

Dew Point Meter

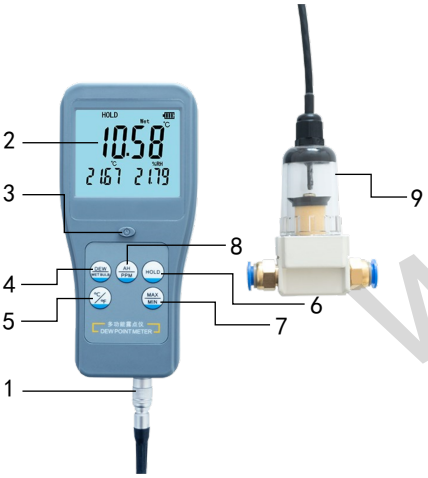
RTM2610S

User's Manual

Version: V1.2
Date: 2024.09

 Qingdao Realtech Instruments Co.,LTD.

Descriptions



- 1 Sensor Connector
- 2 LCD
- 3 Power/Backlit Key
- 4 Dew/Wet Key
- 5 °C/°F Key
- 6 HOLD Key
- 7 MAX/MIN Key
- 8 AH/PPM Key
- 9 Separate Sensor

Specifications

| Display | LCD | |
|-----------------------|---|--|
| Test Parameters | Ambient Temperature, Dew Point Temperature, Wet Bulb Temperature, Relative Humidity, Absolute Humidity, PPM | |
| Ambient Temperature | Range | -30~120°C (-22~248°F) |
| | Accuracy | ±0.4°C (90~120°C) ±0.2°C (60~90°C) ±0.1°C (20~60°C) ±0.2°C (-30~20°C) |
| | Resolution | 0.01 (<100) 0.1 (Other) |
| | | |
| Relative Humidity | Range | 0~100%RH |
| | Accuracy | ±1.5%RH (0~80%RH) ±2%RH (Other) |
| | Resolution | 0.01 |
| Dew Point Temperature | Range | -45~120°C (-49~248°F) |
| | Resolution | 0.01 (<100) 0.1 (Other) |
| Wet Bulb Temperature | Range | -20~40°C (4~104°F) |
| | Resolution | 0.01 (<100) 0.1 (Other) |
| Absolute Humidity | Range | 0~400g/m³ |
| | Resolution | 0.01 (<100) 0.1 (Other) |

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Introduction

It is a professional digital dew point meter. It is able to measure Ambient Temperature, Dew Point Temperature, Wet Bulb Temperature, Relative Humidity, Absolute Humidity, PPM. It can quickly respond to temperature and humidity measurements in the industrial range. It is also capable of measuring temperature and humidity in a variety of complex environments. Widely used in workshops, warehouses, libraries, offices, computer rooms, laboratories and other environmental temperature and humidity monitoring occasions.


Features

- Large LCD with display. It can display three values at the same time.
- Support multi-parameter measurement of ambient temperature, dew point temperature, wet bulb temperature, relative humidity, absolute humidity, PPM.
- Temperature unit (°C/°F).
- 0.01 high resolution.
- High accuracy.
- With maximum, minimum function.
- With data hold function.
- With battery indication function.
- With automatic power off function.
- Separate sensor, suitable for a variety of occasions.

Instruction

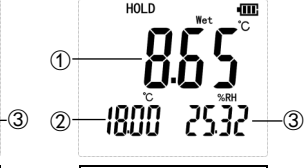
- Power On:** press and hold the **[Power/Backlit]** key.
- Power Off:** press and hold the **[Power/Backlit]** key for 3 seconds.
- Backlit On/Off:** short press the **[Power/Backlit]** key to turn on the backlit. And short press the **[Power/Backlit]** key again to turn off the backlit.

