Digital Pressure Gauge with 0.25% Accuracy
Series: PG7

The PG7 digital pressure gauge is built for accurate pressure measurements in indoor/outdoor environments. With its ease of operation, high accuracy, and many standard features, the PG7 is perfect for a variety of applications.

Features

- Large, full 5-digit display with 0.4 in. characters
- Available ranges from vacuum up to 30,000 psi
- Environmentally sealed housing
- Tare, Peak Hold, and Max/Min functions standard
- ±0.25% accuracy of full scale
- User selectable units of measure (psi, kPa, mmHg, cmHg, mbar, bar, inH₂O, ftH₂O, kg/cm²)
- Available RS-485/Modbus RTU output
PG7 Specifications

Performance
- Accuracy (linearity & hysteresis):
  ±0.25% of full scale (BFSL)
  ±0.1% accuracy in selected ranges
- Stability – One Year Zero Drift: <±1% FS
- Thermal Zero Shift: ±0.04% FS/ °F
- Thermal Sensitivity Shift: ±0.04% FS/ °F
- Life: 10 million cycles minimum
- Adjustments: Auto zero, Tare
- Overpressure:
  Proof: 1.5x full scale
  Burst: 3x full scale

Connectivity
- Output Options:
  4-20 mA, 0-2 VDC, 0-5 VDC, Solid State Relay, RS-485

Environmental
- Compensated Temp: 20º - 130ºF (-7º - 54ºC)
- Storage Temp: -40º - 160ºF (-40º - 71ºC)
- Operating Temp: 0º - 160ºF (-18º - 71ºC)

Certification
- NIST certification on select ranges

Electrical
- Battery Option:
  (2) AA alkaline (typical life 2,000 hrs)
  Auto-off: 15 second - 32 minutes
  Low battery detection with 25% increments
- External Power Option: 9-28 VDC
- 6-Pin Connector: R04-R6M

Physical
- Size: 3.25” x 1.6” (82.6 x 40.6 mm)
  Connection: 1.47” (37.3 mm)
- Weight: 0.36 lb (163 grams)
- Injected molded case (EMI-X ® PDX-W-88341)
- Wetted materials:
  316L SS: up to 5,000 psi
  15-5 SS: 5,000 psi to 10,000 psi
  Incoloy: 10,000 psi and above
- Display: 5 digit LCD, 0.4 in. digits

Programming
- Programmable Features:
  User selectable units of measure, Max/Min Reset & Reading, Peak-Hold, Tare, Sample Rate, Range Adjustment, Quick Calibration, Adjustable Resolution, Auto-Off
Common Model Configurations

2 AA Batteries / No Output, 1/4” NPTM Bottom Port

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Model Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG7-15.00-PSIA-F0-L0-E0-C0-P0-N0</td>
<td>0-15 PSI, Absolute Pressure Reference</td>
</tr>
<tr>
<td>PG7-15.00-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-15 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-30.00-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-30 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-50.00-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-50 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-100.00-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-100 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-200.0-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-200 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-300.0-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-300 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-500.0-PSIG-F0-L0-E0-C0-P0-N0</td>
<td>0-500 PSI, Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-1000-PSIS-F0-L0-E0-C0-P0-N0</td>
<td>0-1,000 PSI, Sealed Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-5000-PSIS-F0-L0-E0-C0-P0-N0</td>
<td>0-5,000 PSI, Sealed Gauge Pressure Reference</td>
</tr>
<tr>
<td>PG7-10000-PSIS-F0-L0-E0-C0-P0-N0</td>
<td>0-10,000 PSI, Sealed Gauge Pressure Reference</td>
</tr>
</tbody>
</table>

PG7 Accessories

Please order separately, by part number.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-pin circular mating connector (E1)</td>
<td>509110</td>
</tr>
<tr>
<td>6-pin circular mating connector (E1) with cable</td>
<td>509110-00BB (B=cable length)</td>
</tr>
<tr>
<td>Flush Panelmount bracket</td>
<td>512591</td>
</tr>
<tr>
<td>Flat mount bracket</td>
<td>110542-0002</td>
</tr>
<tr>
<td>Standoff Panelmount bracket</td>
<td>512599</td>
</tr>
<tr>
<td>Power supply w/8 pin terminal block (cable &amp; mating connector not included)</td>
<td>511643</td>
</tr>
<tr>
<td>Rubber Boot</td>
<td>512626</td>
</tr>
</tbody>
</table>

Mounting Bracket Options

Flat Mount Bracket (Black Acrylic 3/16”)

