Digital Pressure Gauge AR168

Instruction Manual

Perfect Prime

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PRODUCT INTRODUCTION

The AR168 is a professional high precision, high range, high resolution digital pressure gauge for indoor temperature measurement with a large screen display. It measures the pre-blue detection pressure value relative to the current atmospheric pressure. The dual channel can simultaneously detect the pressure difference between two detection ports. The product is widely used in natural gas pipelines, air-conditioning refrigeration and ventilation systems, mechanical hydraulics, plastic molding, bio pharmaceutical molding, mining area pressure detection, gas, liquid and production industrial equipment pressure detection.

BASIC FUNCTIONS

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

3. TECHNICAL PERFORMANCE

Measuring Range	±2.999 Psi
Unit of measurement	Psi, kg/cm2, ozin2, bar, mbar, Pa, kPa, inHg, mmHg, inH2O, ftH2O, cmH2O
Accuracy	±0.3% FSO (25°C)
Repeatability	±0.2% (MAX ±0.5% FSO)
Linearity/Hystersis	±0.29% FSO (25°C)
Measurement rate	0.5s
Data Storage	100 groups
Maximum withstand pressure	50KPa
Automatic shutdown conditions	No operation for 15 mins
Positive pressure range display	Err0
Over negative pressure range display	Err1
Working Temperature	0-50°C (32-122°F)
Working Power	9V battery
Physical dimension	164 x 70 x 32 mm
Weight	200g

4. RANGE OF PRESSURE MEASUREMENT

Unit	Range	Resolution
kPa	±20.68	0.001
psi	±2.999	0.001
kgcm^2	±0.210	0.001
ozin^2	±47.99	0.01
bar	±0.206	0.001
mbar	±206.8	0.1
inHg	±6.106	0.001
mmHg	±151.1	0.1
inH2O	±83.02	0.01
ftH2O	±6.918	0.001
cmH2O	±210.8	0.1
Pa	±9999	1
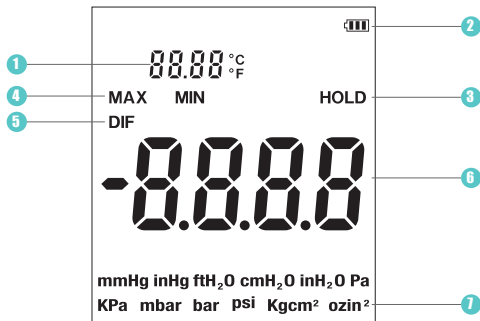
① Temperature Display   ⑤ Differential Pressure Mode

② Low Power Symbol   ⑥ Reading display

③ Hold Function   ⑦ Pressure Units

④ Max/Min Reading
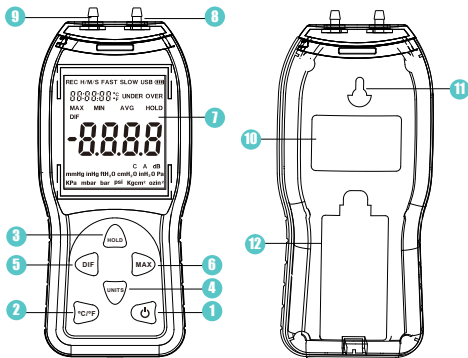
① Power on/off Button
② °C/°F Button
③ HOLD Button
④ UNITS Button
⑤ DIF Button
⑥ MAX Button

⑦ LCD Display
⑦ Tube Connector(+)
⑧ Tube Connector(-)
⑨ Label position
⑩ Hanging Hole
⑪ Battery Cover

1. Power on/off Button

When power is off: short press to turn device on.

When power is on: a. Press this button to open/close backlight.

b. Press this button over 2 seconds to turn off the meter.

c. Auto-off without operation 15 minutes.

2. °C/°F Button

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.

3. HOLD Button

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 Button

a. Short press to switch up to 12 pressure unit.

b. Press and hold for more than 2 seconds to clear the stored data.

5. DIF Button

a. Short press to view stored data.

b. Press and hold for more than 2 seconds to enter P1 and P2 dual channel differential pressure mode.

c. Press and hold for more than 2 seconds to exit differential pressure mode.

6. MAX Button

    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

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7.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 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 apply 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

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