



Series TT02 is shown in a typical manual torque screwdriver test

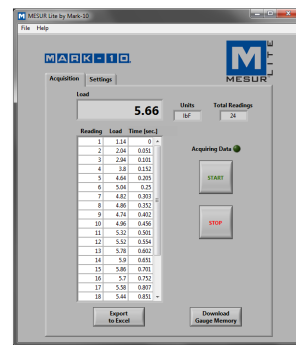
Series TT02 Torque Tool Testers present a simple and accurate solution for testing manual, electric, and pneumatic torque screwdrivers, wrenches, and other tools. These testers are compact and rugged, suitable for production environments. A universal 3/8" square receptacle accepts common bits and attachments. The TT02 captures peak torque in both measurement directions, and also calculates 1st and 2nd peaks, useful for click-type tools.

A blazingly fast sampling rate of 7,000 Hz and accuracy of $\pm 0.3\%$ produce reliable and consistent test results. The TT02 includes a range of sophisticated productivity-enhancing features, including USB, RS-232, Mitutoyo, and analog outputs, automatic data output/zeroing/data storage upon tool slip or click, memory storage for 1,000 readings, pass/fail indicators and outputs, and more. Password protection is provided to prevent unauthorized changes to settings and calibration.

Series TT02 testers include MESUR[®] Lite data acquisition software. MESUR[®] Lite tabulates continuous or single point data. Data stored in the TT02's memory can also be downloaded in bulk. One-click export to Excel allows for further data manipulation.

Note: Not compatible with impact tools.

MESUR Lite data acquisition software is included with Series TT02 testers



Features

- First / second peak capture for CW and CCW directions
- 3/8" square receptacle accommodates common bits and attachments
- High-speed 7,000 Hz sampling rate accurately captures peak torque values
- 1,000-point data memory with statistics and outputs
- USB, RS-232, Mitutoyo, and analog outputs
- Break detection: automatic output, data storage, and zeroing upon tool click/slip automates testing processes
- Programmable set point indicators and outputs for pass/fail determination
- Password protection prevents unauthorized changes
- 5 selectable units of measurement
- MESUR[®] Lite data collection software included

Controls & Indicators

Set points

Current or peak reading

Set point (pass/fail) indicators

Battery indicator

Memory storage for 1000 readings (auto-save also possible)

Access the tester's settings menu via an easy-to-use interface

One-push data output to a PC, printer, or other device (auto-output also possible)

Clockwise/counter-clockwise indicator

Peak readings (CW/CCW or 1st/2nd peaks)

Measurement mode

Unit of measurement

Analog load bar w/set point markers

Zero the reading to begin a new test (auto-zero also possible)

Toggle between real time, peak, and 1st peak/2nd peak display modes



Optional Items



AC1066-1 & AC1066-2 Rundown fixtures

Provide accurate and consistent torque measurements for electric and pneumatic tools. Select AC1066-1 to simulate a soft joint with gradual torque buildup or AC1066-2 to simulate a hard joint with faster torque buildup. Integrated 3/8" square drive.



ST001 Bench mounting kit

Mounts the TT02 securely to a bench for horizontal orientation.



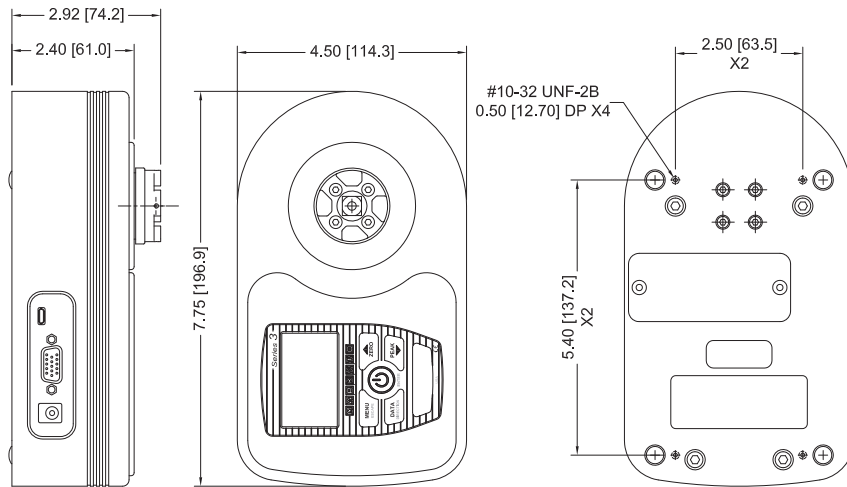
ST002 Carrying case

Provides storage space for the TT02 tester, rundown fixtures, bench mounting kit, AC adapter, and accessories.

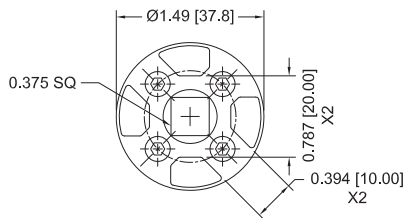
Specifications

Accuracy:	±0.3% of full scale
Sampling Rate:	7,000 Hz
Power:	AC adapter: 100-240VAC, 50-60 Hz, 0.3 A Battery: Rechargeable 8.4V NiMH Low battery indicator appears when battery level is low, and gauge powers off automatically when power reaches critical stage.
Battery life:	Backlight on: up to 7 hours of continuous use Backlight off: up to 24 hours of continuous use
Units:	ozFin, lbFin, kgFcm, Nm, Ncm
Outputs:	USB / RS-232: Configurable up to 115,200 baud. Mitutoyo: Serial BCD suitable for all Mitutoyo SPC-compatible devices. Analog: ±1 VDC, ±0.25% of full scale at capacity. General purpose: Three open drain outputs, one input. Set points: Three open drain lines.
Configurable settings:	1st/2nd peak, digital filters, outputs, automatic shutoff, default settings, key tones, backlight, audio alarms, passwords, calibration
Safe overload:	150% of full scale (display shows "OVER" at 110% and above)
Weight:	5.8 lb [2.6 kg]
Environmental requirements:	40 - 100°F, max. 96% humidity, non-condensating
Warranty:	3 years (see individual statement for further details)

