UNI-T

UT366A
Digital Manometer User Manual

Introduction

UT366A is an instrument for measuring gauge pressure and differential pressure. UT366A can measure P1/P2 pressure independently with LED indication. It can be widely used in industrial manufacturing, HVAC, plumbing and other industries. Combined with an optional pitot tube, UT366A can also measure wind speed.

Accessories

1. Digital manometer ------------------------------- 1pcs
2. Hose-- 1pcs
3. AAA batteries-------------------------------------- 3pcs
4. User manual-- 1pcs
5. Carrying bag--------------------------------------- 1pcs
6. Magnetic hook------------------------------------- 1pcs

Specifications

- Units:
  kPa, mbar, bar, psi, mmHg, inH_2O, inHg, Ozin², kgcm², ftH_2O, mmH_2O, hPa, m/s, fpm
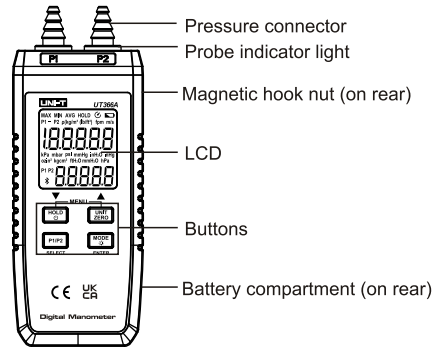- Pitot tube coefficient: 1
- Range:

0.00~±15.00 kPa	0.00~±34.80 Ozin²
0.0~±150.0 mbar	0.000~±0.152 kgcm²
0.000~±0.150 bar	0.000~±5.026 ftH_2O
0.000~±2.175 psi	0.0~±1531 mmH_2O
0.0~±112.5 mmHg	0.0~±150.0 hPa
0.00~±60.29 inH_2O	0.0~19999.9 m/s
0.000~±4.429 inHg	0~199999 fpm

- Resolution:

0.01 kPa	0.01 Ozin²
0.1 mbar	0.001 kgcm²
0.001 bar	0.001 ftH_2O
0.001 psi	1mmH_2O
0.1 mmHg	0.1 hPa
0.01 inH_2O	0.1 m/s
0.001 inHg	1 fpm

- Accuracy:
  ±0.5% FS@25°C
- Unit memory:
  When the product is turned on, its pressure unit defaults to the unit when it was turned off last time.
- Auto power off:
  When the meter enables this function, it will power off automatically if no button press occurs for 5 minutes.
- Low battery indication:
  When the battery power is less than 3.7V, a low battery indicator will appear.
- Batteries:
  AAA 1.5V * 3pcs
- Power consumption:
  Power off: < 10uA;
  Power on: < 10mA;
  Power on and backlight on: < 15mA;
  Power on and one indicator light on: < 15mA;

Power on and two indicator lights on: < 20mA;
Power on, backlight and one indicator light on: < 20mA;
Power on, backlight and two indicator lights on: < 25mA.
- Battery life:
  Power on: > 50h;
  Power on and backlight on: > 30h;
  Power on and one indicator light on: > 30h;
  Power on and two indicator lights on: > 25h;
  Power on, backlight and one indicator light on: > 25h;
  Power on, backlight and two indicator lights on: > 20h.
- Environmental requirements:
  Operating: 0~50°C ≤85%RH;
  storage: 10~60°C ≤75%RH.

Product Structure

- Pressure connector
- Probe indicator light
- Magnetic hook nut (on rear)
- LCD
- Buttons
- Battery compartment (on rear)

Buttons

1. Function

	Long press	Short press	Short press in the menu
HOLD	Power on/off	Data hold	−
UNIT ZERO	Data zero	Unit conversion	+
P1/P2	Turn on/off probe indicator lights	P1/P2 selection	Select
MODE	Turn on/off backlight	Max/Min/Avg	Enter

2. Button combination

HOLD + UNIT ZERO	Short press: enter/exit the setting menu
P1/P2 + MODE	Short press: view the version NO.

