

Data Sheet

Torque Tool Testers Series TT02

32-1155 REV 1

Page 1 of 2



Series TT02 is shown in a typical manual torque screwdriver test

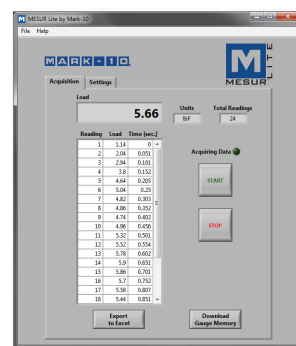
Series TT02 Torque Tool Testers present a simple and accurate solution for testing manual, electric, and pneumatic torque screwdrivers, wrenches, and other tools. These testers are compact and rugged, suitable for production environments. A universal 3/8" square receptacle accepts common bits and attachments. 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 for use 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



◀ **AC1026-1 Rundown fixture**
Helps capture readings for electric and pneumatic tools from 0 to 50 lbFin [0 to 5.7 Nm]



◀ **AC1026-2 Rundown fixture**
Helps capture readings for electric and pneumatic tools from 50 to 100 lbFin [5.7 to 11.5 Nm]



ST001 Bench mounting kit
Mounts the TT02 securely to a bench for horizontal orientation.

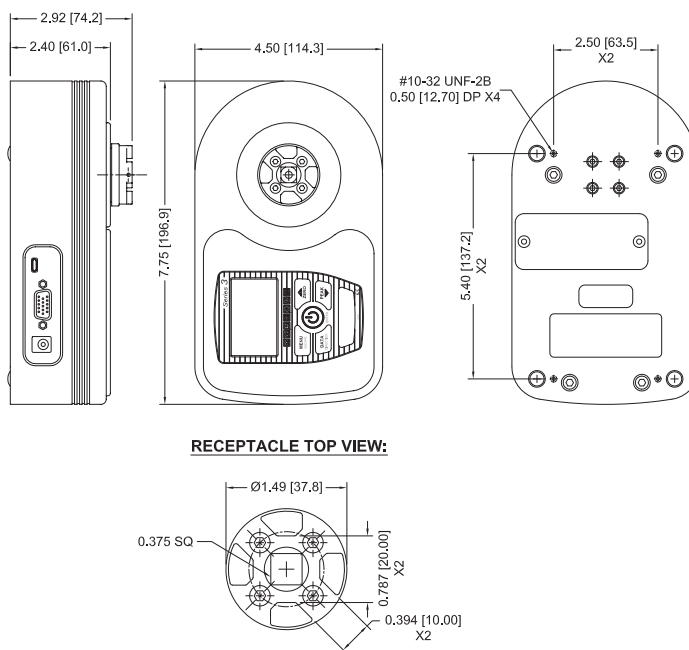


ST002 Carrying case
Provides storage space for the TT02 tester, rundown fixtures, bench mounting kit, AC adapter, and accessories.

Specifications

Accuracy:	±0.3% of full scale
Sampling Rate:	7,000 Hz
Power:	AC or rechargeable battery. Multi-step low battery indicator is displayed, tester shuts off automatically when power is too low.
Battery life:	Backlight on: up to 7 hours of continuous use Backlight off: up to 24 hours of continuous use
Units:	ozFin, lbFin, lbFft, Nm, Ncm
Outputs:	USB / RS-232: Configurable up to 115,200 baud. Mitutoyo: Serial BCD suitable for all Mitutoyo SPC-compatible devices. Analog: ±1 VCD, ±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]
Included items:	1/4" hex to 3/8" square adapter, universal voltage AC adapter, battery, quick-start guide, USB cable, resource CD (USB driver, MESUR™ Lite software, MESUR™ gauge DEMO software, and user's guide), and NIST-traceable certificate of calibration (cert with data is available for an additional charge).
Environmental requirements:	40 - 100°F, max. 96% humidity, non-condensating
Warranty:	3 years (see individual statement for further details)

Dimensions in [mm]



Capacity x Resolution

Model No.	ozFin	lbFin	lbFft	Ncm	Nm
MTT02-12	192 x 0.1	12 x 0.005	1 x 0.0005	135 x 0.1	1.35 x 0.001
MTT02-50	800 x 0.5	50 x 0.02	4 x 0.002	570 x 0.5	5.7 x 0.005
MTT02-100	1600 x 1	100 x 0.05	8 x 0.005	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