Dimensions in [mm]



RECEPTACLE TOP VIEW:



In The Box

Series TT02 torque testers are shipped as shown at right, and include the following accessories:

- (1) 1/4" hex to 3/8" square adapter
- (1) USB cable
- (1) AC adapter
- (1) Battery
- (1) Certificate of calibration without data (data is optional)



Capacity x Resolution

Model No.	ozFin	lbFin	kgFcm	Ncm	Nm
MTT02-12	192 x 0.1	12 x 0.005	14 x 0.01	135 x 0.1	1.35 x 0.001
MTT02-25	400 x 0.2	25 x 0.01	28 x 0.02	290 x 0.2	2.9 x 0.002
MTT02-50	800 x 0.5	50 x 0.02	58 x 0.05	570 x 0.5	5.7 x 0.005
MTT02-100	1600 x 1	100 x 0.05	116 x 0.1	1150 x 0.5	11.5 x 0.005

All models include 110V AC adapters. Add suffix 'E' for euro plug (220V), 'U' for UK plug (220V), or 'A' for Australian plug (220V).

Ex: MTT02-12E, MTT02-50U, MTT02-100A

32-1063 REV 4



Series ST Torque Tool Testers present a simple, yet accurate solution for testing hand operated torque screwdrivers, wrenches, and other tools. Applications exist in manufacturing facilities in virtually every industry. The ST features a solid aluminum housing, making it rugged enough for many years of service in production or laboratory use, while a universal receptacle accepts common bits and attachments. The ST captures peak torque in both clockwise and counterclockwise directions.

Note: The ST cannot be used with power, impact or air tools.

Specifications

Accuracy:	±0.5% of full scale ±1 digit
Power:	AC or non-rechargeable 9V battery, with Intelligent Power Management System (IPM). IPM warns the user via a "LO BAT" indicator and then will power off the gauge.
Battery Life:	30 hours of continuous use
Selectable units of measurement:	lbFin, kgFmm, Ncm
Outputs:	Optional
RS-232	Fully configurable up to 9600 baud
Mitutoyo (Digimatic)	Serial BCD suitable for all Mitutoyo SPC-compatible devices
Safe overload:	150% of full scale (display shows "----" at 110% and above)
Weight:	4.8 lb [2.2 kg]
Environmental Requirements:	40° F - 100°F [5°C - 45°C], <96% humidity (non-condensating)
Thermal effects:	Zero: 0.03% of full scale/°C, Span: 0.01% of full scale/°C
Housing construction:	Aluminum
Warranty	3 years (see individual statement for further details)

Features

Universal receptacle	Accepts many types of torque tools and fixtures
Peak memory	For clockwise and counterclockwise torque
Selectable units of measurement	Measure in lbFin, kgFmm, or Ncm
Data outputs	RS-232 and Mitutoyo (Digimatic)
Push-button	Simple and quick calibration procedure
calibration	

Optional Equipment

Bench mounting bracket ST001	Allows the ST to be mounted securely on a bench.
Carrying case ST002	Hard plastic carrying case with custom molded inserts allows for safe storage and easy transportation. Provides storage space for the ST tester, ST001 mounting bracket, AC adapter, and accessories.
Output cables	Choice of RS-232 and Mitutoyo data output cables are available



Optional bench mounting bracket

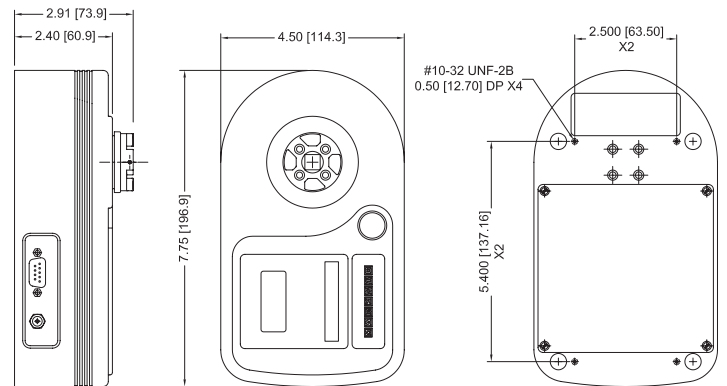


Optional carrying case

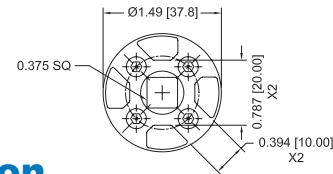


Simply place the torque tool into the universal receptacle and twist. The readout will show the torque value in the clockwise or counterclockwise direction.

Dimensions in [mm]



RECEPTACLE TOP VIEW:



Ordering Information

Model No.	Capacity x Resolution
ST12	12 x 0.01 lbFin, 140 x 0.1 kgFmm, 135 x 0.1 Ncm, 110V
ST50	50 x 0.05 lbFin, 580 x 0.5 kgFmm, 570 x 0.5 Ncm, 110V
ST100	100 x 0.1 lbFin, 1150 x 1 kgFmm, 1150 x 1 Ncm, 110V
ST001	Bench mounting bracket for ST
ST002	Carrying case for ST

For 220V operation, add suffix E to model number. Example: ST50E