



Description

Time Electronics MTEG digital pressure gauge modules for calibration benches, offering a high accuracy solution to pressure calibration with excellent resolution, stability and features to aid the testing process.

Gauges are available with accuracy up to 0.02 % of full scale, with simple controls and various features for improved usability. If a control centre module is fitted to the CalBench, each MTEG connects to it internally and the user can utilise the manual control application or EasyCal software.

Additionally, regulated versions (RMTEG) are available for pneumatic modules up to 300 bar. These modules enable a convenient method for pressure calibration with only a single hose connection to the device under test. All regulated modules have a dual function front panel pressure port for precision output or measurement.

Specifications

Ranges Vacuum to 700 bar. See page 2 for available models and ranges.

Pressure types Gauge or Compound versions.

Regulated versions (RMTEG) Available up to 300 bar pneumatic, dual function with regulated and measure modes. 2 needle valves enable isolation for measure only mode. Measure modes are suitable for use with benchtop pumps (optional extras).

Accuracy 0.02 or 0.05 % FS. See page 2 for further details.

Pressure units Total of 11 pressure units possible: Pa, kPa MPa, bar, mbar, psi, kgf/cm², mmH₂O, inH₂O, mmHg, inHg. Some units are not enabled depending on range.

Measure speed Display rate: 3 readings per second (default setting). Adjustable from 10 readings per second to 1 reading every ten seconds.

Display Wide viewing angle FSTN segment code LCD with backlight, three partition design, 16 mm numeral display height.

Resolution 4 to 5 digits selectable.

Pressure % indicator Pressure percentage is shown at the bottom of the display.

Peak detection Maximum and minimum peak values can be displayed.

Pressure port Minimes test point with check valve. Hoses supplied, and configured to work with ordered manifolds or pumps.

Environmental Operating temperature: -10 °C to 50 °C (14 °F to 122 °F). Compensation temperature: -10 °C to 50 °C (14 °F to 122 °F). Storage temperature: -20 °C to 70 °C (-4 °F to 158 °F). Relative humidity: < 95 %.

Module width MTEG (indicator): 150mm. RMTEG (with regulator): 250mm.

Features

- Pressure ranges up to 700 bar (10,000 psi)
- Gauge and compound versions available
- Regulated versions available up to 300 bar
- 0.02 % or 0.05 % FS accuracy
- Easy-to-read display with 5 digit resolution
- Unique self-protection capability technology
- 3 times per second measure speed
- Fully temperature compensated accuracy
- Internal communication to control centre module
- EasyCal software compatible

EasyCal Calibration Software

MTEG modules can be used with Time Electronics EasyCal software to automate the calibration process. This provides increased speed of calibration and consistency of results. Produce traceable calibration certificates and test reports for quality standards with additional uncertainty information for ISO 17025 conformance.





Pressure Ranges

Gauge Pressure Modules

Media: MTEG: Gas or liquid. RMTEG: Gas only. Burst Pressure: Vacuum to 350 bar = 3x. 600 to 700 bar = 1.5x.

Module	Range (bar)	Range (psi)	Accuracy (% FS)	
MTEG-GVAC	-1 to 0 bar*	-15 to 0 psi	-	0.05
MTEG-G350mb	0 to 350 mbar	0 to 5 psi	-	0.05
MTEG-G700mb	0 to 700 mbar	0 to 10 psi	0.02	0.05
MTEG-G1b	0 to 1 bar*	0 to 15 psi	0.02	0.05
MTEG-G2b	0 to 2 bar*	0 to 30 psi	0.02	0.05
MTEG-G3.5b	0 to 3.5 bar*	0 to 50 psi	0.02	0.05
MTEG-G7b	0 to 7 bar*	0 to 100 psi	0.02	0.05
MTEG-G10b	0 to 10 bar*	0 to 150 psi	0.02	0.05
MTEG-G20b	0 to 20 bar*	0 to 300 psi	0.02	0.05
MTEG-G35b	0 to 35 bar*	0 to 500 psi	0.02	0.05
MTEG-G40b	0 to 40 bar*	0 to 600 psi	0.02	0.05
MTEG-G70b	0 to 70 bar*	0 to 1000 psi	0.02	0.05
MTEG-G100b	0 to 100 bar*	0 to 1500 psi	0.02	0.05
MTEG-G140b	0 to 140 bar*	0 to 2000 psi	0.02	0.05
MTEG-G160b	0 to 160 bar*	0 to 2320 psi	0.02	0.05
MTEG-G200b	0 to 200 bar*	0 to 3000 psi	0.02	0.05
MTEG-G250b	0 to 250 bar*	0 to 3625 psi	0.02	0.05
MTEG-G300b	0 to 300 bar*	0 to 4350 psi	0.02	0.05
MTEG-G350b	0 to 350 bar	0 to 5000 psi	0.02	0.05
MTEG-G600b	0 to 600 bar	0 to 8700 psi	0.02	0.05
MTEG-G700b	0 to 700 bar	0 to 10,000 psi	0.02	0.05

* Regulated version available (RMTEG)

Compound Pressure Modules

Media: MTEG: Gas or liquid. RMTEG: Gas only. Burst Pressure = 3x.

Module	Range (bar)	Range (psi)	Accuracy (% FS)	
MTEG-C350mb	0 to ± 350 mbar	0 to ± 5 psi	-	0.05
MTEG-C700mb	0 to ± 700 mbar	0 to ± 10 psi	0.02	0.05
MTEG-C1b	0 to ± 1 bar*	0 to ± 15 psi	0.02	0.05
MTEG-CV2b	-1 to 2 bar*	-15 to 30 psi	0.02	0.05
MTEG-CV4b	-1 to 4 bar*	-15 to 60 psi	0.02	0.05
MTEG-CV7b	-1 to 7 bar*	-15 to 100 psi	0.02	0.05
MTEG-CV10b	-1 to 10 bar*	-15 to 150 psi	0.02	0.05
MTEG-CV20b	-1 to 20 bar*	-15 to 300 psi	0.02	0.05
MTEG-CV40b	-1 to 40 bar	-15 to 600 psi	0.02	0.05

* Regulated version available (RMTEG)

Ordering Information

How to Order **Module Code/Accuracy (eg. MTEG-G1b/0.02)**
Regulated Modules: RMTEG-####/Accuracy

Options

C202 Traceable calibration certificate (Factory) for MTEG module

C203 Accredited calibration certificate (ISO 17025) for MTEG module

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.