

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% of reading 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

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 mAH 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
TTST-1	TTC Manual Torque Test Stand; 24" (620 mm) Test Distance
TTST-2	TTC Manual Torque Test Stand; 44" (1120 mm) Test Distance

*Multiple sensors may be used on external models (TTC-E) contact factory for external sensor details.



TTST - Manual Test Stand

NIDEC-SHIMPO CORPORATION

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