

# **HT-625 INSTRUCTION MANUAL**

Humidity & Temperature Meter & Wet Bulb Temperature

Dew Point Temperature



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#### 1. INTRODUCTION

The **HT-625** Thermo-hygrometer has been designed to combine the functions of a Humidity Meter, Temperature Meter, Wet Bulb Temperature and Dew Point Temperature Meter.

The Meter is simple to operate and is commonly used in a variety of applications which include laboratory, industrial, engineering and professional use.

The Humidity & Temperature Meter uses a humidity & temperature semiconductor sensor. This operation manual contains general information and specification.

#### 2. FEATURES

- Fast Response Time %RH: 10S (90% at 25 ℃ still air)
- High Accuracy
- Dew Point Temperature (-30 °C ~100 °C/-22 °F ~199 °F)
- Wet Bulb Temperature (0°C~80°C/32°F~176°F)
- Resolution 0.1%RH, 0, 1℃/0, 1°F
- Max Hold and Data Hold Function
- Micro Processor-based Design
- Dual Display Temperature & Humidity
- Shutdown time digitally adjustable from 1 to 120
- Backlight

#### 3. SPECIFICATIONS

**Display:** Large 4-1/2 dual digital LCD display with backlight **Sensor Type:** A single chip relative humidity and temperature multi sensor module comprising a calibrated digital output.

Response Time: %RH:10S (90% at +25°C still air)

**Accuracy Note:** Accuracy is specified for the following ambient temperature range: 64 to 82°F (18 to 28°C)

Sampling Rate: 2.5 samples per second

Polarity: Automatic, (-) negative polarity indication.

**Over-range:** "OL" mark indication.

Low Battery Indication: The " is displayed when the

battery voltage drops below the

opera-ting level.

Operating Conditions: 32 to 104°F (0 to 40°C); < 80% RH

non-condensing

Storage Conditions: 14 to 140°F (-10 to 60°C); <80% RH non-

condensing

Non-Automatic /Auto Power Off: Firstly press humidity hold button, then press power button. After the full display appears, release both buttons. Icon" & " will not show on the LCD. The unit will not auto power off now.

Directly press the power on/off button. The Meter will automatically shut down after adjustment time inactivity (Sleep Mode).

Adjustable Shutdown Time: The shutdown time is digitally adjustable from 1 to 120 minutes. Firstly press the humidity max/min button, then press the power button. After the full display appears, release both buttons. icon" " and the current shutdown time on the LCD. And then respectively press C and F key to upward and downward to set the time period.

Power: One standard 9V, NEDA1604 or 6F22 battery.

**Dimensions/Wt.:** 150mm\*72mm\*35 mm/210g **Humidity / Temperature Measurement Range:** 

Humidity: 0%~100%RH

**Temperature:**  $-30^{\circ}\text{C} \sim 100^{\circ}\text{C}$ ,  $-30^{\circ}\text{F} \sim 199^{\circ}\text{F}$ 

**Resolution**: 0.01% RH, 0.01%/ $^{\circ}$ .

**Humidity Accuracy:**  $\pm$  2%RH (at 25°C, 20%~80% RH).

+ 2.5%RH (at other ranges)

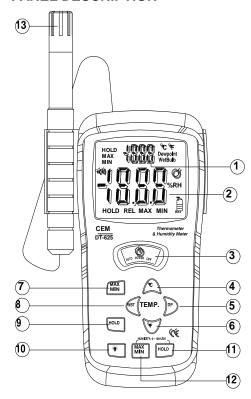
Note: The measuring range is from 0% to 100%, but above 80%

and below 20% the deviation is not specified.

Air Temperature Accuracy:  $\pm 0.5^{\circ}\text{C/}\pm 0.9^{\circ}\text{F}$  (at 25°C)

 $\pm$  0.8°C/ $\pm$  1.5°F (all other ranges)

#### 4. PANEL DESCRIPTION



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- Temperature Display
- ② Humidity Display
- ③ Power ON/OFF Button: Turn the meter power ON/OFF.
- ④ °C: Factory set °C. Press to change to "F' to "C".
- Dew Point Button: Dew Point Measurement.
- ⑥ 'T: Factory set °C. Press to change to "C' to "F'.
- Temperature MAX/ MIN Button: Press MAX/MIN button to enter MAX, MIN Recording mode (manual range only). Select the proper range before selecting MAX MIN to ensure that the MAX/MIN reading will not exceed the testing range. Pressing the max/min button once for Max or twice for Min function.
- WBT Button: Wet Bulb Measurement.
- Temperature HOLD Button: Press the Hold Button to enter the hold function. The Temperature reading will be held when the Data Hold button is pressed.
- (II) Backlight Button: Press to backlight on / off
- 11 Humidity HOLD Button
- Humidity MAX/ MIN Button
- 13 Humidity / Air Temperature Probe: Humidity & Temperature Semiconductor Sensor inside.

# 5. HUMIDITY AND AIR TEMPERATURE MEASUREMENTS

- 1. Hold the probe in the area to be tested & allow adequate time for readings to stabilise.
- 2. Press  ${}^{\circ}F, {}^{\circ}C$ , dew point, WBT Button to enter  ${}^{\circ}F, {}^{\circ}C$ , dew point Wet Bulb Measurement
- 3. Read the Relative Humidity and Air Temperature, dew point temperature wet bulb temperature.

#### **IMPORTANT NOTE:**

Do not immerse the probe into liquid; it is intended for use in air only.

## Warning:

Do not expose the sensor to direct sunlight.

Do not touch or manipulate the sensor.

### 6. BATTERY REPLACEMENT

If the sign " = " appears on the LCD display, it indicates that the battery should be replaced. Open the battery case and replace the exhausted battery with a new battery.

(1 x 9V battery NEDA 1604, 6F22 or equivalent).