

VERY-HIGH-ACCURACY DIGITAL PRESSURE GAUGE LARGE, EASY-TO-READ DISPLAY



DPG4000 Series



**Backlit
Display
Standard!**



DPG4000-30 shown smaller than actual size.

- ✓ RS232 Communications Standard
- ✓ Very High Accuracy: $\pm 0.05\%$ FS
- ✓ Calibration Certificate Included
- ✓ Temperature Compensated: 0 to 50°C
- ✓ Displays in 18 Standard or Custom Engineering Units
- ✓ Displays Ambient Temperature in °C or °F
- ✓ Large, Backlit, 5-Digit Display with 16.5 mm (0.65") High Digits and 20-Segment Bar Graph
- ✓ Rugged Stainless Steel Case Meets NEMA 4 (IP65) Rating
- ✓ Min/Max Recall
- ✓ Adjustable Tare Zeros Large System Offsets
- ✓ User-Configurable Sample Rate Maximizes Measurement Performance and Battery Life
- ✓ User-Configurable Damping Smooths Readings from Pulsating Sources
- ✓ Auto Shut-Off for Extended Battery Life

- ✓ Low-Battery Indicator
- ✓ Available with Optional 24 V External Power Input
- ✓ Rear Pressure Port Optional

OMEGA's DPG4000 takes the concept of a pressure test gauge to a new level. It combines the accuracy of digital technology with the simplicity of an analog gauge, delivering performance, ease of use, and a feature set unmatched in the pressure measurement world. Setup of the DPG4000 is fast and straightforward, involving a menu-driven display with minimal text and intuitive functions. The gauge is simple enough to be used anywhere in the world, without the need for multilingual displays.

SPECIFICATIONS (0 to 50°C Unless Otherwise Noted)

Accuracy: $\pm 0.05\%$ FS positive pressure, $\pm 0.1\%$ FS on compound models

Temperature Compensation: 0 to 50°C (32 to 122°F) to rated accuracy

Proof Pressure: See table, next page

Burst Pressure: See table, next page

Note: DPG4000, positive pressure ranges up to and including 100 psig should not be used for vacuum measurements. Vacuum of -5 psig will cause permanent damage to the sensor on low pressure models. Compound ranges can be used to measure vacuum. Vacuum can be used on the 300 psi and 500 psig ranges without damage.

Standard Engineering Units: psi, bar, kg/cm², inH₂O (4°C, 20°C or 60°F), ftH₂O (4°C, 20°C or 60°F), cmH₂O (4°C and 20°C), mH₂O (4°C and 20°C), kPa, mbar, inHg, mmHg, torr

Media Compatibility: Liquids and gases compatible with 316 SS

VERY-HIGH-ACCURACY DIGITAL PRESSURE GAUGE

Operating Temperature: -10 to 55°C (14 to 131°F)
Storage Temperature: -20 to 70°C (-4 to 158°F)
Dimensions: 111.1 x 127 x 38.1 mm (4.375 x 5 x 1.50")
Input Port: ¼ MNPT lower mount
Display: 5-digits, 16.5 mm (0.65") H
Bar Graph: 0 to 100% in 20 segments
Power: 3 "AA" alkaline batteries (included); 24 Vdc power (optional)
Battery Life: 1500 hours without backlight (2000 hours at slow sample rate)
Low Battery Indicator: Icon displayed near the end of battery life; remaining battery life can also be displayed on bar graph



DPG4000-30 shown smaller than actual size.

