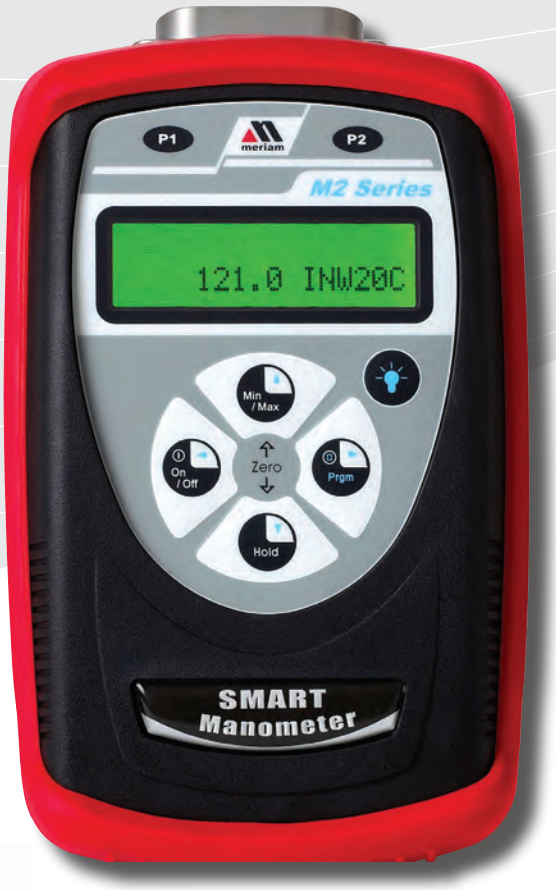

M2 SERIES
SMART MANOMETERS

Meriam's M2 Series Smart Manometers bring high precision and value to handheld, digital manometer users. The M2 features NIST traceable accuracy of + 0.025% of Full Scale (FS), independent of temperature effect, at the lowest prices available. Pressure ranges from 3 kPa to 200 bar are available.

M2 pressure sensors are available to measure gauge (GI), compound (CI), differential (DI/DN), absolute (AI) or vacuum pressure. The display can read out in any of eleven pressure units or can be linearly scaled for special user units. Differential models offer a square root flow function to display flow rate in user defined units.

An adjustable damping feature minimizes the effects of pulsating pressures. A Min/Max function captures the extremes of pulsating or varying pressure signals and a Hold function can freeze the display at any point of interest. Auto Record documents up to 240 readings for future recall.

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BEST ACCURACY OVER THE WIDEST OPERATING TEMP. RANGE

ACCURATE WITH NO TEMPERATURE ERROR
± 0.025%
or
± 0.05%

Accuracy
Accuracy: ± 0.05% FS or optional ± 0.025% FS No temperature effect from -5° to +50° C.

Certifications
Ex ia IIC T4
Class I,Div.1 Groups A,B,C,D, T4

Engineering Units
Inches of H_2O (select 4° C, 20° C), PSI, mm of Hg, inches of Hg, Mbar, bar, kPa, kg/cm², cm of H_2O and user selectable scaling.

Media Compatibility
DN: Non-isolated differential sensor for clean, dry, non-corrosive gases.
GI & AI: Isolated Gauge or Absolute sensor for fluids compatible with 316L SS. *See Meriam's M200-DI for wet/wet DP requirements.*

Pressure Limits
Twice range on Gauge and Absolute units. Twice range on Differential units when pressurized on high side only and 10bar (10.5 Kg/cm²) static when applied to both sides of the sensor simultaneously.

Leak Test
Allows users to view Min/Max pres-sure values and calculates leak rate per minute in pressure units. The feature is very handy when troubleshooting or pressure testing pneumatic systems.

Auto Record
Document up to 240 readings (automati-cally or manually) to reduce paperwork and field time. Saved readings can be recalled at any time.

Damping Rates
Exponential damping with user se-lectable time constant from 0.1 to 25 seconds.

Min/Max Capture
Capture speed is equal to the selected damping rate.

Field Re-cal
The M2 series can be recalibrated in the field for zero, span, and linearity. The user has the option to select a 1 point or 5 point calibration procedure. Enables users with accurate primary standards to calibrate their devices locally if desired.

Auto Shut-Off
User selectable shut-off. Programmable at 10, 20, 30, 45, 60 minutes.

Rely On The Trusted Leader In Measurement And Calibration

M2 Series Smart Manometer

Technical Specifications

Base Unit
400 grams (165 X 91 X 57 mm) polycarbonate, permanently dissipative, ESD protection.

