

**CENTER® 317**

**HUMIDITY  
TEMPERATURE  
METER**

**CE**



**Instruction Manual**

CENTER Technology Corporation

## **C O N T E N T S**

<b>TITLE</b>	<b>PAGE</b>
1. Introduction.....	1
2. Specifications .....	1
3. Symbol Definition and Button Location .....	2
4. Operating Instructions .....	3
4.1 Power-Up.....	3
4.2 Selecting the Temperature Units ....	3
4.3 Data-Hold Operation.....	3
4.4 DP/WB/Ambient Temperature Operation.....	3
4.5 MAX/MIN Operation.....	4
4.6 Auto Power Off .....	4
4.7 Backlight On/Off.....	4
4.8 Low Battery Condition.....	4
4.9 Battery Replacement .....	5

## 1. Introduction:

This instrument is a digital meter that measures relative humidity and temperature. Through the easy to use control, the meter can show the ambient temperature, the wet bulb temperature and the dew point temperature.

## 2. Specifications:

**Display:** Dual display.

**Measurement Range:**

- Humidity: 0%RH ~ 99%RH
- Temperature: -20°C ~ 60°C (-4°F ~ 140°F)
- Wet Bulb Temperature Range:  
-20°C ~ 60°C (-4°F ~ 140°F)
- Dew Point Temperature Range:  
-20°C ~ 60°C (-4°F ~ 140°F)

**Accuracy:** (at 23°C)

Range	Accuracy
10% RH ~ 90% RH	±2.5% RH
<10%RH, >90%RH	±5.0% RH
-20°C ~ 60°C	±0.8°C
-4°F ~ 140°F	±1.5°F

**Resolution:** 0.1%RH , 0.1°C / 0.1°F

**Response Time:** (@ t90; in slowly moving air)

- Humidity: 60 sec
- Temperature: 10 sec
- Sensor hysteresis:  
< ±1.5% RH with excursion of 90% to 10% to 90%.
- Temperature Coefficient:  
0.1 X (specified accuracy)/ °C(<23°C or >23°C)

**Operating Conditions:**

Temperature: -20°C~60°C

Humidity: 0°C~55°C

**Storage Conditions:** -10°C~60°C;<70% RH

**Sample Rate:** 2.5 times per second

**Battery:** 4 each AA/R6 batteries

**Battery Life:**

200-hours continuous (with alkaline battery)

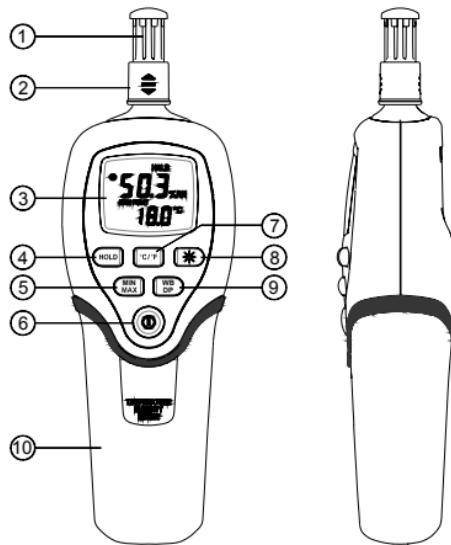
**Dimension:** 204x65x45 mm; 8.0x2.6x1.7 inches

**Weight:** Approx. 230g

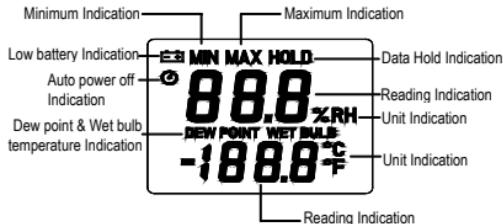
**Accessories:**

Batteries, instruction manual, carrying case

### 3. Symbols and Buttons:



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- |                  |                                    |
|------------------|------------------------------------|
| ① Sensor         | ⑥ ON/OFF button                    |
| ② Dust cover     | ⑦ °C/°F select button              |
| ③ LCD display    | ⑧ Backlight                        |
| ④ HOLD button    | ⑨ DP/WB/Ambient Temperature button |
| ⑤ MAX/MIN button | ⑩ Battery cover                    |
-

**LCD Definition:****4. Operation Instructions:****4.1 Power-Up:**

Press the **(1)** button to turn the Humidity/Temperature meter ON or OFF.

