



# PG-2000

## Digital Pressure Gauge

- Large 4 digit display with 0.5 in. digits
- Available ranges from 0 up to 2,000 psi
- Rugged, chemical-resistant case
- Display capability to 2000
- Battery operated with convenient on/off switch
- $\pm 0.25\%$  accuracy of full scale (on selected ranges)
- Gauge reference pressure
- Internally complaint to CE
- On/off button
- 1/4" NPTM process connection

### Options

- 16 minute auto-off optional at no extra cost
- Rear pressure port
- Zero adjust knob
- External power
- $\pm 0.25\%$  accuracy with NIST certification (on select ranges)

### Accessories

- Panel mount flange (rear pressure port only)
- AC to DC external power supply
- Shock dampening rubber boot

### Operational Description

#### Battery Powered Digital Gauge Offers High Accuracy at Low Cost

Utilizing a solid state design, the PG-2000 incorporates a semi-conductor strain gage pressure transducer as the sensing element, conditioned by state of the art surface mount electronics. The unit has a very low power requirement, resulting in a battery life of two years in typical use. The large 4 digit display and  $\pm 0.25\%$  full scale accuracy allows it to replace much larger mechanical gauges.

### Applications

No special tools or adaptors are required for installation of the PG-2000. This makes the unit an easy, cost-effective replacement for less accurate, standard mechanical gauges. The unit's long life, ease of operation, high accuracy, and low cost make it perfect for all applications where standard 2 1/2 in. or larger mechanical gauges have been used.



## ■ Specifications

Performance	
<b>Standard Pressure Ranges:</b> See table at right	
<b>Overpressure:</b> 2x full scale	
<b>Burst Pressure:</b> 10x full scale or 20,000 psi (whichever is less)	
<b>Accuracy (linearity &amp; hysteresis):</b> ±0.25% of full scale (B.F.S.L.) or 2 digital counts, whichever is greater; NIST traceable certification also available	
<b>Stability - One Year Zero Drift:</b> <b>15-5:</b> < ±0.5% F.S., <b>316:</b> < ±1% F.S.	
<b>Thermal Zero Shift</b>	> <b>100 psi:</b> ±0.02% F.S./°F ≤ <b>100 psi:</b> ±0.04% F.S./°F
<b>Thermal Sensitivity Shift</b>	> <b>100 psi:</b> ±0.02% F.S./°F ≤ <b>100 psi:</b> ±0.04% F.S./°F
<b>Life:</b> 10 million cycles minimum	
Environmental	
<b>Compensated Temp:</b> 20 to 130°F (-7 to 54°C)	
<b>Storage Temp:</b> -40 to 160°F (-40 to 71°C)	
<b>Operating Temp:</b> 0 to 160°F (-18 to 71°C)	
Electrical	
<b>Batteries:</b> Standard 9 V (1), user replaceable (2-year life typical with auto off option)	
<b>External Power:</b> 10-32 VDC	
<b>Display Type:</b> 4 digit LCD, 0.5 in. digits	
<b>Display Resolution:</b> 1 part in 2000	
<b>Low Battery Detection:</b> Displays "LBAT" @ 4.0 VDC ±5% with Vin = 9.0 VDC	
<b>Adjustments:</b> Front accessible "Z": Zero Adjust; "S": Span Adjust	
<b>Auto Off:</b> 16 minutes	
Physical	
<b>Weight:</b> 0.36 lb.	
Construction Materials	
<b>Case:</b> Injection molded case material EMI-X® PDX-W-88341	
<b>Wetted Materials:</b> 15-5 SS; 316L SS available at no extra charge (High resolution ranges under 100 psi, in 316L SS incorporate a Hastelloy® C276 diaphragm); One piece Hastelloy® fitting also available (minimum quantities required)	
<b>External Power Connector:</b> 1/8 in. – 3 conductor (included with optional external power selection)	
<b>External Power Mating Connector:</b> 1/8 in. – 3 conductor (included with optional external power selection)	
<b>Process Cavity Volume:</b> 0.07³ in.	

Specifications are subject to change without notice.

## ■ Linear Accuracy Chart

Full Scale Display	Display Resolution	Standard Linear Accuracy	Accuracy Options
20.00*	0.01	0.25%	N0, N1
100.0	0.1	0.25%	N0, N1
160.0	0.1	0.25%	N0, N1
200.0	0.1	0.25%	N0, N1
250.0	0.1	Better than 1%	N3, N4
500.0	0.1	Better than 1%	N3, N4
1000	1	0.25%	N0, N1
2000	1	0.25%	N0, N1

\*Requires high resolution option

Note: This table lists linear accuracies for specific ranges. For an explanation of how linear accuracy is calculated, please contact APG.

