Temperature Humidity Meter
Instruction Manual

HT-801

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Product Overview

This product is a professional level meter with the integrated measurement function of the ambient temperature, humidity, dew point and wet bulb temperature; it is applicable for the temperature and humidity measurement of production workshop, factory warehouses, libraries, offices, laboratories, and the family living rooms and so on;

This product uses high-precision, low-power consumption digital temperature and humidity sensors; it is featured by wide measuring range and high accuracy.

Features

◇ Bluetooth function
◇ Automatic shutdown function
◇ Provided with dedicated APP
◇ Temperature and humidity measurement
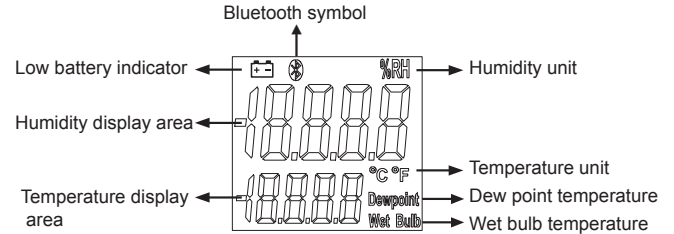◇ Dew point temperature, wet bulb temperature measurement

Precautions

☆ Do not disassemble and modify this product without permission.
☆ If you will not use this meter for a long time, please remove the battery to prevent the corrosion of this meter caused by battery leakage.
☆ Do not put the sensor in liquid or expose the sensor to sunlight.
☆ When the battery is low (LCD displays [+ −] symbol), please timely replace the battery.
☆ Clean by gently wiping with soft cloth or sponge dipped with a little alcohol or weak soap, do not clean it with abrasive or caustic solvent.
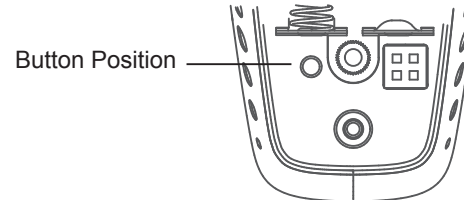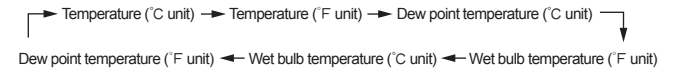
Turn on/off

Short press the button on the bottom of screen to turn on; long press it to shut down

Display Description

Bluetooth symbol
Low battery indicator
Humidity unit
Humidity display area
Temperature unit
Temperature display area
Dew point temperature
Wet bulb temperature

Switch Display Content

There has a button hidden inside the battery compartment, press it to switch the display content, the order is as follows:

Temperature (˚C unit) → Temperature (˚F unit) → Dew point temperature (˚C unit)
Dew point temperature (˚F unit) ← Wet bulb temperature (˚C unit) ← Wet bulb temperature (˚F unit)

Button Position

Software Acquisition

Our company offers the apps for Apple mobile system and Android system. Scan the two-dimensional code below to download and install the app "Thermometer" on company's website or download it from company's website: www.xintest.com.cn/download.php.
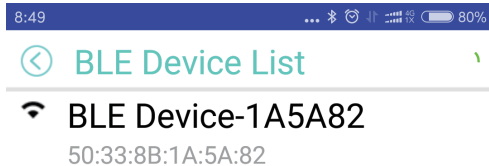
Thermometer

Two-dimensional code

Software Use

1) Connect the meter to mobile phone: Turn on the meter → Turn on phone's Bluetooth function → Open Thermometer APP → Click the ⟳ icon to enter the "BLE Device List" interface → Select the device shown below, click it to finish the connection, the software will automatically return to the main interface. Indicator light flashes for reminding after the successful connection.

8:49   ··· ✳ ⏰ ⇅ ᴵ⁴ᴳₓ ▭ 80%

⟨ BLE Device List

BLE Device-1A5A82
50:33:8B:1A:5A:82

When there are several this products working nearby, click the ⟳ icon in the main interface to enter the "BLE Device List" interface to view or select the meter you need to connect.
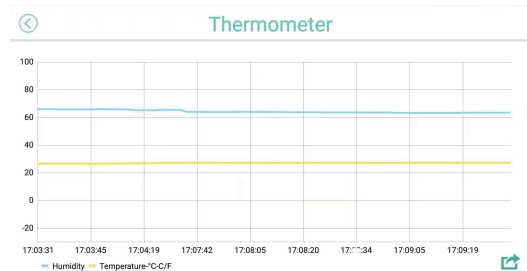
2) The measured readings and the battery power of meter are displayed in the main interface of Thermometer software, and the temperature unit can be switched at any time.
View the measured value: Click "C/F" to display the ambient temperature; click "dew" to display the dew point temperature; and click "wet" to display the wet bulb temperature.
3) Set data's updating frequency: Click "Update interval: 1" to set it in the pop-up dialog box.
4) Share the measured data with others or save to your mobile phone: Click the ⬈ icon in the main interface of APP, click "Share" in the pop-up dialog box to share generated Excel file with others (software that can send files is required). If you click "Export" and select the save location in the pop-up dialog box, the Excel file generated by data will be saved to mobile phone.
5) View, save and share data trend chart: Click "TREND" to open the chart view.

⟨   Thermometer

— Humidity — Temperature-°C-C/F

Click the ⬈ icon in the lower right of chart to save the trend chart to your phone or share it with others, the method is the same as described in point 4.

Product specifications

	Range	Accuracy	Unit	Resolution	Response time
Temperature	−20～60℃	±1.5℃	℃/℉	0.01	About 10 seconds (25℃)
Humidity	0%RH~100%RH	±5%RH	%RH		

Operating temperature: 0 ~ 50 °C
Storage temperature: -10 ~ 60 °C
Power supply: 4 x 1.5V, AAA batteries

Automatic shutdown: 15Min
Size: 179mm × 38mm × 24mm
Weight: 70g (excluding battery)

Note

Additional Information

1. Dew point temperature: it refers to the air temperature cooled to the state of saturation under the condition that the water vapor content and atmospheric pressure do not change. Figuratively speaking, the dew temperature is the one when the water vapor in the air is changed to the dew. When the moisture in the air has reached saturation, the temperature is the same as the dew point temperature; when water vapor is not saturated, the temperature must be above the dew point temperature. Therefore, the difference between air temperature and dew point can represent the saturation level of the moisture in the air.

2. Wet bulb temperature: also known as thermodynamic wet bulb temperature; it is a means to calibrate the relative humidity of the air; Its meaning is, the air under a certain state contacts with the wet bag of the wet-bulb thermometer, so that the adiabatic heat and moisture exchange will occur to reach the saturation temperature; this temperature is the gauge surface temperature measured from the thermometer wrapped with the wet gauze in the air at a flow rate greater than 2.5m/s and is avoided from the direct radiation. Such measurement is conducted to make the air close to saturation level; the greater the saturation difference between the ambient air, the stronger the evaporation occurs on the wet bulb thermometer, and its humidity will be lower. According to the difference between the wet and dry bulb temperature, the relative humidity of the air can be determined.