



#### Accuracy

Accuracy:  $\pm 0.05\%$  FS or optional  $\pm 0.025\%$  F.S. No temperature effect from 23° to 122° F (-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, or 60° F), PSI, mm of Hg, inches of Hg, mBars, Bars, kPa, kg/cm<sup>2</sup>, 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.

# M2 SERIES meriam 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  $\pm 0.025\%$  of F.S., independent of temperature effect, at the lowest prices available. Pressure ranges from 10" H<sub>2</sub>O F.S. to 3000 PSIG F.S. are available.

M2 pressure sensors are available to measure gauge, compound, differential, absolute 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.

#### **Pressure Limits**

Twice range on Gauge and Absolute (GI and AI) units. Twice range on Differential (DN) units when pressurized on high side only and 150 PSI (10.5 Kg/ cm<sup>2</sup>) static when applied to both sides of the sensor simultaneously.

#### Leak Test

Allows users to view Min/Max pressure 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 (automatically or manually) to reduce paperwork and field time. Saved readings can be recalled at any time.

#### **Damping Rates**

Exponential damping with user selectable 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.

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### **Rely On The Trusted Leader In Measurement And Calibration**

## **M2 Series Smart Manometer**

#### **Technical Specifications**

#### Base Unit

14 ounce (6.5" X 3.6" X 2.25") polycarbonate, permanently dissipative, ESD protection.

#### Keypad

Sealed membrane type with 5 dome contact style buttons.

#### Display

5 significant digit LCD (0.25" 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:  $\pm 0.05\%$  F.S. standard, optional  $\pm 0.025\%$  F.S. (DN0010 is  $\pm 0.05\%$  F.S. only). Accuracy statement includes all affects of temperature over specified operating range.

Note: For "CI" type pressure sensors use URL as full scale in accuracy calculations.

#### **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





#### **Temperature Specifications**

Storage:	-40° F to 140° F	(-40° C to 60° C)
Operating:	23° F to 122° F	(-5° C to 50° C) I.S Models
	-4° F to 122° F	(-20° C to 50° C) G.P Modles

#### **Pressure Ranges**

Co	suic i an	yes	
	DN0010	0-10.000" H2O	Differential
	DN0028	0-28.000" H2O	Differential
	DN0200	0-200.00" H2O	Differential
	DN0415	0-415.00" H2O	Differential
	DN2000	0-2000.0" H2O	Differential
	GI0015	0-15.000 PSI	Gauge
	GI0030	0-30.000 PSI	Gauge
	GI0050	0-50.000 PSI	Gauge
	GI0100	0-100.00 PSI	Gauge
	GI0300	0-300.00 PSI	Gauge
	GI0500	0-500.00 PSI	Gauge
	GI1000	0-1000.0 PSI	Gauge
	GI3000	0-3000.0 PSI	Gauge
	CI0015*	-15 to +15.000 PSI	Compound
	CI0030*	-15 to +30.000 PSI	Compound
	CI0050*	-15 to +50.000 PSI	Compound
	CI0100*	-15 to +100.00 PSI	Compound
	CI0300*	-15 to +300.00 PSI	Compound
	CI0500*	-15 to +500.00 PSI	Compound
	CI1000*	-15 to +1000.0 PSI	Compound
	CI3000*	-15 to +3000.0 PSI	Compound
	AI0017	0-17.403 PSI	Absolute
	AI0038	0-38.674 PSI	Absolute
	AI0100	0-100.00 PSI	Absolute
	AI1000	0-1000.0 PSI	Absolute

\* CI accuracy calculated using URL as F.S.

#### Certifications **€ € 0539 €x** II 1 G

Ex ia IIC T4 DEMKO 06 ATEX 0615699 IP 40

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

#### **Optional Accessories**

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

#### 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  $\pm 0.05\%$  FS ( $\pm 0.025\%$  FS optional) independent of temperature effect from 23° to 122 °F for Intrinsically Safe models. The accuracy statement is good from -4 ° to 122 °F for general purpose models.

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