Dew Point Measurement



① Dew Point Temp.
② Ambient Temp.
③ Relative Humidity

Wet Bulb Measurement



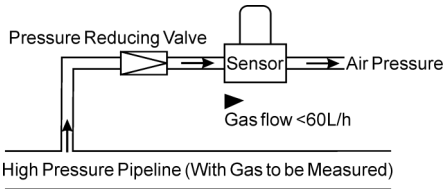
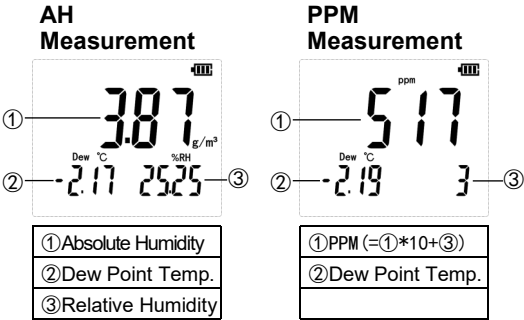
① Wet Bulb Temp.
② Ambient Temp.
③ Relative Humidity

- Enter the Measurement Interface:** after powering on, it will enter the **Dew Point Measurement Interface** automatically.
- Dew Point/Wet Bulb Measurement Interface:** short press the **[DEW/WET]** key to switch between dew point measurement interface and wet bulb measurement interface.

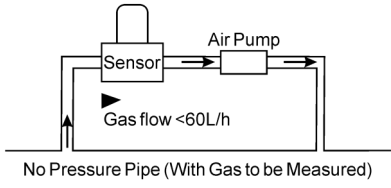
| | | |
|-----------------------|--------------------------------|---------|
| PPM | Range | 0~50000 |
| | Resolution | 1 |
| Temp. Unit | °C/°F | |
| Statistical Functions | Maximum, Minimum | |
| Automatic Power Off | 10 Minutes (No Operation) | |
| Operating Conditions | 0~50°C (32~122°F); | |
| | 0~80%RH (No Condensation) | |
| Storage Conditions | -10~60°C (14~140°F); | |
| | 0~90%RH (No Condensation) | |
| Power Supply | 4×1.5V AAA(UM-4) Battery | |
| Size | 170×80×31mm | |
| Weight | 338g (Not Including Batteries) | |
| Standard Accessories | Main Unit×1 | |
| | DP10 Separate Sensor×1 | |
| | Manual×1 | |
| Optional Accessories | Carrying Case×1 | |
| | DP30 Separate Sensor | |
| | DP80 Separate Sensor | |

Note:
When the measured dew point temperature is lower than -20°C, please calibrate it yourself to ensure the accuracy of the measurement.

- **AH/PPM Measurement Interface:**
short press the [AH/PPM] key to switch between absolute humidity measurement interface and ppm measurement interface.
- **Unit:** short press the [°C/°F] key to switch between Celsius Degree (°C) and Fahrenheit Degree (°F).
- **Data Hold:** short press the [HOLD] key to hold the displayed value, and the 'HOLD' symbol will appear on the LCD. And short press the [HOLD] key again to release the displayed value, and the 'HOLD' symbol will disappear.
- **Maximum/Minimum:** short press the [MAX/MIN] key to display the maximum value, and the 'Max' symbol will appear on the LCD. And short press the [MAX/MIN] key again to display the minimum value, and the 'Min' symbol will appear on the LCD.



Installation Diagram 1



Installation Diagram 2

- Notes:
- 1.If the measured gas has a high pressure/flow rate, a pressure reducing valve needs to be installed in front of the sensor.
 - 2.The sensor must be in complete contact with the flowing gas to be measured.
 - 3.If the measured gas cannot be vented externally, it is necessary to add an air pump at the rear of the sensor to return the measured gas to the pipeline.
 - 4.Pay attention to the direction of the sensor when installing, do not install it backwards.

1. When the indication " " symbol appears on the display, it means low battery and needs to replace batteries timely.
2. Open the battery cover and remove the old batteries.
3. Replace the new batteries correctly according to "+" and "-" in the battery compartment.
4. If the meter will not be used for a long time, please remove the batteries to prevent the batteries from rot and damage the meter.

To avoid damage, do not use abrasives or solvents for cleaning the meter. Do not disassemble the meter without authorization, the wrong method will cause man-made damage.

If you want to know more services, please contact with services@realltech.cn.