

HIGH-ACCURACY DIGITAL PRESSURE GAUGES WITH NIST CERTIFICATION

Three Power Options: Battery Powered, Loop Powered, AC/DC Powered

DPG1001 Series



- ✓ NIST Certification Included
- ✓ High-Accuracy $\pm 0.10\%$ Test Gauge
- ✓ 316 SS Wetted Parts
- ✓ Easy-to-Read $3\frac{1}{2}$ Digit LCD
- ✓ Rugged Aluminum Case

The DPG1001 Series is a versatile family of industrial pressure gauges. All DPG1001 models feature a large 13 mm H ($\frac{1}{2}$ ") digital display in a rugged, splashproof extruded aluminum case.

A $\frac{1}{4}$ -18 NPT 316 stainless steel fitting is standard for the pressure connection. Media compatibility includes all liquids and gases compatible with 316 SS.

The DPG1001B features a wide operating temperature range of -20 to 85°C (-4 to 185°F). Many standard pressure ranges are available. The DPG1001 Series also features $\pm 0.10\%$ accuracy, 2x overpressure, and 4x burst specifications.

DPG1001AD (AC/DC Powered)

The DPG1001AD is powered by any AC source of 8 to 24 Vac 50/60 Hz or any DC source of 9 to 32 Vdc. No recalibration is needed, and no jumpers have to be moved to use either AC or DC power within the specified range. No polarity needs to be observed when connecting a DC supply. Therefore, the DPG1001AD can be used with inexpensive, unregulated AC or DC power sources in applications requiring continuous pressure display.



DPG1001AD-100G shown smaller than actual size.



DPG1001B-100G shown smaller than actual size.

DPG1001B (Battery Powered)

The DPG1001B is powered by replaceable batteries that can operate the gauge for approximately 2500 hours. All DPG1001B models include standard auto shut-off circuitry to conserve battery life. A low-battery indication is also standard. An optional rubber boot (DPG1000-RB) is available as well.

Requiring no electrical connection, the DPG1001B is equally suited to portable or fixed applications.

DPG1001L-100G shown smaller than actual size.



DPG1001L (Loop Powered)

All operating power for the DPG1001L gauge is supplied by the 4 to 20 mA output loop. This "2-wire" connection allows the DPG1001L to be used as a digital indicating transmitter in any 4 to 20 mA current loop application. Individual, non-interactive controls are available for the zero/span display and the output loop 4 to 20 mA settings. Connection to the DPG1001L is made via a 2-conductor cable at the back of the gauge.

A front-accessible TEST pushbutton switches the display and output loop to a preset level determined by the setting of a "Test Calibration" potentiometer. This feature allows easy testing of the display and process loop with a preset input signal in place of the actual input. The DPG1001L also includes "low loop" warning circuitry. This circuitry indicates on the display when the loop supply voltage falls below a level that may not be sufficient to drive a full 20 mA into the loop load resistance. These 2 proprietary features make the DPG1001L easier to set up and maintain.

HIGH-ACCURACY DIGITAL PRESSURE GAUGES

SPECIFICATIONS

Power:

DPG1001B: 2 "AA" batteries (included) provide up to 2500 hr life typically; auto shut-off: 5 minutes; LOBAT indication
DPG1001L: 8 to 32 Vdc at gauge; reverse polarity protected
DPG1001AD: 8 to 24 Vac 50/60 Hz or 9 to 32 Vdc; 5 mA max

Standard Ranges: 0 to 5.00, 0 to 15.00, 0 to 100.0, 0 to 500, 0 to 1000 psi gauge

Display Type/Size: LCD, 13 mm (0.5") digit height, 3 readings per second

Controls and Location:

DPG1001B and DPG1001AD: Display zero/span, non-interactive, $\pm 15\%$ range; top-accessible, multiturn potentiometers

DPG1001L: Display zero/span, non-interactive, $\pm 15\%$ range; test calibration level, 0 to 100% range; top-accessible, multiturn potentiometers; loop 4 mA and 20 mA internal potentiometers

Accuracy: $\pm 0.10\%$ FSO or better, ± 1 least-significant digit (includes linearity, hysteresis, repeatability); NIST certificate included

Temperature Stability:

$\pm 0.003\%$ of span per $^{\circ}\text{C}$ (typical)
 $\pm 0.01\%$ of span per $^{\circ}\text{C}$ (max)
 0 to 70°C (-18 to 158°F)

