SPECIFICATIONS

STANDARD FEATURES

SCALE SPECIFICATIONS

Bright red LED; 1-inch x 6-digit numeric Display Gross, Net, Motion, Zero, LB, kg (LED) Status Indicators Keyboard 5-key sealed tactile feel membrane Internal Resolution 20-bit A/D Sigma-Delta; 1,048,000 d Display Resolution 200.000 dd industrial: 10.000 dd HB44 Display Increments Selectable 1, 2, 5, 10, 20, 50 100 **Decimal Point** Selectable 0, 1, 2, 3, 4 decimal places Conversation Rate 60 samples/second typical

Signal Sensitivity 0.1 uV/graduation (min) 0.5 mV/V to 6mV/V Signal Range Load Cell Excitation 10 ± 0.5 VDC (-5 to +5) Load Cell Power

12 x 350 Ω or 24 x 700 Ω load cells Auto Zero Tracking 0-60 dd in 1/4 dd increments

Auto Zero Delav 0-25 seconds In 0.1 second increments

0-60 dd in 1/4 dd increments Motion Detect

Motion Delay 0-25 seconds In 0.1 second increments Digital Filter 0-18 selectable filter (DSP) levels Calibration Selectable multi-point (up to 5) digital calibration to linearize input signal

Enable/disable fault tolerant operation Watchdog Timer Signal, excitation and sense lines **RFI** Protection **RAM** 32K provides 500 ID storage (parts, etc)

COMMUNICATIONS

Relay Box

EZ-LINKTM

Serial Port 1 Simplex RS232 or 20mA current loop Serial Port 2 Full duplex RS232, 20ma or RS485 3 inputs and 3 outputs; Low active (TTL) Digital Port **Print Formats** 4 user configurable print formats

GENERAL SPECIFICATIONS

Power 110/220VAC ±10% @ 50/60Hz or 12-28

Power Consumption 10W @ 115VAC; 6W @ 12VDC

-10 to +40 °C. **Operating Temperature** Weight 6 lbs (2.72 kg) Warranty One-year limited

OPTIONS

Analog Output Module Fully isolated 0-10VDC or 4-20mA; 16-bit

> resolution: 650Ω load resistance 4-channel external relay box

Relay Modules Input/output solid-state (AC/DC) relavs Clock Module Time and Date Clock Y2K and Leap Year

compliant

100 samples/second conversion rate; High speed (HS)

high-speed process control applications PC software; facilitates configuration

and Scale Basic programming

Hazard location intrinsic safety barriers IS Barriers

Panel Mount Kit Mounts enclosure to user panel

(for future release)

PLC/COM interface (for future release) DeviceNet **Profibus** PLC/COM interface (for future release)

APPROVALS

NTEP COC# 96-133-A1 UL & CUL pending

MODES OF OPERATION

The IDS 410 is the only digital weight meter in its class that is fully programmable in an easy and flexible macro language called Scale Basic™. In addition to the built-in modes of operation, Scale Basic allows you to customize the operation of the IDS 410 to meet your application requirements. The Scale Basic language provides various commands and functions that include: math operations, I/O control, setpoints, timers, data entry, ID storage, message display, and program sequence control among others. Programming the IDS 410 can be performed through the keyboard or a PC using the optional EZ-LINK™ software that greatly facilitates setup and programming.

MODE 0 - Normal

Basic gross, tare and net weighing

MODE 1 - Keyboard Tare

Same as Mode 0 but tare weight is keyboard entered

MODE 2 - Print Weight and Total

Print multiple gross or net weights and keep a running total for job, lot, etc. Print accumulated gross, tare and net totals at the end

MODE 3 - Print Weight With Subtotal and Total Same as Mode 2 but subtotals can be printed.

MODE 4 - Multi-Container/Axle Weighing

Push the PRINT button to sequentially number and print a series of weighments. Push the TOTAL button to print and clear the total

MODE 5 - Auto Weigh and Print (Auto Axle Weigh)

Same as Mode 4 but printing is automatic when weights are placed on the scale. Provides traffic light control and trip level configuration

MODE 6 - Auto Axle Weigh (Long Scales)

Same as Mode 5 but previous axles are auto tared

MODE 7 - Peak Hold Mode

Display or print the gross or net peak weight detected

MODE 8 - Over/Under Checkweigh

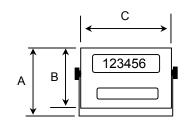
Provides 3 TTL outputs and 2 setpoints to indicate over, under and between weight conditions. Outputs can activate lights or alarms

MODE 9 - Bulkweigh

Provides setpoint entry and relay output to control fill process. Remote start/stop operation with configurable scale empty and draft weights. Use for multiple drafts with subtotal and total printing

DIMENSIONS

A = 7.63" (19.38 cm) B = 6.88" (17.48 cm) (21.74 cm) C = 8.56" D = 2.00" (5.08 cm) E = 3.00" (7.62 cm)





Specifications subject to change without notice © IDS, Inc. 1999 09/02/1999 DS-IDS410.doc



APPLICATIONS

- Gross, tare and net weighing
- · Vehicle and railroad weighing
- Multi-container or axle weighing
- Weigh system interface to Distributed Control System
- · Batching and process control systems
- Drum filling, tank, hopper, bench and floor scales
- Over/Under check-weighing and material-testing
- Chemical and washdown environments
- Hazardous environments with optional IS barriers

FEATURES

- NEMA 4/4x stainless steel enclosure
- · One-inch-high bright, bold, 6-digit LED display
- 10 selectable modes of operation: normal, keyboard tare, print weight, subtotal and total, multi-container/axle weighing with total, auto weigh and print, auto axle weigh with traffic light control, peak hold, over/under checkweigh, and bulkweigh
- Programmable in Scale Basic[™] macro language for application development (event driven)
- Simulates A&D, Condec, Weigh-Tronix, Ohaus communication protocols; user configurable protocol
- Selectable 5-point calibration for improved accuracy
- 20-bit A/D with 60 samples/second conversion rate
- Signal sensitivity to 0.1 uV/graduation
- Selectable digital filter to eliminate weight vibrations
- Powers up to 12 x 350 Ω or 24 x 700 Ω load cells
- Two serial ports: RS232, 20mA current loop and RS485
- Digital port for relay control and remote operation
- Primary and secondary units with conversion factor
- 32K RAM provides 500 ID storage for part, truck, etc.
- Selectable address for multi-drop RS485 network interface

OPTIONS

- Time and Date Clock Y2K and Leap Year compliant
- 4-20mA/0-10VDC isolated analog output with 16-bit resolution
- 4-channel relay box for setpoint control or remote operation
- Input/output solid-state relay modules (AC/DC)
- High-speed 100 samples/second conversion rate
- EZ-LINK™ PC software; facilitates configuration and Scale Basic programming; Windows® 3.1/95/98/2000 compatible
- Intrinsic safety barriers for hazardous locations Class I / II / III Div. 1and 2 Groups A-G
- Panel mount kit (for future release)
- DeviceNet PLC communications interface (for future release)
- Profibus PLC communications interface (for future release)



WEIGHT INDICATOR













MADE IN U.S.A.