

M200-LS LAB STANDARD SMART MANOMETERS



Meriam's M200LS Lab Standard Smart Manometer offers the best available pressure measurement accuracy in a portable, handheld format. The NIST traceable accuracy is typically $\pm 0.01\%$ of F.S. and is independent of temperature effect over an operating temperature range of 59° to 86° F. Pressure ranges from 28" H₂O F.S. to 500 PSIG F.S. are available.

M2 pressure sensors are available to measure gauge, 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.

Accuracy

Accuracy: $\pm 0.01\%$ FS
($\pm 0.02\%$ F.S. for DN0028) No temperature effect from 59° to 86° F (15° to 30° C).

Certifications

CE 0539

Engineering Units

Inches of H₂O (select 4° C, 20° C, or 60° F), PSI, mm of Hg, inches of Hg, mBars, Bars, kPa, kg/cm², cm of H₂O 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 (GI and AI) units. Twice range on Differential (DN) units when pressurized on high side only and 150 PSI (10.5 kg/cm²) static when applied to both sides of the sensor simultaneously.

Auto Shut-Off

User selectable shut-off. Programmable for Disable, 10, 20, 30, 45, 60 minutes.

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.



Relv On The Trusted Leader In Measurement And Calibration

M200LS Lab Standard 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: $\pm 0.01\%$ of F.S. DN0028 $\pm 0.02\%$ of F.S. Accuracy statement includes all affects of temperature over specified operating range.

Temperature Specifications

Storage: -40°F to 140°F (-40°C to 60°C)

Operating: 59°F to 86°F (15°C to 30°C)

Pressure Ranges

DN0028	0-28" H ₂ O	Differential ($\pm 0.02\%$ F.S.)
DN0200	0-200" H ₂ O	Differential
DN2000	0-2000" H ₂ O	Differential
GI0015	0-15 PSI	Gauge
GI0030	0-30 PSI	Gauge
GI0050	0-50 PSI	Gauge
GI0100	0-100 PSI	Gauge
GI0500	0-500 PSI	Gauge
AI0900	0-900 mm Hg	Absolute
AI2000	0-2000 mm Hg	Absolute

Certifications

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Ordering Information

Model No & Description

M200LS - (specify pressure range) - Smart Manometer

All Models Include

- Protective Platinum 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



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 gases 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. Rated for static pressure up to 1000 PSIG!