## ■ Common Pressure Ranges

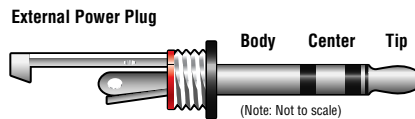
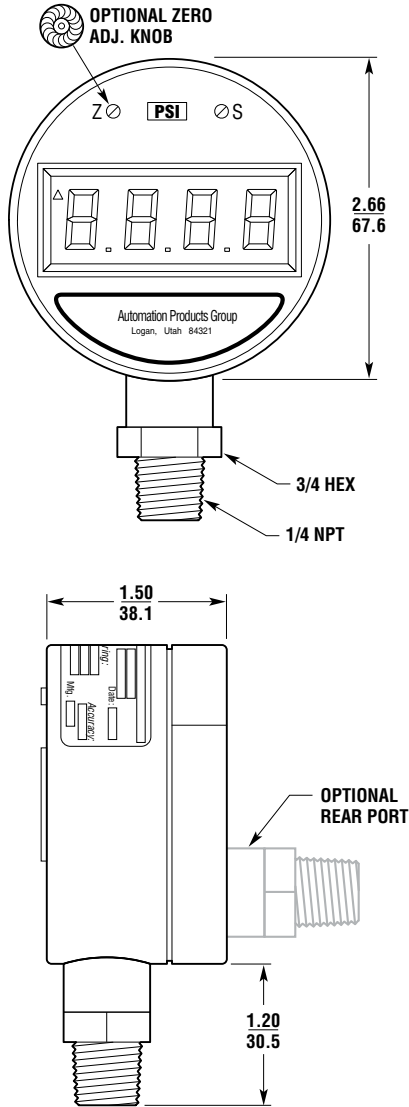
Range Option	Range	Unit of Measure	Display Resolution
<b>20</b>	0 to 20	psi	0.01*
<b>100</b>	0 to 100	psi	0.1
<b>160</b>	0 to 160	psi	0.1
<b>200</b>	0 to 200	psi	0.1
<b>250</b>	0 to 250	psi	0.1
<b>500</b>	0 to 500	psi	0.1
<b>1000</b>	0 to 1000	psi	1
<b>2000</b>	0 to 2000	psi	1

\*Requires G2 option when ordering.

## ■ Electrical Cable Length Table

	Cable Length
<b>W0</b> ^	0 ft.
<b>W1</b>	2 ft. (0.6 m)
<b>W2</b>	5 ft. (1.5 m)
<b>W3</b>	10 ft. (3 m)
<b>W4</b>	25 ft. (7.6 m)
<b>W5</b>	50 ft. (15.2 m)

■ Dimensions — in./mm



■ Ordering Information

PG-2000 - [ ] - PSI - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - PO - [ ] - [ ]	
<b>Range</b>	
20.00	
100.0	
160.0	
200.0	
250.0	
500.0	
1000	
2000	
<b>Pressure Type</b>	
G ^	Gauge
G2	High resolution gauge
<b>Auto Off</b>	
A0 ^	No auto off
A4	16 minute auto off
<b>Zero Adjustment</b>	
Z0 ^	Cover screw
Z1	Z knob
<b>Port</b>	
F0 ^	Bottom
F1	Rear
F6	Rear port with panel bracket
F7	Bottom port with rubber boot
<b>Operation</b>	
L0 ^	9V battery
L4	External power
<b>Electrical Connection</b>	
E0 ^	No connector
E2	1/8 in., 3-conductor external power
<b>Electrical Cable Length</b>	
W0	0 ft. (Use with E2 (no cable) connections)
W1-W5	Use with E2 connections. (See Electrical Cable Length chart for details)
<b>Accuracy</b> (see Linear Accuracy Chart for details)	
N0 ^	±0.25%
N1	±0.25% with NIST certification
N3	±1%
N4	±1% with NIST certification
<b>Materials</b>	
M0 ^	15-5 SS
M1	316L SS

^ This option is standard.

**Accessories**

Please order separately, by part number. When ordering a flange or boot as an accessory, they will not be installed on the gauge.

Description	Part Number
Panel mount flange (rear port only)	512598
AC to DC external power supply (includes E2 mating connector)	511641
Rubber boot	512625