REED

Model C-317



Psychrometer

Instruction Manual

www reedinstruments com

Table of Contents

Features	3
Specifications	.3-4
Instrument Description	.4-5
Operating Instructions	.5-6
ON/OFF	5
Selecting Temperature Units	5
Data-Hold Operation	5
Dew Point/Wet Bulb/Ambient Temperature Operation	6
MAX/MIN Operation	6
Auto Power Off	6
Backlight On/Off	6
Low Battery Indication	6
Batten/ Replacement	7

For service on this or any other REED product or information on other REED products, contact REED Instruments at info@reedinstruments.com



Features

- · Simultaneous display of relative humidity and temperature
- Electronic capacitance polymer film humidity sensor
- · Measures dew point and wet bulb temperatures
- · Displays temperature in °F or °C
- · LED backlight
- Display Hold
- Max/Min function
- · Auto shut off conserves battery life
- "Pull-up" sensor protector cap

Specifications

Display: Dual LCD screen

Temperature Range: -20 to 60°C (-4 to 140°F)

Temperature Accuracy: $\pm 1.6^{\circ}F$ ($\pm 0.8^{\circ}C$)
Humidity Range: 0 to 99%RH
Humidity Accuracy: $\pm 2.5^{\circ}RH$

Resolution: 0.1%RH, 0.1°C / 0.1°F

Humidity Response Time: 60 seconds
Temperature Response Time: 10 seconds

Temperature Coefficient: 0.1 X (specified accuracy)/°C

(<23°C or >23°C)

Operating Conditions:

Temperature: -20 to 60°C Humidity: 0 to 55°C

Storage Conditions: -10 to 60°C; <70%RH
Sampling Rate: 2.5 times per second

Power Supply: 4 x 1.5V "AA" alkaline batteries

continued ...



Battery Life: 200-hours continuous

(with alkaline battery)

Dimensions: 210 x 65 x 43mm (8.3 x 2.6 x 1.8")

Weight: Approx. 230g

Includes: Batteries and carrying case

Optional Accessories: 33% humidity calibration standard

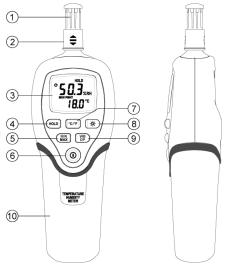
(model RHA-33)

75% humidity calibration standard

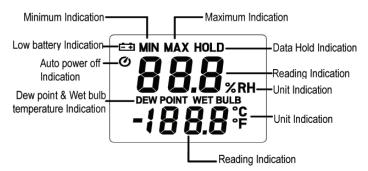
(model RHA-75)

Instrument Description

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



LCD Description



Operating Instructions

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

ON/OFF

Press the ① button to turn the humidity/temperature meter ON or OFF.

Selecting Temperature Units

By default the meter is set to the Celsius (°C) scale. To change to Fahrenheit (°F) press the [CPF] button. Press the button again to revert back 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.

Data-Hold Operation

To hold the current measurement displayed on the LCD screen press the button. When the data being held is no longer needed, release the data-hold operation by pressing the button again. When the meter is in the data-hold mode, the MAX/MIN, and °C/°F buttons are disabled.



Dew Point/Wet Bulb/Ambient Temperature Operations

When first turned on the meter will display the ambient temperature. To display the dew point (DP) temperature, press the $\left(\begin{array}{c} WB \\ WB \end{array}\right)$ button. Press the $\left(\begin{array}{c} WB \\ WB \end{array}\right)$ button again to switch to wet bulb (WB) temperature. Pressing the $\left(\begin{array}{c} WB \\ WB \end{array}\right)$ button a third time returns the meter to ambient temperature. The display indicates when dew point and wet bulb temperature are selected.

MAX/MIN Operation

Pressing the www button places the meter in the MAX/MIN mode. Under this mode the maximum value and minimum values are kept in memory and updated with every new data reading. Pressing the www button once will display the MAX indicator and the maximum value on the display. Pressing the www button again will display the MIN indicator and the minimum value on the display. Pressing the www button again causes the MAX and MIN indicators to blink together. This means that the meter is now taking a new data reading and is displaying the present temperature and humidity on the LCD screen. The meter is now logging a new MAX/MIN reading to be displayed. When the meter is in the MAX/MIN mode, the °C/°F buttons are disabled. To exit the MAX/MIN mode press and hold www button for two seconds.

Auto Power Off

By default the meter is set to auto power off mode. The meter will power itself off if left inactive for 30 minutes. To disable the auto power off feature, first turn the meter off. Press and hold the (NOLD) button and then turn the meter back on. The auto power off symbol will disappear indicating that auto power off has been disabled.

Backlight On/Off

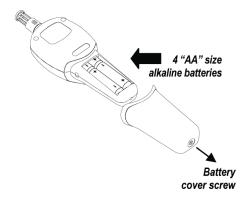
The LCD backlight can be switched on or off by pressing the 🔅 button.

Low Battery Indication

When the battery voltage is low, the **E** symbol will show on the LCD indicating that the battery needs to be replaced.



Battery Replacement



- Take out the screw on 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.

For service on this or any other REED product or information on other REED products, contact REED Instruments at info@reedinstruments.com

Notes _	 	 	

