INSTRUCTION MANUAL

MT667

Thermo Hygrometer

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1. INTRODUCTION

The MT667 is a digital microprocessor controlled Thermo-Hygrometer with fast response and high accuracy with Dew point, Wet bulb and Temperature measurements. The Wet Bulb mode is effectively a Digital Sling Psychrometer.

It is an ideal instrument for scores of practical applications for Laboratory, Industrial, Engineer and Professional use. This offers a wide variety of applications ranging from HVAC to laboratories, and is ideal in other industries such as computer rooms, hospitals, tobacco industry, factories and offices and general 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°C still air)
- High Accuracy
- Dew Point Temperature (-30°C to 100°C)/(-22°F to 199°F)
- Wet Bulb Temperature (0°C to 80°C)/(32°F to 176°F)
- Resolution 0.01%RH, 0.01°C/0.01°F
- Max Hold and Data Hold Function
- Micro Processor-based Design
- Dual Display Temperature & Humidity
- Auto Power Off, Disable Sleep Mode
- Back light
- Mini Size

3. SPECIFICATIONS

Function	Range
Display	Large 4½ dual digital LCD display with back light
Sensor Type	A single chip relative humidity and temperature multi sensor module comprising a calibrated digital output.
Response Time	%RH:105 (90% at +25°C still air)
Accuracy Note	Accuracy is specified for the following ambient temperature range: 18 to 28°C (64 to 82°F)
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 operating level.
Operating Conditions	0 to 40°C (32 to 104°F); < 80% RH non-condensing
Storage Conditions	-10 to 60°C (14 to 140°F); <80% RH non-condensing
Auto Power Off	Meter automatically shuts down after approx.15 minutes of inactivity (Sleep Mode) To override Auto Power Off function (Non-Sleep Mode): First press hold/backlight button, then press the 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.
Power	One standard 9V, NEDA1604 or 6F22 battery.
Dimensions/Wt.	225 (H) x 45 (W) x 34 (D) mm/200g

Humidity / Temperature Measurement Range

Function	Range
Humidity	0%~100%RH
Temperature	-30°C ~ 100°C, -30°F ~ 199°F
Resolution	0.01% RH, 0.01°C/°F.
Humidity Accuracy	±2%RH (at 25°C, 20% ~ 80% RH). ±2.5%RH (at other ranges)
Air Temperature Accuracy	±0.5°C+ 0.9°F (at 25°C) ±0.8°C/+ 1.5°F (all other ranges)

Note: The measuring range is from 0% to 100%, but above 80% and below 20% the deviation is not specified.

4. PANEL DESCRIPTION

1 - **Humidity / Air Temperature Probe:** Humidity & and Temperature Semiconductor Sensor inside.

2 - **LCD Display:** 4½ dual digits LCD display with units of °C, °F, %RH dew point, wet bulb and low battery "BAT" MIN /MAX HOLD, indication.

3 - **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. Press once to select MIN. Press again to select MAX. Press and hold the Button for over 2 second to turn off MAX, MIN Recording.

4 - **°C, °F, Dew Point, Wbt Select Button:** Press °C, °F, Dew Point, Wbt select Button to enter select °C, °F, Dew Point, Wet Bulb Measurement.

5 - **Power ON/OFF Button:** Turn the meter power ON/OFF.

6 - **HOLD /Back light Button:** Press Hold/backlight Button to enter hold function. The reading will be held when Data Hold button is pressed. Press Hold/backlight Button for over 2 seconds to turn on or off back light function.

7 - **Battery Compartment**

5. HUMIDITY AND AIR TEMPERATURE MEASUREMENTS

1. Hold the probe in the area to be tested & allow adequate time for readings to stabilize.
2. Press °C, °F, dew point, WBT select Button to enter select °C, °F, dew point Wet Bulb Measurement.
3. Read the Relative Humidity and Air Temperature, dew point temperature wet bulb temperature.

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

⚠ **WARNING:** Don't expose the sensor to direct sunlight (in solation). Don't 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 depleted battery with a new battery. (1 x 9V battery NEDA 1604, 6F22 or equivalent).

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