Flush Panelmount Bracket 0.62” 15.83 mm

Rubber Boot 3.4” 86.75 mm

Standoff Panelmount Bracket 0.85” 21.5 mm
Model Configuration Options

Model Number: PG7 - _____ - _____ - _____ - _____ - _____ - _____ - _____ - _____

A. Common Pressure Ranges*

☐ 5.000  ☐ 50.00  ☐ 500.0  ☐ 1000  ☐ 5000
☐ 15.00  ☐ 60.00  ☐ 500.0  ☐ 2000  ☐ 10000
☐ 30.00  ☐ 100.00  ☐ 500.0  ☐ 3000  ☐ 30000
*Other ranges available

B. Pressure Type

☐ PSIG ▲ Gauge (≤ 500 psi)
☐ PSICG ▲ Compound gauge (≤ 500 psi)
☐ PSIV ▲ Vacuum
☐ PSA ▲ Absolute (≤ 500 psi)
☐ PSIS ▲ Sealed gauge (> 500 psi)

C. Port

☐ F0 ▲ Bottom
☐ F1 Rear
☐ F2 Bottom with O_{2} clean
☐ F3 Rear with O_{2} clean
☐ F5-XX * Remote transducer with mV sensor-bottom
☐ F6 Rear port with panel bracket installed
☐ F7 Bottom port with rubber boot installed
☐ F10-XX* Remote transducer with mV sensor-rear
*XX for feet of cable, 30 ft max.

D. Operation (see Operation Table)

☐ L0-E0 ▲ (2) AA batteries; no output
☐ L1-E1*† 4-20 mA (loop powered) output
☐ L2-E1† (2) AA batteries; 0-2 VDC output
☐ L3-E1*† External power; 0-5 VDC output
☐ L4-E1*† External Power; no output
☐ L5-E1† RS-485: External Power, Logging Software
☐ L8-E0 (1) AA-size lithium battery; no output
*Auto-off options are not available with L1, L3, or L4 1M12 connector available upon request.

E. Relays

☐ C0 ▲ No Solid-State Relays
☐ C2†† (2) Solid-State Relays with Visual Indication
- 120 mA max, 240 AC/DC max, @ 25°C (77°F)
- 80 mA max, 240 AC/DC max, @ 60°C (140°F)
††Relays available with L3, L4, and L5 only.

F. Process Connection*

☐ P0 ▲ 1/4 - 18 NPTM
☐ P7 7/16 - 20 SAE Male
☐ P14 1/8 - 27 NPTM
☐ P16 PT 1/4 (BSPM 1/4)
☐ P56 F250C High Pressure (10,000 psi - 30,000 psi)
☐ P57 F560C40 High Pressure (10,000 psi - 30,000 psi)
*Other options available

G. Accuracy

1-10,000 PSI

☐ N0* ▲ ±0.25% (1% for pressure ≤ 1 psi)
☐ N1* ±0.25% with NIST certification
☐ N2* ±0.1% with NIST certification (select ranges)
*Available only up to 5,000 psi for L2 and L3

Up to 30,000 PSI

☐ N12 ±0.5%
☐ N13 ±0.5% with NIST certification

H. Backlight

☐ H0 ▲ None
☐ H1* Backlight
*Backlight available with L3, L4, or L5 only

Operation Table

<table>
<thead>
<tr>
<th>Input Voltage (Excitation)</th>
<th>L1: 4-20 mA</th>
<th>L2: 0-2 VDC</th>
<th>L3: 0-5 VDC</th>
<th>L5: RS-485</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 VDC min - 28 VDC max</td>
<td>Battery Powered</td>
<td>9-28 VDC</td>
<td>12-28 VDC</td>
<td></td>
</tr>
<tr>
<td>Input Current</td>
<td>3-30 mA max</td>
<td>6 mA max</td>
<td>6 mA max</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>4-20 mA ±0.16 mA at set points</td>
<td>Zero set point ±0.15 C with a 2 VDC span V0.02 VDC</td>
<td>0.5 VDC ±0.05 VDC at set points</td>
<td>RS-485 Modbus RTU</td>
</tr>
<tr>
<td>Wiring</td>
<td>2 wire loop powered</td>
<td>2 wire</td>
<td>3 wire Non-isolated</td>
<td>4 wire</td>
</tr>
<tr>
<td>Resolution</td>
<td>14 bit</td>
<td>14 bit</td>
<td>14 bit</td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>Reversed Polarity</td>
<td>Reversed Polarity</td>
<td>Reversed Polarity</td>
<td></td>
</tr>
<tr>
<td>Backlight</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: ▲ Indicates this option is standard.