



Description

The VT-600M is a combined package for testing torque wrench and torque screwdriver levels between 4 In Lbs and 600 Ft Lbs. It features a mechanical loading bench that works with precision transducers and a display monitor module that captures torque measurements with a user-friendly interface.

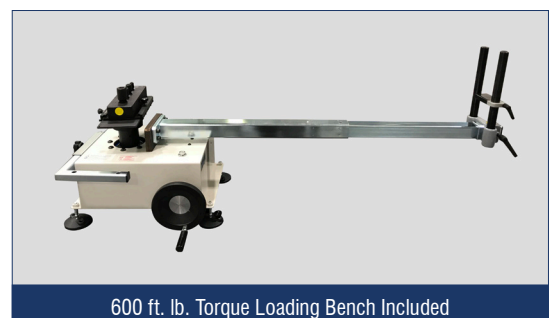
The module features a large LCD graphical display that connects to the transducers on the loading system. It features versatile data acquisition capabilities including measurement storage, retrieval, statistical analysis and automatic downloading to an external printer/computer. The VT-600M system provides readings with an accuracy of $\pm 0.25\%$ of indicated value.

Items In VT-600M Torque Calibration System - Package

VT-MOD	Analysers Module with digital monitor.
TE-TRQ-LB600	Manual torque loader (600 ft. lb.)
TE-TRQ-TTC12	3/4 " drive, 60-600 ft. lb. transducer with socket.
TE-TRQ-TTC400	4-in-1 transducer kit (Multiple transducer). 1/4 " ext. drive, 4-50 in. lb. 3/8 " ext. drive, 30-400 in. lb. 3/8 " ext. drive, 80-1000 in. lb. 1/2 " ext. drive, 20-250 ft. lb.
Adaptors/Brackets Included	1/4 " internal adaptor. 1/4 "-3/8 " internal adaptor. 3/8 " internal adaptor. 1/2 " internal adaptor. 4-in-1 transducer adaptor kit. Quick release pin (x2).

Features

- Complete package solution for torque wrench calibration to 600 ft-lb
- 4 in 1 transducer 4–50 in-lb (min) to 20–250 ft-lb (max)
- 600 ft-lb transducer
- Mechanical loader with mounting brackets for transducers (600 ft-lb unit)
- Analyser module connects to transducers
- Large LCD graphical display
- Five built-in languages
- Date and time stamp
- RS-232 connection to control centre module
- Automatic downloading
- Accuracy is $\pm 0.25\%$ of indicated value, CW & CCW, from 10 % to 100 % of full scale
- EasyCal software compatible



600 ft. lb. Torque Loading Bench Included



VT-600M Torque Calibration System - Module VT-MOD Specifications

System accuracy	±0.25 % of reading @ 25 °C with VT-600 base unit and transducer calibrated together. (Note: Transducers calibrated independent of the base provide a system accuracy of ±0.5 % of reading @25 °C)
Temperature drift	+0.03 %/°C (+0.017 %/°F).
Display	5.5 " x 1.5 " backlit LCD display, 240 x 64 dot matrix., 0.67 " torque digits character height.
Display capacity	16 bit A/D, 5 digits ±32,000 counts. Sample rate, 2000 sample/sec., display rate 5 updates/sec.
Language select	English, German, French and Spanish.
Bar graph	Zero to transducer full-scale. Resolution, 10 major divisions, 100 minor divisions.
Units of measure	Ft. lb., in. lb., in. oz., Nm, dNm, cNm, mkg, cmkg.
Measurement modes	Track, Peak Hold, First Peak, Power Tool.
Keypad	Sealed membrane keypad with audible feedback featuring "Soft key" user interface.
Features	Zerotare; Mode, Units and Language select; High and Low limits setup; Auto Store, Clear and Send select; Clock adjust; Calibration; and RS-232 programming.
Data storage/recall	3,000 measurements (with date and time stamp).
Statistical analysis	Max, Min, Range, Mean, Sigma N, Sigma, Cp, Cpk, %Error, Go, Nogo, Printout Histogram.
Serial output ports	Printer, RS-232 True, 300-19.2 k Baud, 8 data bit, 1 stop bit, no parity, (default 9600 Baud). Optional Computer COM port, as above, (default 19.2 k Baud).
Analog output	+ (CW), - (CCW) 1.8 V at transducer full range. Linearity ±1 % of reading, ±100 mV zero offset.
Loader control relays	Two, normally open, from rated 12 VDC@1/2 A close contact at 110 % CW or CCW of torque transducer range, and release at 105 % (open contact).
Power requirements	100-230 VAC, 50-60 HZ, 50 W, automatic voltage selection. Fused at 3.15 A.
Environmental	Operating Temperature: 10 to 32 °C, (50 to 90 °F). Storage Temperature: -20-50 °C, (-2 to 122 °F). Temperature Drift: +0.011 %/°C, (0.006 %/°F). Humidity: up to 85 % non-condensing.
Module Width	295 mm.

VT-600M Torque Calibration System - TE-TRQ-LB600 Loading Bench Specifications

Input torque (hand crank)	6 ft. lb. maximum.
Output torque	600 ft. lb. maximum. 30° Rotation.
Dimensions	W 1220 mm (48.1 "), with deflection beam fully extended. H 660 mm (26 "), with base unit fitted to bracket. D 736 mm (29 "), from crank handle open and base unit fitted to bracket.
Weight	30 kg (65 lbs).

Torque Transducer Options

Included transducers

TE-TRQ-TTC400	Transducer, 4-in-1, 4-50 in-lb (min.) to 20-250 ft-lb (max.), 1/4, 3/8 and 1/2 " drives.
TE-TRQ-TTC12	Transducer, 60-600 ft-lb, 3/4 " Drive.

Optional Transducers

TE-TRQ-TTC4	Transducer, 5-50 in-oz, 1/4 " Drive.
TE-TRQ-TTC5	Transducer, 15-200 in-oz, 1/4 " Drive.
TE-TRQ-TTC6	Transducer, 4-50 in-lb, 1/4 " Drive.
TE-TRQ-TTC65	Transducer, 15-150 in-lb, 1/4 " Drive.
TE-TRQ-TTC7	Transducer, 30-400 in-lb, 3/8 " Drive.
TE-TRQ-TTC8	Transducer, 80-1000 in-lb, 3/8 " Drive.
TE-TRQ-TTC10	Transducer, 10-125 ft-lb, 1/2 " Drive.
TE-TRQ-TTC11	Transducer, 20-250 ft-lb, 1/2 " Drive.
TE-TRQ-TTC13	Transducer, 100-1000 ft-lb, 1 " Drive (requires higher range loading bench).
TE-TRQ-TTC14	Transducer, 200-2000 ft-lb, 1 " Drive (requires higher range loading bench).

Loading Bench Options

Included Loading Bench

TE-TRQ-LB600	Manual Torque Loader (600 ft. lb.).
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Optional Loading Benches

TE-TRQ-LB250F	Manual Torque Loading Bench (250 ft-lb / 339 Nm).
TE-TRQ-LB750F	Manual Torque Loading Bench (750 ft-lb / 1017 Nm).
TE-TRQ-LB2000F	Manual Torque Loading Bench (2000 ft-lb / 2711 Nm).

Ordering Information

VT-600M	Torque Calibrator Module with Transducers and Loading Bench
ECFLA	EasyCal Calibration Software (for additional options see separate datasheet)
Transducer Options	See above for available models