



Digital Pressure Gauge Series 2400



Features

- Ranges to 6000 psi
- Calibrated with NIST Traceable Primary Standards
- Dynamic compensation from 15 to 45°C
- RS-232 or RS485 Communications
- 17 Selectable Pressure Units and 1 User Defined Unit
- Calibration Password Protected
- Display of Max. and Min. Readings
- Null Capability
- Unique and simple user interface
- Absolute, Gauge, Bi-directional or Vacuum
- CE Compliant

Mensor's Series 2400 Digital Pressure Gauge (DPG) is a low cost, single-range pressure measuring instrument. With an uncertainty of 0.03% FS, and a small package design, this unit is perfect for desk top monitoring of pressure changes. Temperature compensation from 15 to 45°C, permits use in this temperature range, without degradation of accuracy.

The unique design of the Series 2400 has modest features and simple menu options. Combined with lower uncertainty levels, cost is reduced for applications where higher levels of uncertainty are not required and cost is a concern.

For protection of lower sensor ranges, internal relief valves are standard on ranges 100 psi and below.

Options

- Relief Valves for pressures > 100 psi

Series 2400

Digital Pressure Gauge Specific Data Series 2400

General Specifications

Total Uncertainty	0.03% FS over compensated temperature range, 15 to 45°C for 180 days
Pressure Range	
P _{sia} :	7.5 to 6000
P _{sig} :	0.36 to 6000
Pressure Range (Bi-directional, Vacuum)	
P _{sig} :	-0.36 to 0.36 min. -Atm to 6000 max.
Resolution	5 digits
Over Pressure Limit	2X to 500 psi, 1.5X > 500 psi
Storage	-20 to 70°C
Warm-up	< 1 minute
Reading Rate	~ 4.6/seconds
Response Time	< 252 mS
Orientation	Negligible > 30 psi zero offset resetable w/zero cal or null function
Communications	RS-232 or RS-485 @ 9600 baud, N,8,1
Case Size	2.52" H x 4.174" W x 4.7" D
Weight	< 1.5 lbs
Media	
Pressure Port:	Ranges < 3 psi: clean dry non-corrosive gases. Ranges ≥ 3 psi: media compatible with aluminum, 316 SS, BunaN, Viton, silicone grease and RTV (Not designed for oxygen service)
Reference Port:	Clean, dry non-corrosive gases

Power Input	12 VDC, .125 Amps
Pressure Interfaces	7/16 – 20 SAE, Ref: 10 – 24, 1/8 and 1/4" FNPT Adapters included
Warranty	One year
Options	Relief valves for ranges > 100 psi, mounted externally
Units	PSI, inHg@0°C, inHg@60°F, inH ₂ O@4°C, inH ₂ O@20°C, mbar, bar, mmHg@0°C, cmHg@0°C, Pa, hPa, kPa, MPa, kg/cm ² , cmH ₂ O@4°C, cmH ₂ O@20°C, MSW@0°C
Display	Monochrome 128x64 LCD, with white LED back light
CE	Compliant to EN50081, EN50082, and EN61010-1

Total Uncertainty is the combined uncertainties of all components of a measurement at the approximate 95% confidence level (K=2). Total uncertainty includes the uncertainties of the following: calibration standard, repeatability, pressure hysteresis, creep, linearity, and temperature effects over the compensated temperature range.

The calibration program at Mensor is accredited, by A2LA, as complying with both the ISO/IEC 17025:1999 and the ANSI/NCSL Z540-1-1994 standards. All Mensor primary standards are traceable to NIST.

Mensor Corporation is registered to BS EN ISO9001:2000.

Since product innovation is a continuous process at Mensor, we reserve the right to change specifications without notice.