**4.2 Selecting Temperature Units:**

When the meter is first powered on, the default scale setting is set to the Celsius ( $^{\circ}\text{C}$ ) scale. To change to Fahrenheit ( $^{\circ}\text{F}$ ) press the  **$^{\circ}\text{C}/\text{F}$**  button. Press again to revert to Celsius. The next time the meter is turned on, the scale setting will be the same as it was when you powered off last time.

**4.3 Data-Hold Operation:**

The present reading may be held on the display by pressing the **HOLD** button. When the held data is no longer needed, release the data-hold operation by pressing the **HOLD** button again. When the meter is in the Data Hold mode, the **MAX/MIN**, and  **$^{\circ}\text{C}/\text{F}$**  buttons are disabled.

**4.4 DP/WB/Ambient Temperature Operation:**

The Meter displays ambient temperature when first turned on. To display dew point(DP) temperature, press **WB/DP** button once. Press **DP/WB** button again to switch to wet bulb (WB) temperature. Pressing **DP/WB** button a third time returns the Meter to ambient temperature. The display indicates when dew point and wet bulb temperature are selected.

#### **4.5 MAX/MIN Operation:**

Pressing the **MAX/MIN** button places the meter in the MAX/MIN mode. Under this mode the maximum value and minimum value are kept in the memory simultaneously and updated with every new data reading.

Pressing the **MAX/MIN** button will display the MAX indicator and the Maximum value on the display. Pressing **MAX/MIN** button again will display the MIN indicator and the Minimum value on the display. Pressing **MAX/MIN** button again causes the MAX and MIN indicators to blink together. This means that these data have been updated in the memory and the reading is the present temperature and humidity.

When the meter is in the MAX/MIN mode, the **°C/F** buttons are disabled. To exit the MAX/MIN mode, one may press and hold **MAX/MIN** button for two seconds.

#### **4.6 Auto Power Off:**

By default, when the meter is powered on, it is in the auto power off mode. The meter will power itself off after 30 minutes if no key operation is performed. To disable the auto power off feature, press and hold the **HOLD** button and then power on the meter, The auto power off symbol will disappear to indicate that auto power off is disabled.

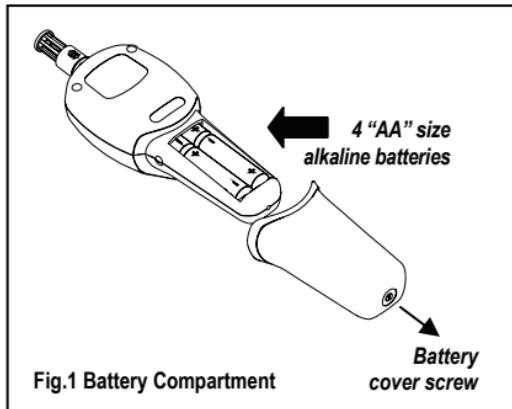
#### **4.7 Backlight On/Off**

The display backlight is switched on by pressing the  button. The backlight is switched off by pressing the button again.

#### **4.8 Low Battery Condition:**

When the battery voltage is under proper operation requirement, the  symbol will show on the LCD and the battery needs to be replaced with new batteries.

#### 4.9 Battery Replacement:



1. Back out the screw at the bottom of the battery door and lift the door away from the Meter.
2. Remove the four AA batteries from the compartment.
3. Replace with four new AA batteries, observing proper polarity as depicted on the bottom of the battery compartment.
4. Replace the battery door and tighten the screw to lock it in place.

**⚠ Caution:**

*To extend sensor life, keep the sensor's protective shutter closed whenever the meter is not in use.*

#### Optional Accessories:

33%RH Humidity standard

75%RH Humidity standard

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