To Order

| MODEL NO. | DESCRIPTION (RANGE/RESOLUTION) | PROOF PRESSURE | BURST PRESSURE |
|--------------------------|--|----------------|----------------|
| DPG4000-1 | Battery-powered digital pressure gauge, -1 to 1 psi range | 5 psi | 50 psi |
| DPG4000-15 | Battery-powered digital pressure gauge, 0 to 15 psi range | 30 psi | 500 psi |
| DPG4000-30 | Battery-powered digital pressure gauge, 0 to 30 psi range | 60 psi | 500 psi |
| DPG4000-100 | Battery-powered digital pressure gauge, 0 to 100 psi range | 200 psi | 1000 psi |
| DPG4000-300 | Battery-powered digital pressure gauge, 0 to 300 psi range | 600 psi | 2000 psi |
| DPG4000-500 | Battery-powered digital pressure gauge, 0 to 500 psi range | 1000 psi | 2000 psi |
| DPG4000-1K | Battery-powered digital pressure gauge, 0 to 1000 psi range | 2000 psi | 10k psi |
| DPG4000-2K | Battery-powered digital pressure gauge, 0 to 2000 psi range | 3000 psi | 10k psi |
| DPG4000-3K | Battery-powered digital pressure gauge, 0 to 3000 psi range | 6000 psi | 10k psi |
| DPG4000-5K | Battery-powered digital pressure gauge, 0 to 5000 psi range | 10k psi | 10k psi |
| DPG4000-10K | Battery-powered digital pressure gauge, 0 to 10,000 psi range | 15k psi | 15k psi |
| COMPOUND PRESSURE GAUGES | | | |
| DPG4000-15C | Battery-powered digital compound pressure gauge, -15 to 15 psi range | 30 psi | 500 psi |
| DPG4000-30C | Battery-powered digital compound pressure gauge, -15 to 30 psi range | 60 psi | 500 psi |

Comes complete with 3 "AA" batteries (when applicable), calibration certificate, rubber boot and operator's manual

Note: Lower fitting standard. To order with rear mount, add suffix "-RM" to model number for additional cost (all ranges, all models). To order 24 Vdc power option, add suffix "-DC" to model number for additional cost.

Ordering Examples: DPG4000-100, 0.05% digital pressure gauge with lower fitting and 0 to 100 psig range.
 DPG4000-15-RM, 0.05% digital pressure gauge with rear fitting and 0 to 15 psig range.
 DPG4000-30-DC, 0.05% digital pressure gauge with lower fitting, 0 to 30 psig range and 24 Vdc power option.

ACCESSORIES

| MODEL NO. | DESCRIPTION |
|----------------|--|
| DPG4000-RB | Protective rubber boot |
| DPG4000-C32 | RS232 cable |
| DPG4000-FLANGE | Panel mount flange (for DPG4000-RM only) |

