
Professional Temperature & Humidity Meter

User Manual



Part Number: ST-91

1. Meter Description

- 1 - Temperature/Humidity Sensor
- 2 - LCD Display
- 3 - Data Hold/Backlight button
- 4 - MAX/MIN button
- 5 - Power on/off button
- 6 - Temperature button
- 7 - Bluetooth button



2. Features

1. Range: 0 ~ 100% RH, -20°C ~ 60°C (-4°F ~ 140°F); Resolution: 0.1%RH, 0.1°C/0.1°F
2. Dual Display Temperature & Humidity.
3. Bluetooth 4.0
4. MAX/MIN
5. HOLD lock and backlight
6. Measurable Dry bulb temperature, Wet bulb temperature, Dew point Temperature
7. Temperature unit switch
8. Auto power off, Disable auto-power off.

3. Specifications

Function	Range	Resolution	Accuracy
Humidity	0~100%RH	0.1%RH	±3.5%RH (20~80%)
			±5%RH (0~20 & 80~100%)
Dry bulb temperature	-20~60°C -4~140°F	0.1°C/°F	±0.5°C/0.9°F (0~40°C)
			± 1 °G/1.8°F (-20~0&40~60°C)
Wet bulb temperature	0~60°C 32~140°F	0.1°C/°F	±0.5°C/0.9°F (0~40°C)
			± 1°C/1.8°F (40~60°C)
Dew point temperature	-20~60°C -4~140°F	0.1°C/°F	±0.5°C/0.9°F (0~40°C)
			± 1°C/1.8°F (-20~0&40~60°C)

Display	Dual digital LCD display with backlight
Sensor Type	Humidity: Accurate capacitance sensor Temperature: Thermistor
Low battery indication	The low battery signal "E+" flash when battery voltage drops below 7.2V; The backlight and low battery signal "E+" flash twice when battery voltage drops below 6.5V, then auto power off.
Operating condition	0~50°C (32~122°F) <80% RH non-condensing
Storage condition	-20~60°C(-4~140°F) < 80% RH non-condensing
Power	One standard 9V battery.
Dimension	204mm (L) × 54mm (W) × 36mm (H)
Weight	172g

4. Operation Instructions

1. Power On/ off, Auto-power on:

Power on: Short press button “” to power on, system default auto power off . Long press to power on and disable auto power off function. Long press the button again to enable the auto power off function

Power on: Short press button “” to power off.

Auto-power on: Auto-power off signal “” displays in the left caner of LCD and the instrument will auto-power off in 10 minutes of no button operations.

If press the power on/off button for over 1 minutes, it will be recognized as faulty operation and the instrument will auto power off.

2. Temperature: Short press to switch the measure temperature type: NULL (dry bulb temperature) → WS (wet bulb temperature) → DP (Dew point temperature) → NULL (dry blub temperature), cycle in this order. Default measure dry blub temperature; Long press temperature button to switch temperature unit, and cycle in turn °C→°F→°C, default unit is the last unit before power off.

3. Bluetooth: Long Press once to enable the Bluetooth communication function; Long press once again to disable the function.

4. MAX/MIN:

Press MAX/MIN button once and “MAX” appears on the display. The LCD is now displaying the maximum reading of the selected parameter in the display. The display reading will not change until a higher reading is registered. Press the MIN/MAX button again and “MIN” appears on the display. The LCD is now displaying the minimum reading of the selected parameter in the display. The display reading will not change until a lower reading is registered. Press the MIN/MAX button once again to exit the MIN/MAX mode, no “MAX/MIN” display on the LCD now. Cycle in order: NULL→ MAX→ MIN→NULL.

5. HOLD /Backlight: Press Hold/backlight Button to enter hold function, the LCD displays “HOLD”. At hold mode, only power button and Hold/backlight button is enabled. Short press the button again to disable the hold function, no” Hold” displays on LCD. Long press to enable backlight and long press once again to disable the backlight. (**Note:** button 2, 3, 4, 5 can be enabled only when the instrument is power on.)

6. Meterbox Pro Operation Download Meterbox Pro APP to the smartphone before using the Bluetooth communication function. Meterbox Pro APP is compatible with instruments with Bluetooth: Laser Distance Meters, Multimeters Clamp Meters, Multifunction Insulation Tester, Environment Meter etc. The Meterbox Pro for Environment Meter detailed introduction please look at the help files in GUIDE which is in the Environment Meter interface of Meterbox Pro.

5. Maintain

1. The instrument should be cleaned with a damp cloth and non-irritating cleanser when necessary. Do not use corrosive and irritating cleanser.
2. Please keep the instrument in proper temp and humidity environment.

6. Battery Replacement

If the low battery signal appears on the LCD display, it indicates that the battery should be replaced. Open the battery cover with screw, then replace the exhausted battery with new battery.

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