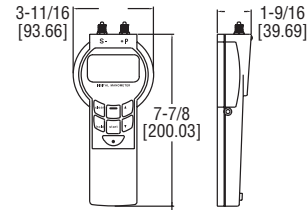


# PRECISION DIGITAL PRESSURE MANOMETER

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



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.

**FEATURES/BENEFITS**

- 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;  $\pm 0.20\%$  FS  $\pm 1$  digit;  $\pm 0.10\%$  FS  $\pm 1$  digit;  $\pm 0.05\%$  FS  $\pm 1$  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).

**Weight:** 10.5 oz (300 g).

**Process Connections:** Hose 4/6 mm or 1/8" NPT.

**Agency Approvals:** CE.

**ACCESSORIES**

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

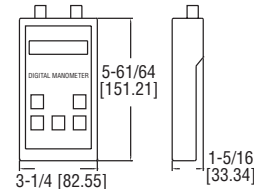
**OPTION**

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

SERIES HM28

# PRECISION HANDHELD DIGITAL MANOMETER

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



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.

**FEATURES/BENEFITS**

- 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)
<b>For absolute pressure</b>	
HM28A3I10000	0 to 15.9 psia (0.2% FS (110 kPa abs))

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

**SPECIFICATIONS**

**Service:** Air and compatible gases.

**Wetted Materials:** 18/8 stainless steel.

**Accuracy:** (Includes linearity, hysteresis, and repeatability): per order code.  $\pm 0.20\%$  FS  $\pm 1$  digit;  $\pm 0.10\%$  FS  $\pm 1$  digit;  $\pm 0.05\%$  FS  $\pm 1$  digit.

**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 to 14 VDC.

**Current Consumption:** < 9 mA. **Memory:** 964 measured values. Recording intervals adjustable from manual, 1, 5, 10, 20, 30 seconds, 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).

**Weight:** 9.5 oz (270 g).

**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.

**Agency Approvals:** CE.

**ACCESSORIES**

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

**OPTION**

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