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 ±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.

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) 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

Specifications subject to change without prior notice.
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.

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>ozFin</th>
<th>lbFin</th>
<th>kgFcm</th>
<th>Ncm</th>
<th>Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>±0.3% of full scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sampling Rate</td>
<td>7,000 Hz</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Power</td>
<td>AC or rechargeable battery. Multi-step low battery indicator is displayed, tester shuts off automatically when power is too low.</td>
<td></td>
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<tr>
<td>Battery life</td>
<td>Backlight on: up to 7 hours of continuous use, Backlight off: up to 24 hours of continuous use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units</td>
<td>ozFin, lbFin, kgFcm, Nm, Ncm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outputs</td>
<td>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.</td>
<td></td>
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</tr>
<tr>
<td>Configurable settings</td>
<td>1st/2nd peak, digital filters, outputs, automatic shutoff, default settings, key tones, backlight, audio alarms, passwords, calibration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe overload</td>
<td>150% of full scale (display shows &quot;OVER&quot; at 110% and above)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>5.8 lb [2.6 kg]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Included items</td>
<td>1/4&quot; hex to 3/8&quot; 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).</td>
<td></td>
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<tr>
<td>Environmental requirements</td>
<td>40 - 100°F, max. 96% humidity, non-condensating</td>
<td></td>
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<tr>
<td>Warranty</td>
<td>3 years (see individual statement for further details)</td>
<td></td>
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</tbody>
</table>

Dimensions [in mm]

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.

Capacity x Resolution

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

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

Mark-10 Corporation  www.mark-10.com  info@mark-10.com
Toll-free: 888-MARK-TEN  Tel: 631-842-9200  Fax: 631-842-9201

3 Year Warranty

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