Keypad
Sealed membrane type with 5 dome contact style buttons.

Display
5 significant digit LCD (6mm high) 2 line x 16 alphanumeric characters with contrast adjustment. Two stage backlight with visual overrange indication.

Power
4 each AA batteries providing over 100 hours of continuous use.

Wetted Parts
DN: 316L SS, brass, viton
GI: 316L SS
AI: 316L SS

Connections
1/8" female NPT, 316L SS

NIST Traceable Accuracy
Pressure: + 0.05% FS standard, optional ± 0.025% FS (DN0010 is ± 0.05% FS only) . Accuracy statement includes all affects of temperature over specified operating range. Note: For "CI" type pressure sensors use Upper Range Limit (URL) as full scale in accuracy calculations.

Temperature Specifications
Storage: -40° C to 60° C
Operating: -5° C to 50° C Intrinsically Safe (IS) Models
-20° C to 50° C General Purpose (GP) Models

Pressure Ranges

DN0010	0 to 3.000 kPa +/- 0.05% FSV - Full Scale Value	Differential
DN0028	0 to 7.0000 kPa +/- 0.05% FSV	Differential
DN0200	0 to 35.000 kPa +/- 0.05% FSV	Differential
DN0415	0 to 120.00 kPa +/- 0.05% FSV	Differential
DN2000	0 to 500.00 kPa +/- 0.05% FSV	Differential
GI0015	0 to 100.00 kPa +/- 0.05 % FSV	Gauge
GI0030	0 to 200.00 kPa +/- 0.05% FSV	Gauge
GI0050	0 to 350.00 kPa +/- 0.05% FSV	Gauge
GI0100	0 to 700.00 kPa +/- 0.05% FSV	Gauge
GI0300	0 to 2000.0 kPa +/- 0.05% FSV	Gauge
GI0500	0 to 3500 kPa +/- 0.05% FSV	Gauge
GI1000	0 to 7000.0 kPa +/- 0.05% FSV	Gauge
GI3000	0 to 20000 kPa +/- 0.05% FSV	Gauge
CI0015*	-100.00 to 100.00 kPa +/- 0.05% FSV	Compound
CI0030*	-100 to 200.00 kPa +/- 0.05% FSV	Compound
CI0050*	-100 to 350.00 kPa +/- 0.05% FSV	Compound
CI0100*	-100 to 700.00 kPa +/- 0.05% FSV	Compound
CI0300*	-100.0 to 2000.0 kPa +/- 0.05% FSV	Compound
CI0500*	-100 to 3500 kPa +/- 0.05% FSV	Compound
CI1000*	-100 to 7000.0 kPa +/- 0.05% FSV	Compound
CI3000*	-100 to 20000 kPa +/- 0.05% FSV	Compound
AI0017	0.05% FSV 0-17 PSIA (0-120.00 kPa A)	Absolute
AI0038	0.05 % FSV 0-38 PSIA (0-300.00 kPa A)	Absolute
AI0100	0.05% FSV 0-100 PSIA (0-700.00 kPa A)	Absolute
AI1000	0.05% FSV 0-1000 PSIA (0-7000.0 kPa A)	Absolute

*CI accuracy calculated using URL as FS

Certifications
CE 0539 Ex II 1 G
Ex ia IIC T4
DEMKO 06 ATEX 0615699 IP 40

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Class I,Div.1 Groups A,B,C,D, T4
Intrinsically Safe, Exia
Class I, Zone 0, AEx ia IIC T4
Class I, Zone 0, Ex ia IIC T4
-5 C < Ta < +50 C

Ordering Information

Model No & Description
M200 - (specify pressure range) - Smart Manometer
M201 - (specify pressure range) - Rotary Gas Meter Tester (only available with DN0028 or DN0200 sensor range)

All Models Include
- Protective Red Boot
- 4 AA Alkaline batteries
- Hard copy user's manual

Optional Accessories

Z9P000107	Hard Carrying Case
Z9P000108	Hard Carrying Case with Vacuum Pump
Z9P000109	Hard Carrying Case with Pressure Pump
ZA34386	Connector Kit, brass

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M200-DI FOR WET/WET DP APPLICATIONS

Meriam's **M200-DI** handheld Smart Manometer for liquids brings high accuracy to wet/wet differential pressure applications. Potentially corrosive or wet gasses are also handled by the M200-DI. NIST traceable accuracy of ± 0.05% FS (± 0.025% FS optional) independent of temperature effect from -5° to 50° C for Intrinsically Safe models. The accuracy statement is good from -20 ° to 50° C for general purpose models.