# WESIVO 880

# Digital Pressure Gauges




## Key Features

■ Maximum pressure up to **250 MPa (2500 bar)**
■ **Automatic temperature compensation** for stable and accurate measurement
■ Large **5-digit LCD display** for clear and easy reading
■ **Graphical pressure percentage indication** for intuitive pressure monitoring
■ **Automatic overpressure alarm** for enhanced operational safety
■ Supports **PC communication**; pressure gauge calibration software available as an option
■ Available with **bottom or back connection** installation options
■ Optional **intrinsically safe, data-logging, and high-temperature versions**
■ Highly customizable to meet different application requirements
■ Data-logging models can store up to **1,000,000 measurement records**

## Technical Specifications

| Parameter | Specification |
|---|---|
| **Instrument Versions** | Basic Type; Communication Type; Data Logging Type; Intrinsically Safe Type |
| **Display** | 5-digit digital display with switchable display modes.<br>Adjustable measurement rate: default 2 readings/second; maximum 8 readings/second; minimum 1 reading every 8 seconds. |
| **Pressure Units** | Pa, kPa, MPa, psi, bar, mbar, mmHg, inHg |
| **Operating Environment** | Ambient Temperature: -10 to 50°C<br>Relative Humidity: <95% RH<br>Atmospheric Pressure: 86 to 106 kPa<br>Storage Temperature: -20 to 70°C |
| **Pressure Connection** | Standard: M20 × 1.5 male thread<br>Optional: G1/4, 1/4 NPT, and other customized connections<br>Differential Pressure Type: Ø6 mm quick-connect socket |
| **Power Supply** | Built-in 1 × ER18505H battery<br>Optional external power adapter: 5 V / 12 V / 24 V<br>External power supply is not applicable to intrinsically safe models. |
| **Operating Time (Basic Type)** | Low-power design: operating life >3 years<br>Continuous backlight operation: approximately 1 year |

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| | Rechargeable models: approximately 1 year per full charge |
| **Data Logging Function** | Available for Data Logging Type only<br>Storage capacity: 80,000 records<br>Each record includes date, time, pressure, and temperature<br>Adjustable recording interval: 1 to 99,999 seconds<br>Supplied with USB flash drive and data management software |
| **Communication Function (RS485 Type)** | Supplied with data logging software and communication cable<br>Supports real-time PC communication<br>Software acquisition interval adjustable from 1 to 10 seconds<br>Measurement data can be exported to Excel |
| **Additional Functions** | Temperature measurement<br>Peak and valley value recording<br>Pressure percentage indication |

## Digital Pressure Gauge – Pressure Range & Accuracy

**Gauge Pressure**

| Measurement Range | Accuracy Class | Medium | Burst Pressure |
|---|---|---|---|
| −100 to 0 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 16 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 25 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 40 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 60 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 100 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 160 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 250 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 400 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 600 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 1 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 1.6 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 2.5 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 4 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 6 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 2× |
| 0 to 10 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 16 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 25 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 40 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 60 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 2× |
| 0 to 100 MPa | 0.05 / 0.1 / 0.2 | Gas / Liquid | 1.5× |
| 0 to 160 MPa | 0.05 / 0.1 / 0.2 | Gas / Liquid | 1.5× |
| 0 to 250 MPa | 0.05 / 0.1 / 0.2 | Gas / Liquid | 1.2× |

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|---|---|---|---|
| **Compound Pressure** | | | |
| **Measurement Range** | **Accuracy Class** | **Medium** | **Burst Pressure** |
| ±16 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| ±25 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| ±40 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| ±60 kPa | 0.05 / 0.1 / 0.2 | Gas | 3× |
| ±100 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| −100 to 160 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| −100 to 250 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| −100 to 400 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| −100 to 600 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| −0.1 to 1 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| −0.1 to 1.6 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| −0.1 to 2.5 MPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
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| **Absolute Pressure** | | | |
| **Measurement Range** | **Accuracy Class** | **Medium** | **Burst Pressure** |
| 0 to 40 kPa(a) | 0.1 / 0.2 | Gas | 3× |
| 0 to 60 kPa(a) | 0.1 / 0.2 | Gas | 3× |
| 0 to 110 kPa(a) | 0.1 / 0.2 | Gas | 3× |
| 0 to 160 kPa(a) | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 250 kPa(a) | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 400 kPa(a) | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 600 kPa(a) | 0.05 / 0.1 / 0.2 | Gas | 3× |
| 0 to 1 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 1.6 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 2.5 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 4 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 6 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 2× |
| 0 to 10 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 16 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 25 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 40 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 3× |
| 0 to 60 MPa(a) | 0.05 / 0.1 / 0.2 | Gas / Liquid | 2× |
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| **Differential Pressure** | | | |
| **Measurement Range** | **Accuracy Class** | **Medium** | **Burst Pressure** |
| ±500 Pa | 0.1 / 0.2 | Gas | 50× |
| ±2.5 kPa | 0.05 / 0.1 / 0.2 | Gas | 20× |
| ±5 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 10× |
| ±10 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 5× |
| ±16 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |

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|---|---|---|---|
| ±25 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| ±40 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
| ±60 kPa | 0.02 / 0.05 / 0.1 / 0.2 | Gas | 3× |
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| **Notes** | | | |
| 1 | Automatic temperature compensation range: −10 to 50°C. | | |
| 2 | For absolute pressure models, Class 0.05 accuracy is guaranteed for 180 days; other accuracy classes are guaranteed for 1 year. | | |
| 3 | The pressure-transmitting medium must be non-corrosive. | | |