Storage Temperature: -55 to 95°C (-67 to 203°F)

Operating Temperature: -20 to 85°C (-4 to 185°F)

Compensated Temperature:

0 to 70°C (32 to 158°F)

Weight: Approx. 255 g (9 oz)

Standard Case: Extruded aluminum case, epoxy powder coated; polycarbonate cover, front and rear gaskets

Pressure Connection:

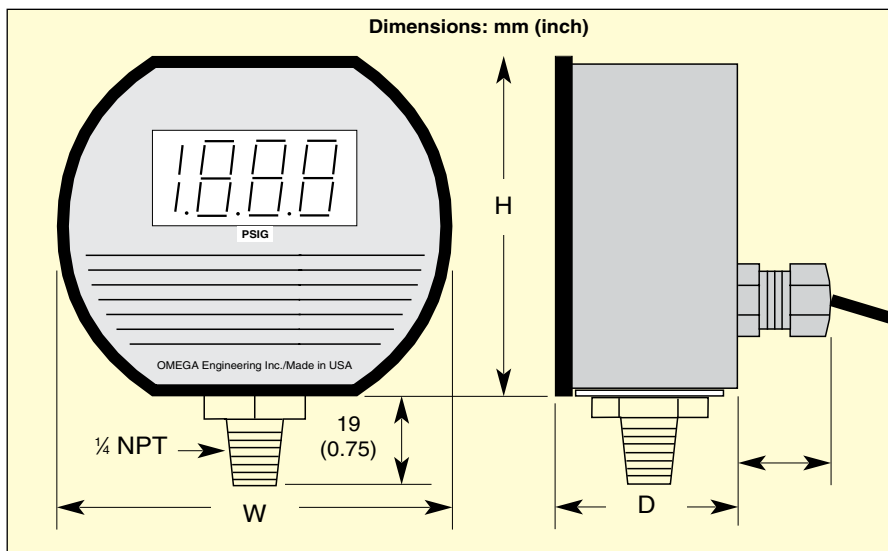
316 SS, $\frac{1}{4}$ -18 MNPT

Wetted Parts: 316 SS

Electrical Connection: 0.9 m (3') 2-conductor 22 AWG cable (none required on DPG1001B)

Overpressure: 2x rated pressure min

Burst Pressure: 4x rated pressure min



Dimensions: mm (inch)

	W	H	D
Standard Case	86 (3.38)	73 (2.88)	42 (1.65)

To Order Visit omega.com/dpg1001 for Pricing and Details

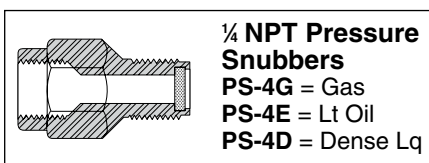
RANGE (psi)	MODEL NO.	COMPATIBLE METERS
BATTERY POWERED - STANDARD CASE		
0 to 5.00	DPG1001B-05G	N/A
0 to 15.00	DPG1001B-15G	N/A
0 to 100.0	DPG1001B-100G	N/A
0 to 500	DPG1001B-500G	N/A
0 to 1000	DPG1001B-1KG	N/A
LOOP POWERED - STANDARD CASE		
0 to 5.00	DPG1001L-05G	DP41-E, DP25B-E, DP24-E
0 to 15.00	DPG1001L-15G	DP41-E, DP25B-E, DP24-E
0 to 100.0	DPG1001L-100G	DP41-E, DP25B-E, DP24-E
0 to 500	DPG1001L-500G	DP41-E, DP25B-E, DP24-E
0 to 1000	DPG1001L-1KG	DP41-E, DP25B-E, DP24-E
AC/DC POWERED - STANDARD CASE		
0 to 5.00	DPG1001AD-05G	N/A
0 to 15.00	DPG1001AD-15G	N/A
0 to 100.0	DPG1001AD-100G	N/A
0 to 500	DPG1001AD-500G	N/A
0 to 1000	DPG1001AD-1KG	N/A

Comes complete with operator's manual.

To order wall-mount 115 Vac power supply, specify **DPG1000-PS**.

Custom ranges not available.

Ordering Example: **DPG1001B-100G**, high-accuracy battery-powered digital gauge with a range of 0 to 100.0 psig, NIST certificate included.



ACCESSORY

MODEL NO.	DESCRIPTION
DPG1000-PS	Wall-mount 115 Vac power supply