Smart Manometer

Digital Manometer

Meriam Instrument's 350 Series Smart Manometers are the first pressure measuring instruments with accuracy of $\pm 0.025\%$ of F.S. at truly low prices. They are microprocessor-based pressure sensing devices that can measure gauge, differential, absolute or vacuum pressure. The displays can read out in any of eleven engineering units and can also be scaled to special user units for pressure. Differential models offer a flow function to display square root 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 other varying pressure signals and a Hold button can freeze the display at any point of interest.



Standard Features on the 350 Series Digital Manometer Family

- Approvals: CE compliant and CSA Intrinsically safe (Optional)
- **Display:** 5 significant digit LCD (0.25" high) 2 line x 16 alphanumeric characters
- **NIST traceability:** NIST certificate supplied with all models.
- Damping rates: User selectable from 0.1 to 25 seconds
- Power: 9-volt alkaline battery with user enabled automatic shut off. 9 volt Lithium battery is recommended for use below 32°F (0°C)
- Temperature: Storage: -40°F to 140°F (-40 to 60°C) Operating: 23°F to 122°F (-5 to 50°C)
- Min/Max capture capture speed is equal to the selected damping rate
- **Process connection** 1/8" female NPT, 316ss

- Media compatibility: Non-isolated Differential sensor (DN) for clean, dry, non-corrosive gases. Isolated Gauge and Absolute sensor (GI and AI) for fluids compatible with 316ss.
- **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.
- Engineering units: inches of H₂O (with three choices of reference temperature), PSI, mm of Hg, inches of Hg, mBars, Bars, kPa, kg/cm², cm of H₂O and user selectable scaling.
- Contrast adjustment: Adjusts display for easier viewing
- Enclosure: 14 ounce (6.5" X 3.6" X 2.25") ABS plastic case.
- Auto Shut-Off: user selectable shut-off time period.

Model 350 Smart Manometer Test Gauge

- Accuracy *: ± 0.05% of F.S.
 ± 0.1% of F.S. 20" H₂O differential range only
- Range: 20" H₂O, 200" H₂O and 2000" H₂O DP 20 PSIG, 200 PSIG and 2000 PSIG Gauge 2000 mm Hg Absolute

Model 351 Smart Manometer Calibrator

- Accuracy *: ± 0.025% of F.S.
- Range: 200" H₂O, 200" H₂O and 2000" H₂O 20 PSIG, 200 PSIG and 2000 PSIG 2000 mm Hg Absolute
- * Includes the combined effects of temperature, linearity, repeatability, hysteresis and resolution.

Smart Manometer Accessories



Several accessory items are available for Smart Manometers and Digital Manometers to help complete your pressure calibration needs. Multi-bay carrying cases provide convenient portability and organization of fittings, hand pumps, tubing and up to two manometers.

Description	Part Number
Dual Bay Carrying Case(see photos at left)	A900016-50001
Single Bay Carrying Case for Digital Mano	A34957
Pressure Hand Pump	961P
Vacuum Hand Pump with vernier variator	961V
Pressure Vacuum Variator (lab use)	971A3
Connector Kit – includes fittings, tees, tubing	A34386
and reducers to fit up to most	
pressure instruments	
One valve, push to read equalizing manifold	A900020-90772
for differential models only	