



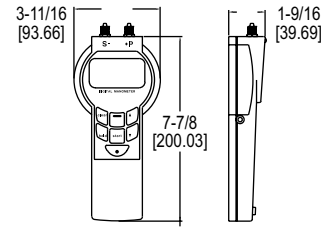
SERIES HM35



# PRECISION DIGITAL PRESSURE MANOMETER

Up to 0.05% Accuracy, Graphical Display, Data Logging Capability

CALIBRATION SERVICES AVAILABLE



The Series HM35 Precision Digital Pressure Manometer is designed to reliably measure and log absolute pressure, differential pressure, or gage pressure with up to 0.05% accuracy. The data logging function can store up to 10,742 readings and transmit the readings to a PC through an IR serial port. The large display can graphically display trends in the data as well as peaks and valleys.

**BENEFITS/FEATURES**

- Able to record up to 10,742 readings, which can be downloaded to a PC
- Up to 0.05% accuracy for use in critical applications
- Measure absolute, differential, or gage pressure

**APPLICATIONS**

- Calibration facilities
- Laboratories

MODEL CHART - ERROR LIMIT 0.2% FS FOR GAGE, VACUUM, AND DIFFERENTIAL PRESSURE		
Model	Range	Over Pressure
HM3531DLB300	0 to 10 in w.c. (0-2.5 kPa)	50 in w.c.
HM3531DLC300	0 to 28 in w.c. (0-7 kPa)	140 in w.c.
HM3531DLE300	0 to 80 in w.c. (0-20 kPa)	600 in w.c.
HM3531DLF300	0 to 120 in w.c. (0-30 kPa)	600 in w.c.
HM3531DLG300	0 to 200 in w.c. (0-50 kPa)	58 psi
HM3531DLH300	0 to 14.5 psi (0-100 kPa)	58 psi

**Note:** For higher accuracy models, change the 10th digit from a 3 to a 1 (0.05% FS), 2 (0.1% FS), or 6 (0.1% of reading); higher accuracies are only available on 0 to 28 in of w.c. range or higher.

**Example:** HM3531DLC100 (0 to 28 in w.c. with 0.05% accuracy); consult factory.

**SPECIFICATIONS**

**Service:** Air and compatible gases.  
**Wetted Materials:** 18/8 stainless steel.  
**Accuracy:** (Includes linearity, hysteresis, and repeatability): Depending on model; ±0.20% FS ±1 digit; ±0.10% FS ±1 digit; ±0.05% FS ±1 digit.  
**Temperature Limits:** 32 to 122°F (0 to 50°C).  
**Storage Temperature:** -4 to 140°F (-20 to 60°C).  
**Humidity:** Maximum 95% RH non-condensing.  
**Display:** Graphical back lit LCD. 128 x 64 points.

**Power Requirements:** (3) 1.5 V AA alkaline batteries, installed functional, user replaceable. Can operate on 6 to 9 VDC external power.  
**Current Consumption:** 25 mA without back lit display, IR, or buzzer.  
**Memory:** 10,742 readings. Recording intervals adjustable from 1 s to 24 hrs or manual.  
**Case Protection:** IP54 (NEMA 3).  
**Process Connections:** Hose 4/6 mm or 1/8" NPT.  
**Weight:** 10.5 oz (300 g).

**OPTIONS**

Use order code:	Description
NISTCAL-MD1	NIST traceable calibration certificate

**Note:** New units include data report/calibration report. NIST can be provided for the additional fee.

**ACCESSORIES**

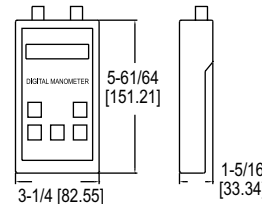
Model	Description
HM28-0	1/8" NPT adaptor (1 piece)
HM35-1	Communication software key
HM35-2	Infrared RS-232 serial adaptor, required to download stored data to a PC
HM35-3	External power converter with U.S. plug adaptor, input 100 to 240 VAC, 50/60 Hz

SERIES HM28

# PRECISION HANDHELD DIGITAL MANOMETER

High Accuracy (0.2%, 0.1% or 0.05%), Differential, Gage or Absolute

CALIBRATION SERVICES AVAILABLE



The Series HM28 Precision Handheld Digital Manometer is designed to measure a wide range of pressures with up to 0.05% accuracy. The data logging function can store up to 964 readings and transmit the readings to a PC through an IR serial report. The dual line LCD is able to display a resolution to 0.001 of the selected unit and indicate peaks and valleys.

**BENEFITS/FEATURES**

- Measures differential, gage, or absolute pressure
- Able to record up to 964 readings, which can be downloaded to a PC
- Up to 0.05% accuracy

**APPLICATIONS**

- Calibration facilities
- Laboratories

MODEL CHART	
Model	Features
<b>Error limit 0.2% FS for gage, underpressure and differential pressure</b>	
HM28D3B10000	0 to 10 in w.c. (2.5 kPa)
HM28D3C10000	0 to 28 in w.c. (7 kPa)
HM28D3F10000	0 to 120 in w.c. (30 kPa)
<b>Error limit 0.05% FS for gage, underpressure and differential pressure</b>	
HM28D3C30000	0 to 28 in w.c. (7 kPa)
HM28D3F30000	0 to 120 in w.c. (30 kPa)
HM28D3K30000	0 to 100 psi (700 kPa)

**For absolute pressure**

HM28A3110000 | 0 to 15.9 psia (0.2% FS (110 kPa abs))

**Note:** Consult factory for 0.10% models.

**SPECIFICATIONS**

**Service:** Air and compatible gases.  
**Accuracy:** (Includes linearity, hysteresis, and repeatability): per order code. ±0.20% FS ±1 digit; ±0.10% FS ±1 digit; ±0.05% FS ±1 digit.  
**Wetted Materials:** 18/8 stainless steel.  
**Temperature Limits:** 23 to 122°F (-5 to 50°C).  
**Storage Temperature:** -4 to 140°F (-20 to 60°C).  
**Humidity:** 30 to 95% rH, non-condensing.  
**Display:** 2 line, 16 character, dot matrix LCD, with switchable display sizes.  
**Power Requirements:** 9 V alkaline battery, installed functional, user replaceable. Can operate from external power supply of 7-14 VDC.

**Current Consumption:** < 9 mA.  
**Memory:** 964 measured values. Recording intervals adjustable from manual, 1, 5, 10, 20, 30 s, 1, 2, 3, 5, 10, 30, 60 minutes.  
**Case Protection:** IP54 (NEMA 3).  
**Case Dimensions:** 6" x 3.27" x 1.34" (152 x 83 x 34 mm).  
**Process Connections:** Hose; 4/6 mm or 1/8" NPT.  
**Maximum Measurement Rates:** Stand alone: 2-1/2 readings/s (0.1% and 0.05% ratings), 5 readings/s (0.2% rating). Output to RS-232: 20 measurements/s (0.2% rating), 10 measurements/s (0.1% and 0.05% ratings).  
**RS-232 Baud Rate:** Adjustable, 1200, 2400, 4800, or 9600 baud.  
**Weight:** 9.5 oz (270 g).

**OPTIONS**

Use order code:	Description
NISTCAL-MD1	NIST traceable calibration certificate

**Note:** New units include data report/calibration report. NIST can be provided for the additional fee.

**ACCESSORIES**

Model	Description
HM28-0	1/8" NPT adaptor (1 piece)
HM28-1	Communication software and cable
HM28-2	Universal power adaptor