The SERIES DPG-100 Digital Pressure Gage has a precise ±0.25% full scale accuracy. The 4 digit digital display reduce the potential for errors in readings by eliminating parallax error commonly produced with analog gages.

The DPG-100 is packaged in a durable extruded aluminum case designed to meet NEMA 4/4X. The unit is battery powered and has an auto-shutoff to conserve battery life. A four button key pad allows easy access to features without the need to work through complex menus or difficult key combinations. These features include backlight, peak and valley, auto zero and conversion of the pressure units. Readings may be converted to various engineering units. See reverse page for available units.

**DPG Quick Start Button Operation**

For complete detailed instructions on the four button operation see the Operation Chart provided on back.

- **On/Backlight:** Push to turn on; Press again for backlight. Press and hold for 5 seconds to turn unit off.
- **Zero:** Zeros the display - Press the ZERO button until dashes “---” are seen on the LCD, then release the button. If after pressing zero the display does not re-zero, the unit is no longer meeting specified accuracy and should be sent back to the factory for calibration. Do not use the zero button when pressure is applied.
- **Units:** Scroll (see next page for Model/Range Chart).
- **P/V:** Peak recorded reading retrieved by initial push of button; push again retrieves the valley or lowest value recorded.

**INSTALLATION**

When installing gage always use 1˝ hex at the base of the housing to tighten the gage to a mating fitting. Do not apply wrench to housing.

**MAINTENANCE**

A “LOW BAT” descriptor indication will appear on the display when batteries need to be replaced.

Battery Replacement: Remove the three screws on back plate. Lift back plate off by hand. Replace batteries per polarity indicators. To reassemble, ensure O-ring seats into housing evenly and press until seated completely. Replace screws.

Substitution of components may impair intrinsic safety. Batteries must be changed in a non-hazardous location only. DO NOT mix batteries from different manufacturers. DO NOT mix old batteries with new batteries. Use 1.5 volt AAA alkaline batteries Duracell® MN2400.

Enclosure parts are constructed of plastic. When cleaning the exterior surfaces use a damp cloth to avoid electrostatic sparking.

Enclosure parts are constructed of aluminum. Enclosure must be protected from mechanical friction and impact with iron/steel to prevent ignition capable sparks.

**SPECIFICATIONS**

- **Service:** Liquids and combustible compatible gases (for FM listings see agency approvals below).
- **Wetted Materials:** Type 316L SS.
- **Housing Materials:** Black polycarbonate front & back cover, anodized aluminum extruded housing with recessed grooves, polycarbonate overlay, Buna-N O-rings, 316L SS sensor construction.
- **Accuracy:** ±0.25% full scale; Ceramic Ranges: 0.5% full scale; ±1 least significant digit @ 70°F (21°C). (Includes linearity, hysteresis, repeatability).
- **Pressure Limit:** 2x pressure range for models ≤1000 psi; 5000 psi for 3000 psi range; 7500 psi for 5000 psi range.
- **Enclosure Rating:** Designed to meet NEMA 4/4X (IP65).
- **Temperature Limits:** 0 to 130°F (-18 to 55°C).
- **Thermal Effect:** Between 70 to 130°F 0.016%/F; Between 32 to 70°F is 0.026%/F; Between 10 to 32°F is 0.09%/F; Between 0 to 10°F is 0.50%/F.
- **Size:** 3.00˝ OD x 1.90 deep (max).
- **Process Connection:** 1/4˝ male NPT.
- **Weight:** 8.84 oz (275 g).
- **Display:** 4 digit (.425 H x .234W digits).
- **Sample Rate:** 2 sec.
- **Power Requirements:** (2) AAA alkaline batteries, included, user replaceable.
- **Battery Life:** 2000 hours typical; low battery indicator (60 hours in continuous use).
- **Auto Shut-Off:** Gage: 60 minute auto shut-off. Auto shut-off may be disengaged; Backlight: 2 minute auto shut-off.
- **Agency Approvals:** FM, CE.

*Note: Gages with ceramic sensor are not CE and FM approved.

