



# User Manual

Digital Pressure Gauge PCE-DPG Series



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, русский, 中文) can be found by using our product search on: [www.pce-instruments.com](http://www.pce-instruments.com)

Last change: 30 July 2020  
v1.0



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## 1 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, ...) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- Do not expose the device to shocks or strong vibrations.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not use the device.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.
- Non-observance of the safety notes can cause damage to the device and injuries to the user.

We do not assume liability for printing errors or any other mistakes in this manual.

We expressly point to our general guarantee terms which can be found in our general terms of business.

If you have any questions please contact PCE Instruments. The contact details can be found at the end of this manual.



## 2 Description

The digital pressure gauge is mainly composed of a housing, a pressure sensor and a signal processing circuit and has the advantages of high precision, good corrosion resistance, impact resistance, shock resistance, small temperature drift, and good stability.

Please note the following when using:

1. Clear it before use. Due to the difference in atmospheric pressure and stress after installation, the product may show a little pressure. Please clear it before using it again (make sure the meter is not under pressure when it is cleared).
2. This product has a built-in pressure sensor, which is a precision device. Please do not disassemble it yourself. Do not use a hard object to probe or touch the diaphragm to avoid damaging the sensor.
3. Use a wrench to install. Before installing the product, make sure that the interface threads match the gauge threads and use a hex wrench; do not rotate the case directly.

### 2.1 Technical specifications

| Type<br>PCE-DPG          | 3   | 6                        | 10                         | 25                           | 100                          | 200                          |
|--------------------------|---|--------------------------|----------------------------|------------------------------|------------------------------|------------------------------|
| Measurement range        | -14.5...43.5 psi,<br>-1...3 bar                                     | 0...87 psi,<br>0...6 bar | 0...145 psi,<br>0...10 bar | 0...362.6 psi,<br>0...25 bar | 0...1450 psi,<br>0...100 bar | 0...2900 psi,<br>0...200 bar |
| Resolution               | 0.0145 psi,<br>0.001 bar  |                          | 0.145 psi,<br>0.01 bar     |                              |                              | 1.45 psi,<br>0.1 bar         |
| Accuracy                 | 0.25% FSO   |                          |                            |                              |                              |                              |
| Pressure                 | Relative  |                          |                            |                              |                              |                              |
| Overpressure             | 1.5 times   |                          |                            |                              |                              |                              |
| Measurable media         | Gases, water  |                          |                            |                              |                              |                              |
| Response time            | <50 ms  |                          |                            |                              |                              |                              |
| Housing material         | Metal   |                          |                            |                              |                              |                              |
| Measurement units        | Mpa, bar, Kpa, mH2o, kg / cm <sup>2</sup> , psi, mmH2o, in.WC, mbar |                          |                            |                              |                              |                              |
| Protection class         | IP56  |                          |                            |                              |                              |                              |
| Diameter display         | 2.5"  |                          |                            |                              |                              |                              |
| Dimensions               | Ø80 x 50 mm / 3.1 x 2 in (without sensor)                           |                          |                            |                              |                              |                              |
| Pressure connection      | 1/40" NPT   |                          |                            |                              |                              |                              |
| Power supply             | 3 x 1.5 V AAA battery   |                          |                            |                              |                              |                              |
| Environmental conditions | -10 ... 60 °C / 14 ... 140 °F, <80 % RH                             |                          |                            |                              |                              |                              |
| Weight                   | approx. 276 g / <1 lb (without batteries)                           |                          |                            |                              |                              |                              |

## 2.2 Delivery contents





1 x digital pressure gauge PCE-DPG  
 3 x batteries 1.5 V AAA  
 1 x user manual

## 2.3 Display description



1. Percentage graph
2. Peak indicator
3. MAX indicator
4. MIN indicator
5. Battery status indicator
6. Current pressure indicator
7. Pressure unit

## 2.4 Key description

|   |   |
|---|---|
|    | On / Off  |
|    | Pressing for short time – switching pressure unit<br>Pressing for a long time – zero calibration  |
|  | Pressing for a long time – clear peak<br>Pressing for a short time – switch the max. and min. peak  |
|  | Pressing for a short time – activate the backlight<br>Pressing for long time – set backlight duration <ol style="list-style-type: none"> <li>1. Press the backlight key for 3 seconds</li> <li>2. With the unit key you shift between the two digits.</li> <li>3. By pressing the backlight key you change the number.</li> <li>4. To save the number and exit the menu, press the peak key.</li> </ol> |



### 3 Contact

If you have any questions, suggestions or technical problems, please do not hesitate to contact us. You will find the relevant contact information at the end of this user manual.

### 4 Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations.

If you have any questions, please contact PCE Instruments.



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