Operation

Turn on/off the meter:
Long press [HOLD]

Data hold:
Short press [HOLD]

Unit conversion:
Short press [UNIT ZERO] to switch between selectable units: kPa, mbar, bar, psi, mmHg, inH_2O, inHg, Ozin², kgcm², ftH_2O, mmH_2O, hPa, m/s ,fpm.

SPEEd Unit (m/s)

Among them, m/s and fpm are wind speed units. To switch between these two units, short press ⬜ and ⬜ to enter the setting menu, press ⬜ to enter the wind speed unit setting mode (as shown in the figure), and then short press ⬜ to switch between m/s and fpm. Press ⬜ and ⬜ again to exit the setting menu. Notes: Wind speed needs to be measured with a pitot tube. Please purchase it separately if necessary.

Data zero:
The meter can start to operate about 5 seconds after being turned on. Before the hose is connected, if the value displayed on the screen is not 0, users need to long press ⬜ to zero the data. P1 and P2 will be zeroed at the same time.

Switch channel:
The default channel when turning on the meter is P1-P2 (the difference between P1 and P2 channels). Short press ⬜ to step through P1-P2 > P1-P2/P1 > P1-P2/P2 > P1/P2.

Turn on/off probe indicator lights:
Long press ⬜

Max/Min/Avg selection:
Short press ⬜

Turn on/off the backlight:
Long press ⬜

Turn on/off the auto power off function:

On APO

Short press ⬜ and ⬜ to enter the setting menu. Short press ⬜ to turn on/off the APO function. Short press ⬜ and ⬜ again to exit the setting menu. If the APO function is turned on, the icon ⏻ will show on the screen. The meter will power off automatically if no button press occurs for 5 minutes.

Air density setting:

ρ(kg/m³) 1.293 dEns.

Air density setting is related to the wind speed measurement. In general, the air density is 1.293kg/m3. If users need to measure the flow rate of other gases, they can set the corresponding density. Short press ⬜ and ⬜ to enter the setting menu. Press ⬜ twice to set the air density. Short press ⬜ or ⬜ to add/subtract the selected digit. Short press ⬜ to select the next digit.
Short press ⬜ and ⬜ again or short press ⬜ once to exit the setting menu.

Probe Indicator Lights

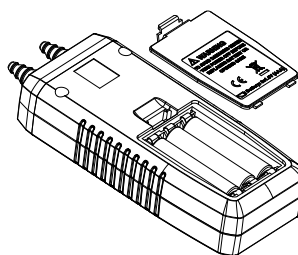| P1+	Green Off	P2+	Off Green
P1-	Red Off	P2-	Off Red

Note: P1+ means the air pressure value is positive (the indicator light is green). P1- means the air pressure value is negative (the indicator light is red). Long press the "P1/P2" button to turn on/off the indicator lights. In the P1-P2 channel, the indicator lights are off by default, and cannot be turned on.

Maintenance and Repair
● Replace batteries:
When the icon ▭ is displayed on the screen, follow the steps below to replace the batteries.
1. Remove the battery cover.
2. Take out the old batteries and put in three new 1.5V AAA batteries. Pay attention to the battery polarity.
3. Close the battery cover.

● Clean the housing:
Clean the housing with a damp cloth. Please do not use corrosive detergents or solutions for cleaning in that they are corrosive to the housing, especially to the LCD.
● Please take out the batteries if the meter is not used for a long time to prevent battery leakage from seriously damaging the meter.
● Do not disassemble this meter or change the internal.

Troubleshooting
● "OL or -OL": The reading exceeds the measurement range. Please measure within the specified range.
● "Lo": The wind speed reading is too low. Check whether the two ends of the pitot tube are connected reversely.
● "-" flashes when measuring wind speed: The data should be zeroed. Otherwise there will be measurement errors.
● Wind speed unit flashes when pressing the "P1/P2" button: The P1-P2 channel is used for wind speed measurement by default, and cannot be changed.
● "Err":Ambient temperature compensation NTC has errors.

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