**WARNING:** DO NOT pressurize DPG over maximum allowable pressure limits. Extreme damage can occur if limits are exceeded (see Pressure Limit under Specifications). An overflow “OFL” designator will flash to acknowledge that the gage’s pressure range has been exceeded.

**PANEL MOUNT OPTION**

Drill a 3-1/4˝ (82.55) diameter hole in a panel, locate three mounting holes for a #6 screw 120° apart on a 3-5/8˝ (92.08) bolt circle.
LOW BATTERY INDICATION

AUTO SHUT-OFF INDICATOR

PRESSURE READING

DPG Button Operation

<table>
<thead>
<tr>
<th>Button</th>
<th>Operation</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Turn Unit On</td>
<td>Press and hold ON button</td>
</tr>
<tr>
<td></td>
<td>Turn Backlight On (Auto Shut-Off: 2 Min)</td>
<td>While gage is on press ON button</td>
</tr>
<tr>
<td></td>
<td>Turn Backlight Off</td>
<td>While backlight is on press ON button</td>
</tr>
<tr>
<td></td>
<td>Turn Unit Off</td>
<td>While gage is on, press and hold ON button 5 seconds for unit to turn off</td>
</tr>
<tr>
<td>ZERO</td>
<td>Zero Gage</td>
<td>With no pressure applied to the gage, press the ZERO button until dashes &quot;---&quot; are seen on the LCD, then release</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If gage will not zero, then gage is no longer meeting specified accuracy and should be sent back to the factory for recalibration</td>
</tr>
<tr>
<td>UNIT</td>
<td>Unit Selection</td>
<td>Press UNIT button to change units on gage (Not all units are available for each range, please refer to model/range chart located below for available units)</td>
</tr>
<tr>
<td>P/V</td>
<td>View Peak</td>
<td>Press P/V button to read peak (highest pressure) measurement</td>
</tr>
<tr>
<td></td>
<td>View Valley</td>
<td>Press P/V button again to read valley (lowest pressure) measurement</td>
</tr>
<tr>
<td></td>
<td>Reset Peak &amp; Valley</td>
<td>Press and hold P/V button to reset peak and valley</td>
</tr>
<tr>
<td></td>
<td>Exit Peak &amp; Valley</td>
<td>Press ON button to exit peak/valley</td>
</tr>
<tr>
<td>ON &amp; P/V</td>
<td>Disengage Auto Shut-Off</td>
<td>Auto shut-off will turn off an idle gage after 60 minutes. To disengage auto shut-off, press and hold ON button, then press and hold P/V button. A decimal will blink in the lower left hand corner of the display to indicate the auto-shut off is turned off. To turn on auto shut-off, repeat above procedure until decimal point stops blinking</td>
</tr>
</tbody>
</table>

Model/Range Chart

<table>
<thead>
<tr>
<th>Model</th>
<th>Pressure Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg/cm²</td>
</tr>
<tr>
<td>DPG-100*</td>
<td>-14.70</td>
</tr>
<tr>
<td>DPG-102</td>
<td>15.00</td>
</tr>
<tr>
<td>DPG-103</td>
<td>30.00</td>
</tr>
<tr>
<td>DPG-104</td>
<td>50.00</td>
</tr>
<tr>
<td>DPG-105</td>
<td>100.0</td>
</tr>
<tr>
<td>DPG-106</td>
<td>200.0</td>
</tr>
<tr>
<td>DPG-107</td>
<td>300.0</td>
</tr>
<tr>
<td>DPG-108</td>
<td>500.0</td>
</tr>
<tr>
<td>DPG-109</td>
<td>1000</td>
</tr>
<tr>
<td>DPG-110</td>
<td>3000</td>
</tr>
<tr>
<td>DPG-111*</td>
<td>5000</td>
</tr>
</tbody>
</table>

Compound Ranges available: DPG-120* Range: 30 Hg-0-15 psi; DPG-121* Range: 30 Hg-0-30 psi; DPG-122* Range: 30 Hg-0-45 psi; DPG-123*: Range 30 Hg-0-60 psi; DPG-124*: 30 Hg-0-100 psi.

*Optional ceramic sensor available. Add “C” to the range (Ex. DPG-100C).