

## Digital Pressure Gauge Instruction Manual

### Product introduction :

This instrument is a professional high precision, high range, high resolution, large screen display with imported pressure sensor, high precision ADC and low power MCU designed, with digital pressure gauge for indoor temperature measurement. Quickly measure the pre-blue detection pressure value (relative to the current atmospheric pressure). Dual channel can simultaneously detect the pressure difference between two detection ports (P1P2)

### Product use :

This product is widely used in natural gas pipelines, air conditioning refrigeration and ventilation systems, mechanical hydraulics, plastic molding, ceramic products, biopharmaceutical molding, mining area pressure detection, petrochemical petrochemical refining, gas, liquid and production industrial equipment pressure detection.

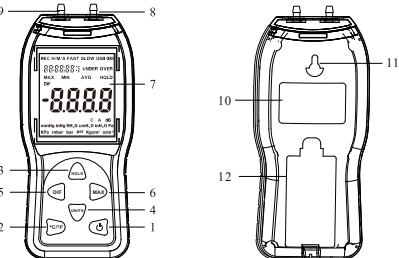
### Basic function :

1 °C / °F display; 2 pressure value display; 3 °C / °F conversion;  
4 hold data mode; 5 data storage function; 6 data search function;  
7. Maximum minimum data mode; 8 automatic shutdown function.

### Technical performance :

Measuring range	± 2.999 Psi ( Tc-168 )	± 100Psi ( Tc-169 )
Unit of measurement	Psi, kg/cm <sup>2</sup> , ozin <sup>2</sup> , bar, mbar, Pa, kPa inHg, mmHg, inH2O, ftH2O, cmH2O	Psi, kg/cm <sup>2</sup> , ozin <sup>2</sup> , bar, mbar, kPa inHg, mmHg, inH2O, ftH2O, cmH2O
Accuracy	± 0.3% FSO ( 25 °C )	± 0.3% FSO
Repeatability	± 0.2% ( MAX ± 0.5%F SO )	± 0.2% ( MAX ± 0.5%F SO )
Linearity/Hysteresis	± 0.29%FSO ( 25 °C )	± 0.29%FSO
Measurement rate	0.5 s	0.5 s
Data storage	100groups	100groups
Maximum withstand pressure	50 KPa	150Psi
Low battery indicator	6.8Vshow low battery symbol	6.8Vshow low battery symbol
Automatic shutdown conditions	No operation for 15 minutes	No operation for 15 minutes

### Product Description



1. Power on/off Button
2. °C/F Button
3. HOLD Button
4. UNITS Button
5. DIF Button
6. MAX Button
7. LCD Display
8. Tube Connector(+)
9. Tube Connector(-)
10. Label position
11. Hanging Hole
12. Battery Cover

### Key operation :

- 1.POWER KEY:

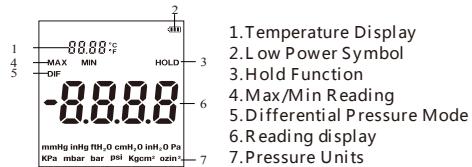
  - a.Short press to turn on
  - b.Short press to turn on and turn off the backlight
  - c.Long press to turn off(Automatic shutdown in 15 minutes without any operation)

### 2.°C/F KEY:

- a.Short press to store the current measured pressure value(can store up to 100 groups)
- b.Long press to exit the storage mode
- c.Press and hold for more than 2 seconds to switch the °C/F unit

Positive pressure range display	Err0	Err0
Over negative pressure range display	Err1	Err1
Working temperature	0~50°C ( 32~122°F )	0~50°C ( 32~122°F )
Working power	9V battery	9V battery
Physical dimension	164X70X32mm	164X70X32mm
Weight	200g	200g

Tc-168			Tc-169		
Unit	Range	Resolution	Unit	Range	Resolution
kPa	±20.68	0.001	kPa	±689.4	0.1
psi	±2.999	0.001	psi	±100	0.01
kgcm <sup>2</sup>	±0.210	0.001	kgcm <sup>2</sup>	±7.030	0.001
ozin <sup>2</sup>	±47.99	0.01	ozin <sup>2</sup>	±1600	1
bar	±0.206	0.001	bar	±6.894	0.001
mbar	±206.8	0.1	mbar	±6894	1
inHg	±6.106	0.001	inHg	±203.6	0.1
mmHg	±151.1	0.1	mmHg	±5171	1
inH <sub>2</sub> O	±83.02	0.01	inH <sub>2</sub> O	±2767	1
ftH <sub>2</sub> O	±6.918	0.001	ftH <sub>2</sub> O	±227.2	0.1
cmH <sub>2</sub> O	±210.8	0.1	cmH <sub>2</sub> O	±7030	1
Pa	±9999	1			



### 3.HOLD KEY:

- a. Press to lock and hold the current data.
- b. Press and hold for more than 2 seconds to clear the drift zero.(The data before measurement does not return to zero)

### 4.UNITS KEY:

- a. Short press to switch up to 12 pressure units.
- b. Press and hold for more than 2 seconds to clear the stored data.

### 5.DIF KEY:

- a. Short press to view stored data up
- b. Press and hold for more than 2 seconds to enter p1 and P2 dual channel differential pressure mode
- c. DIF mode: Press and hold for more than 2 seconds to exit differential pressure mode

### 6.MAX KEY:

- a. Short press to view stored data
- b. Press and hold for 2 seconds to enter the maximum and minimum mode
- c. Press and hold for more than 2 seconds to return to the normal measurement mode

### Precautions :

1.When the meter is working, keep it away from vibration sources and strong electromagnetic fields, and environmental locations with drastic temperature changes, so as not to be interfered and cause inaccurate measurement data.

2.When measuring corrosive and toxic gases or liquids, please take precautionary measures to avoid danger or damage to the instrument.

3.Please replace the battery in time when the meter shows a low battery level, and remove the battery when it is not used for a long time to avoid battery leakage and damage to the meter.

4.When measuring the pressure input maximum value please do not exceed the scope of the instrument measurement

5.When measuring the pressure of a single channel, please do not block the other channel, and do not face the place with wind or strong airflow. At this time, the meter displays the difference between the current measurement port and the atmospheric pressure.

6.When the screen shows over range during measurement, please disconnect the vent hole. The displayed data will automatically return to normal.(Pa units can only be displayed up to 9999, adjustable to kpa units)

7.Before connecting to the trachea, please press and hold the hold button to clear the zero drift to ensure accurate measurement data.