Data Sheet

Digital Torque Testers **Series TT05**

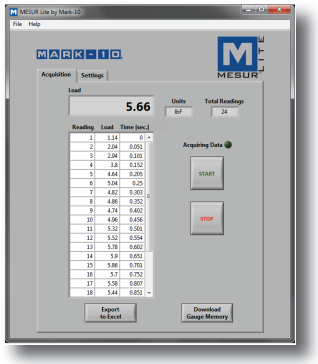
32-1173 REV 0825

Series TT05 universal torque testers can be used for a range of applications up to 100 lbFin [11.5 Nm]. The stainless steel loading surface features a matrix of threaded holes, ideal for accommodating specialized fixtures and attachments. The testers' rugged design and simple, intuitive operation allow for use in laboratory and production environments.

Accuracy of ±0.3% and blazingly fast sampling rate of 7,000 Hz ensure reliable and consistent test results, even in quick-action applications. Password protection is provided to prevent unauthorized changes to settings and calibration.

The TT05 includes a range of sophisticated productivity-enhancing features, including USB, RS-232, Mitutoyo, and analog outputs, automatic data output and zeroing upon sample break, memory storage for 1,000 readings, pass/fail indicators and outputs, and more. First / second peak torque detection is useful for torque tool testing, tamper evident closure testing, and other applications.

Series TT05 testers include MESUR® Lite data acquisition software. MESUR® Lite tabulates continuous or single point data. Data stored in the TT05's memory can also be downloaded in bulk. One-click export to Excel allows for further data manipulation.



▶ MESUR® Lite data acquisition software is included with Series TT05 testers

Features

- **Stainless steel loading plate with threaded holes accommodates fixtures and attachments**
- **USB, RS-232, Mitutoyo, and analog outputs**
- **Automatic output, data storage, and zeroing upon sample break helps automate testing processes**
- **First / second peak detection for torque tool testing, bottle cap testing, and other applications**
- **1,000-point data memory with statistics and outputs**
- **Password protection prevents unauthorized changes**
- **High-speed 7,000 Hz sampling rate accurately captures peak torque values**
- **Programmable set point indicators and outputs for pass/fail determination**
- **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) 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

MARK-10®

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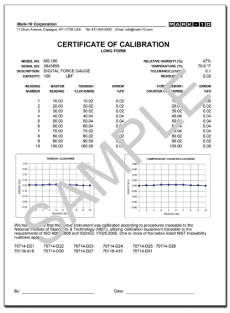
3 YEAR WARRANTY

Specifications subject to change without prior notice

Optional Items

CT002
Carrying case
Provides storage space for the TT05 tester, gripping jaws, AC adapter, and accessories.

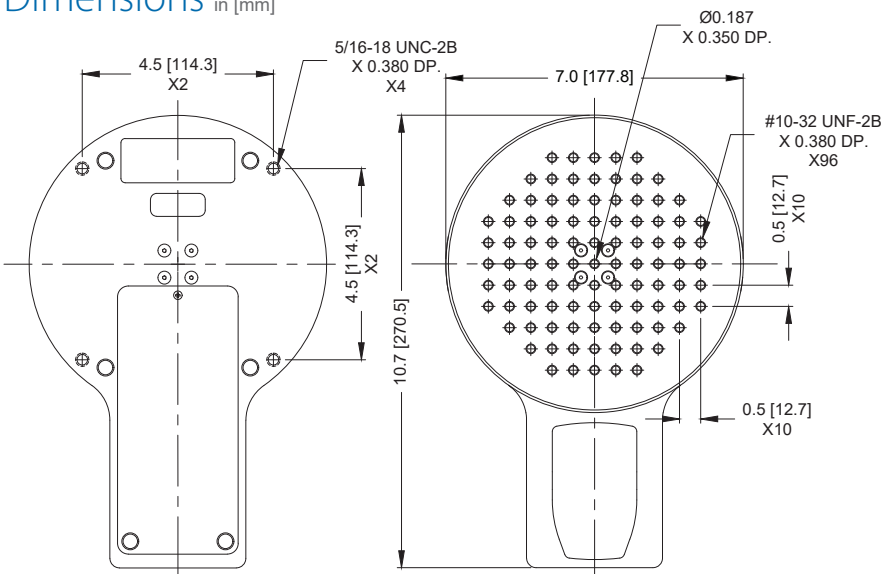


CERT
Calibration certificate w/data
Includes 10 data points in each measurement direction (short form certificate without data is included)

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, 40 VDC max., 100 mA DC max.
Safe overload:	150% of full scale (display shows "OVER" at 110% and above)
Weight:	10.9 lb [4.9 kg]
Environmental requirements:	40 - 100°F, max. 96% humidity, non-condensating
Warranty:	3 years (see individual statement for further details)

Dimensions in [mm]



In The Box

Series TT05 torque testers are shipped as shown at right, and include the following accessories:

(1) USB cable

(1) AC adapter

(1) Battery

(1) Certificate of calibration without data (data is optional)

Capacity x Resolution

Model No.	lbfin	ozfin	kgfcm	Ncm	Nm
MTT05-12	12 x 0.005	192 x 0.1	14 x 0.01	135 x 0.1	1.35 x 0.001
MTT05-25	25 x 0.01	400 x 0.2	28 x 0.02	290 x 0.2	2.9 x 0.002
MTT05-50	50 x 0.02	800 x 0.5	58 x 0.05	570 x 0.5	5.7 x 0.005
MTT05-100	100 x 0.05	1600 x 1	116 x 0.1	1150 x 0.5	11.5 x 0.005

Alternative AC Adapter Prongs

AC1120 AC1121 AC1122

All instruments include a 110V AC adapter with US prong style.
Select an alternative prong adapter (if required) from the table below.

Model No.	Description
AC1120	Prong for AC adapter, 220V EUR
AC1121	Prong for AC adapter, 220V UK
AC1122	Prong for AC adapter, 220V AUS