VERY-HIGH-ACCURACY DIGITAL PRESSURE GAUGE

DPG4000 RANGES AND RESOLUTIONS

| ENGINEERING UNIT | CONVERSION FACTOR | MODEL NUMBER: DPG4000-(*) | | | | | | | | | | |
|---------------------------|-------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 1 | 15† | 30†† | 100 | 300 | 500 | 1K | 2K | 3K | 5K | 10K |
| Burst Pressure | — | 50 | 500 | 500 | 1000 | 2000 | 2000 | 10000 | 10000 | 10000 | 10000 | 15000 |
| Proof Pressure | — | 5 | 30 | 60 | 200 | 600 | 1000 | 2000 | 3000 | 6000 | 10000 | 15000 |
| psi | 1 | 1.0000 | 15.000 | 30.000 | 100.00 | 300.00 | 500.00 | 1000.0 | 2000.0 | 3000.0 | 5000.0 | 10000 |
| bar | 0.06894747 | 0.0689 | 1.0342 | 2.0684 | 6.8947 | 20.684 | 34.474 | 68.947 | 137.89 | 206.84 | 344.74 | 689.47 |
| mbar | 68.94757 | 68.948 | 1034.2 | 2068.4 | 6894.8 | 20684 | 34474 | 68948 | ††† | ††† | ††† | ††† |
| kPa | 6.894757 | 6.8948 | 103.42 | 206.84 | 689.48 | 2068.4 | 3447.4 | 6894.8 | 13790 | 20684 | 34474 | 68948 |
| Mpa | 0.0068947 | 0.0069 | 0.1034 | 0.2068 | 0.6895 | 2.0684 | 3.4474 | 6.8947 | 13.789 | 20.684 | 34.474 | 68.947 |
| kg/cm ² | 0.07030697 | 0.0703 | 1.0546 | 2.1092 | 7.0307 | 21.092 | 35.153 | 70.307 | 140.61 | 210.92 | 351.53 | 703.07 |
| mmHg @ 0°C | 51.71508 | 51.715 | 775.73 | 1551.5 | 5171.5 | 15515 | 25858 | 51715 | ††† | ††† | ††† | ††† |
| inHg @ 0°C | 2.03602 | 2.0360 | 30.540 | 61.081 | 203.60 | 610.81 | 1018.0 | 2036.0 | 4072.0 | 6108.1 | 10180 | 20360 |
| cmH ₂ O @ 4°C | 70.3089 | 70.309 | 1054.6 | 2109.3 | 7030.9 | 21093 | 35154 | 70309 | ††† | ††† | ††† | ††† |
| cmH ₂ O @ 20°C | 70.4336 | 70.434 | 1056.5 | 2113.0 | 7043.4 | 21130 | 35217 | 70434 | ††† | ††† | ††† | ††† |
| mmH ₂ O @ 4°C | 703.089 | 703.1 | 10546 | 21093 | 70309 | ††† | ††† | ††† | ††† | ††† | ††† | ††† |
| mmH ₂ O @ 20°C | 704.336 | 704.3 | 10565 | 21130 | 70434 | ††† | ††† | ††† | ††† | ††† | ††† | ††† |
| mH ₂ O @ 4°C | 0.703089 | 0.7031 | 10.546 | 21.093 | 70.309 | 210.93 | 351.54 | 703.09 | 1406.2 | 2109.3 | 3515.4 | 7030.9 |
| mH ₂ O @ 20°C | 0.704336 | 0.7043 | 10.565 | 21.130 | 70.434 | 211.30 | 352.17 | 704.34 | 1408.7 | 2113.0 | 3521.7 | 7043.4 |
| inH ₂ O @ 4°C | 27.68067 | 27.681 | 415.21 | 830.42 | 2768.1 | 8304.2 | 13840 | 27681 | 55361 | 83042 | ††† | ††† |
| inH ₂ O @ 20°C | 27.72977 | 27.730 | 415.95 | 831.89 | 2773.0 | 8318.9 | 13865 | 27730 | 55460 | 83189 | ††† | ††† |
| inH ₂ O @ 60°F | 27.70759 | 27.708 | 415.61 | 831.23 | 2770.8 | 8312.3 | 13854 | 27708 | 55415 | 83123 | ††† | ††† |
| ftH ₂ O @ 4°C | 2.306726 | 2.3067 | 34.601 | 69.202 | 230.67 | 692.02 | 1153.4 | 2306.7 | 4613.5 | 6920.2 | 11534 | 23067 |
| ftH ₂ O @ 20°C | 2.310814 | 2.3108 | 34.662 | 69.324 | 231.08 | 693.24 | 1155.4 | 2310.8 | 4621.6 | 6932.4 | 11554 | 23108 |
| ftH ₂ O @ 60°F | 2.308966 | 2.3090 | 34.634 | 69.269 | 230.90 | 692.69 | 1154.5 | 2309.0 | 4617.9 | 6926.9 | 11545 | 23090 |
| ft Sea Water | 2.247 | 2.2470 | 33.705 | 67.410 | 224.70 | 674.10 | 1123.5 | 2247.0 | 4494.0 | 6741.0 | 11235 | 22470 |
| M Sea Water | 0.6849 | 0.6849 | 10.274 | 20.547 | 68.490 | 205.47 | 342.45 | 684.90 | 1369.8 | 2054.7 | 3424.5 | 6849.0 |
| Torr | 51.71508 | 51.715 | 775.73 | 1551.5 | 5171.5 | 15515 | 25858 | 51715 | ††† | ††† | ††† | ††† |

† Also applies to -15 to 15 psi compound range.

†† Also applies to -15 to 30 psi compound range.

††† Will not be displayed due to limitations on display resolution. In all cases, resolution is limited to 100,000 counts.