

# 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  $\pm 0.01\%$  of Full Scale (F.S.) from 15° to 30° C and  $\pm 0.025\%$  of F.S. from -20° to 15° C and 30° to 50° C. Pressure ranges from 28" H<sub>2</sub>O 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

NIST Traceable:  
 $\pm 0.010\%$  F.S. from 15° to 30° C  
 $\pm 0.025\%$  F.S. from -20° to 15° C & 30° to 50° C

#### Certifications

CE 0539

#### Engineering Units

Inches of H<sub>2</sub>O (select 4° C, 20° C, or 60° F),  
PSI, mm of Hg, inches of Hg, mbar, bar,  
kPa, kg/cm<sup>2</sup>, cm of H<sub>2</sub>O 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 re-  
quirements.

#### 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.

#### 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 pres-  
sure 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 damp-  
ing 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 calibra-  
tion procedure. Enables users with accurate  
primary standards to calibrate their devices  
locally if desired.



## 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.

## 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

### Temperature Specifications

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

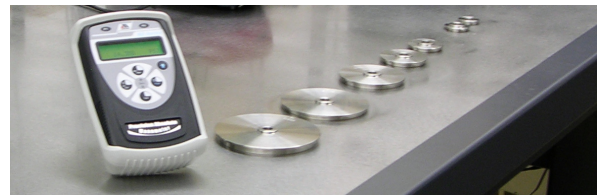
Operating: 59° F to 86° F (15° C to 30° C)

### Pressure Ranges

	0-28" H <sub>2</sub> O	Differential ( $\pm 0.02\%$ F.S.)
	0-200" H <sub>2</sub> O	Differential
DN2000	0-2000" H <sub>2</sub> 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

CE 0539



### 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!