being returned must be returned within 2 weeks of original shipping date.
3. The Merchandise being returned must be unused and received in new condition. If merchandise appears to have been used or received in poor or damaged condition, a refurbishing charge will be applied before credit is given.

If the wrong part was shipped:

1. The correct merchandise will be shipped at once.
2. Full credit will be issued upon return of incorrect merchandise.

## Damaged in Shipment

Merchandise that has been damaged in shipment must be reported to the freight carrier immediately.

Do not return the merchandise until after the freight carrier has inspected the damage. Keep all the original packaging material for the inspection. The freight carrier will not honor a claim for damage if the merchandise is not as you received it.

After the freight carrier has inspected the damage and has given us approval, we will give you a Return Authorization Number.

## Email

sales@totalcomp.com
purchasing@totalcomp.com
accountspayable@totalcomp.com
accountsreceivable@totalcomp.com

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## Analog Load Cell Testing Procedure

1. Using an ohm meter, measure the following resistances on the load cell cable.

| A. INPUT | +EX to -EX |
| :--- | :--- |
| B. OUTPUT | +SIG to -SIG |
| C. | +EX to +SIG |
| D. | +EX to -SIG |
| E. | -EX to +SIG |
| F. | -EX to -SIG |

The input and output resistance should match the manufacturer's specs. The other resistance readings should all be the same and approximately $75 \%$ of the input or output resistance.
2. Using an ohm meter, measure the following resistance
A. All leads to case.
B. All leads to shield.

The resistance should be greater than $5,000 \mathrm{meg}$ ohms. If it is less, there is a chance for signal loss due to leakage to ground. Low resistance usually indicates water in the cable.
3. Using a digital test meter, measure the following load conditions.
A. Unloaded.
B. 2 or 3 test loads.

Unloaded reading should be within manufacturers specs, usually $1 \%$ of output.
4. If meter goes into over range, then use voltmeter and measure the following voltages.
A. +EX to -EX (volts)
B. +SIG to -EX (volts)
C. -SIG to -EX (volts)
D. +SIG to -SIG (millivolts)

The D reading should be equal to "B" - "C".
Calculate percent of output voltage with the following:

| Actual zero output |  | "D" x 100 |  |
| :---: | :---: | :---: | :---: |
|  | $=$ |  | = \% output |
| Full scale output |  | "A" x mv/V |  |

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