

TTC Series Torque Tool Tester

The TTC Digital Torque Tool Tester is a simple operation test instrument for quickly checking torque tool performance up to 590 ft-lb (800 N-m). The TTC Series provides exceptional accuracy for measuring torque on various products including torque wrenches, manual screwdrivers, electric screwdrivers, pneumatic screwdrivers and other torque controlled power tools.

The TTC's provide long operation life and power flexibility with the ability to work from the internal rechargeable battery or included AC adapter. The TTC's have six modes of operation: Track for live readings, Peak which records the highest level over a test, First Peak which records a reading after a programmed decrease, Auto Peak which resets after a period of time, Auto First Peak which resets the first peak after a period of time, Double Peak which provides two separate peak readings from programmed decreases. Preset operation with programmable tolerance thresholds for quick pass fail tool test is available in all modes.

The analog bar graph on the backlit, reversible LCD aids users by providing the resultant torque's current position compared to the full scale range along with the direction of the force. Pass/fail icons produce live test feedback allowing instant determination of the results.

Every tester comes standard with USB and RS-232 outputs. The TTC's software enables the uploading of data and the additional statistical analysis with its auto-calculation of the selected values.

These excellent features make the TTC Torque Tool Testers a valuable and versatile addition to the production and quality control departments.

Features

- Strong, light-weight, compact aluminum enclosure allows portability and usage in any shop environment.
- Flexible six modes of operation: Track, Peak, First Peak, Auto Peak, Auto First Peak, Double Peak
- Backlit graphical, reversible display with analog bar graph plus CW/CCW directional indication provides fast interpretation of tool response. Selectable chart display mode aids viewing performance over the entire test.
- Preset operation with Pass-Fail LED icons enable quick determination of tool performance acceptance.
- Units come standard with USB or RS232 communication output for data upload.
- 1000 memory record storage plus software provides easy data transfer.
- 0.3% FS accuracy provides a standard for checking tools on ranges up to 590 ft-lb (800 N-m)
- Operation via the rechargeable battery or the AC adapter.
- Available rundown adapter for power tool testing on certain models
- Calibration certificate with data guarantees performance upon purchase.



TTC-I Torque Tool Tester with Internal Sensor



TTC-E Torque Tool Tester with External Sensor



TTC with Optional Rundown Adapter for use with Drivers

TTC Series Specifications

| | |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measuring Range | See Ordering Details |
| Accuracy | ± 0.3 % of reading over 5 to 100% capacity |
| Units of Measure | N-cm, N-m, in-lb, ft-lb, kg-cm (depending on range) |
| Measure Modes | Track, Peak, First Peak, Auto Peak, Auto First Peak & Double Peak |
| Tool Socket Size | TTC-2/5/10: 1/4" & 1/2" (6.3 & 12.5 mm); TTC-20/50/100/200: 3/8" & 1/2" (10 & 12.5 mm); TTC-500/800: 3/4" (19 mm) |
| Overload Protection | 120% of Full Scale |
| Sampling Rate | 2000 Hz |
| Peak Capture Rate | 0.05 s |
| Display | 160* 128 Dot matrix backlit LCD |
| Display Update Rate | 10 times/sec |
| Resolution | See Chart |
| Memory | 1000 data |
| Set Point | Programmable High and Low Limits |
| Battery Indication | Battery icon flashes when low |
| Charger/Adapter | Universal USB charger, input 100 - 240 V ac 50/60 Hz |
| Operating Temperature | 14 to 104°F (-10 to 40°C) |
| Humidity Limit | 20 - 80% RH |
| Power | 3.6 V dc 1600 mA Ni-MH |
| Battery Life | Approx. 16 Hours continuous on full charge |
| Output | USB, serial port RS-232, High and low limit NPN |
| Dimensions | Display TTC-I: 7.75 x 7 x 3.3" (197 x 180 x 83 mm); Display TTC-E: 7.75 x 7 x 3" (197 x 180 x 75 mm); External Sensor (50, 100 N-m): 4.3 x 3.3" (110 x 83 mm); External Sensor (200, 500 & 800 N-m): 4 x 3.8" (100 x 98 mm) |
| Product Weight | TTC-I: 3.3 lb (1.5 kg); TTC-E Display: 2.6 lb (1.2 kg); TTC-E-200/500/800 External Sensor: 4.4 lb (2 kg) |
| Package Weight | TTC-I: 6.5 lb (3 kg); TTC-E-200/500/800: 10.2 lb (4.6 kg) |
| Warranty | 1 year |
| Certification | CE |
| Included Accessories | USB cable, charger adapter, cal. cert. printer cable, square driver adapter connector (Ranges to 200 N-m only) |
| Optional Accessories | RS-232 cable, Rundown adapters & Printer. Note: Software available for free at www.shimpoint.com |

Ordering Details

| Range by Unit (Resolution) | | | | | |
|----------------------------|---------------------|------------------|--------------------|----------------------|------------------------|
| Model | N-m | N-cm | kgf-cm | in-lbf | ft-lbf |
| TTC-I-2 | 0.0020-2 (0.0002) | 0.20 -200 (0.02) | 0.020 - 20 (0.002) | 0.025 - 17.7 (0.002) | 0.0020 - 1.48 (0.0002) |
| TTC-I-5 | 0.0050 - 5 (0.0005) | 0.50- 500 (0.05) | 0.050 -50 (0.005) | 0.045 - 43.3 (0.005) | 0.0040 - 3.7 (0.0005) |
| TTC-I-10 | 0.010 - 10 (0.001) | 1.0 - 1000 (0.1) | 0.10 - 100 (0.01) | 0.09 - 88.5 (0.01) | 0.007 - 7.4 (0.001) |
| TTC-I-20 | 0.020- 20 (0.002) | 2.0- 2000 (0.2) | 0.20 -200 (0.02) | 0.18 - 177 (0.02) | 0.014 - 14.8 (0.002) |
| TTC-I-50 | 0.050 - 50 (0.005) | 5.0 - 5000 (0.5) | 0.50 - 500 (0.05) | 0.45 - 443 (0.05) | 0.035 - 36.8 (0.005) |
| TTC-I-100 | 0.10 - 100 (0.01) | 10- 10000 (1) | 1.0 -1000 (0.1) | 0.9 - 885 (0.1) | 0.07 - 74 (0.01) |
| TTC-E-200 | 0.20 - 200 (0.02) | - | 2.0 -2000 (0.2) | 1.8 - 1770 (0.2) | 0.14 - 148 (0.02) |
| TTC-E-500 | 0.50- 500 (0.05) | - | 5.0 -5000 (0.5) | 4.5 -4425 (0.5) | 0.35 - 368 (0.05) |
| TTC-E-800 | 1.6 - 800 (0.1) | - | 16 -8000 (1) | 14 -7080 (1) | 1.1 - 590 (0.1) |

Accessories

| | |
|-------------------|----------------------------------------------------------------------|
| TTC-RD-2 | Rundown adapter. 17.7 in-lbf (2 N-m) 1/4" hex male, PH2 4mm female |
| TTC-RD-6 | Rundown adapter. 53.1 in-lbf (6 N-m) 1/4" hex male, 5mm hex female |
| TTC-RD-40 | Rundown adapter 354 in-lb (40 N-m) 17mm hex male, 8mm hex female |
| TTC-RD-100 | Rundown adapter 885.1 in-lb (100 N-m) 21mm hex male, 12mm hex female |
| FG-PRINTER | Portable Thermal Printer |