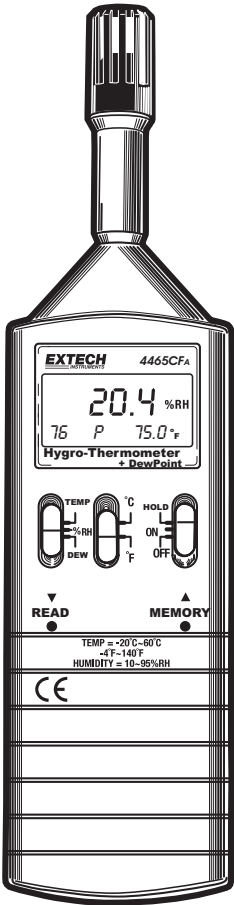


User's Guide



Hygro-Thermometer Datalogger

Model 4465CF_A



Introduction

Congratulations on your purchase of the Extech 4465CFa Hygro-Thermometer. The Extech Hygro-Thermometer measures and displays Temperature and Relative Humidity. In addition, Dew Point Temperature is calculated and displayed. The meter incorporates a 99 memory storage feature whereby temperature, humidity, and dew point readings can be stored for later recall. This meter is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

Safety Information

- Please read the following safety information carefully before attempting to operate or service the meter.
- Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.

Environmental Conditions

- Altitude: 6562 ft (2000 meters) max.
- Relative Humidity: 95% max.
- Ambient operation: 32 to 140°F (0 to 60°C)
- For indoor use only

Maintenance and Cleaning

Repairs or servicing not covered in this user guide should be performed by qualified personnel. Periodically wipe the case with a dry cloth. Do not use abrasives or solvents.

Safety Symbols

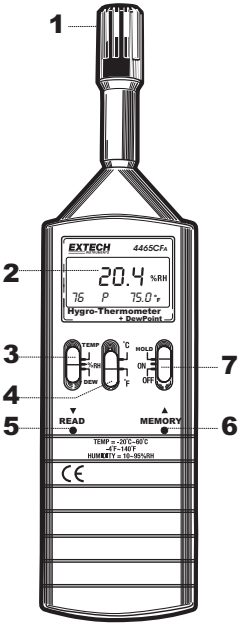


Complies with EMC

Meter Description

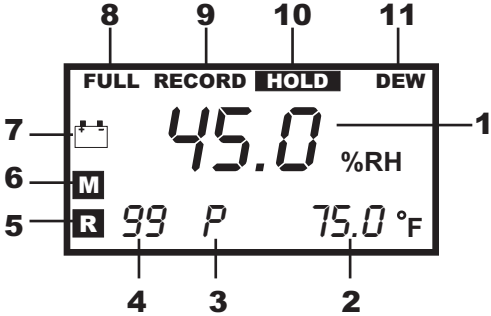
- 1. Temperature and Humidity Sensor
- 2. Multifunction LCD Display
- 3. Temperature (TEMP), Relative Humidity (%RH), and Dew Point Temperature (DEW) Select Switch
- 4. Temperature units Select Switch (C/F)
- 5. READ push-button for use with built-in datalogger. Also functions as Down arrow button for scrolling stored data
- 6. MEMORY push-button for use with built-in datalogger. Also functions as Up arrow button for scrolling stored data
- 7. HOLD ON/OFF switch

The battery compartment and the tripod mount are located on the rear of the instrument.



Display Description

- 1. Primary Display
- 2. Secondary Display
- 3. Auto Power OFF active
- 4. Memory Location Counter (0-99)
- 5. Read mode
- 6. Memory mode
- 7. Low Battery indicator
- 8. Memory full indicator
- 9. Record Mode active icon
- 10. Data Hold mode active icon
- 11. Dew Point Temperature mode



Operation

Getting Started

1. Set the TEMP, %RH, DEW switch to the desired measurement position.
 - TEMP position: Temperature reading shown on Primary display (top); Relative Humidity % is shown on Secondary display (lower).
 - %RH position: Relative Humidity % shown on Primary display; Temperature is shown on the Secondary display
 - DEW position: Dew Point temperature shown on Primary display; Relative Humidity % shown on Secondary display.
2. Set the **HOLD-ON-OFF** switch to the ON position. If the display does not switch on please check that the 9V battery is installed and is fresh.
3. Set the °C/°F selector switch to the desired unit of measure for temperature.
4. The Humidity and Temperature sensors are contained in the tip of the meter. Mount or hold the meter in the area to be tested. For convenience, a standard tripod mount is located at the rear of the meter.
5. Allow time for relative humidity readings to stabilize (3 to 5 minutes, typically).
6. When the low battery icon  flashes on the LCD, replace the 9V battery.

Data Hold

Set the **HOLD-ON-OFF** switch to the HOLD position to freeze a displayed reading. The **HOLD** icon will appear on the LCD display. Move the switch to the ON position to continue normal operation (the **HOLD** icon will switch off).

MEMORY READ Feature

Two front panel pushbuttons (**MEMORY** and **READ**) control the storage and retrieval of readings. The **MEMORY** and **READ** buttons double as **DOWN ▼** and **UP ▲** arrow keys for navigating the meter's memory locations. Up to 99 readings can be stored and recalled.

Storing a reading

Momentarily press the **MEMORY** button to store the current reading (the **M** icon will flash on the LCD display). The memory location number (0 - 99) is always shown on the lower left side of the LCD display for easy reference. Each time the **MEMORY** button is pressed the meter beeps and the location number increments by one. When the memory is filled, the meter beeps twice and the display will flash the icon FULL.

Viewing stored readings

To view stored readings, the meter must first be placed in the READ mode by momentarily pressing the **READ** button (the **R** icon will appear on the LCD). Now, use the **DOWN ▼** arrow button to step through the storage locations. Use the **UP ▲** arrow button to jump ten (10) readings at a time. To exit the READ mode, press and hold the **READ** button for 3 seconds until two beeps are heard (the **R** display icon will switch off). Please note that the memory can only be read in reverse order (99 first down to 1.)

Clearing all stored readings

With the meter off, press and hold the **MEMORY** button while turning the meter on. The CLr (clear) display icon will appear. Release the **MEMORY** button; all of the readings stored in the meter are now erased.

Battery Replacement

The Battery Compartment is located on the lower back of the instrument housing. Slide the compartment cover off in the direction of the arrow. Replace the 9V battery and secure the compartment cover. The low battery symbol  appears on the display when the battery requires changing.

Calibration

Separate calibration documentation is available covering the calibration procedures for this instrument. Contact the Extech Technical Support department for additional information.

Automatic Power OFF

The meter automatically shuts off after a 10 minute period of inactivity. To disable this feature, hold the READ button while turning the meter on. The 'P' display icon appears and the meter beeps when the Auto Power OFF feature is enabled.

Specifications

General Specifications	
Display	Multi-function LCD display
Measurement	Relative Humidity% (RH), Temperature (°C & °F), and Dew Point Temperature (°C & °F)
Data Hold	Freezes Display
Data Storage	99 readings can be stored and recalled
Response Time	45% to 95%: ≤ 3 minutes
Humidity	95% to 45%: ≤ 5 minutes
Measurement rate	2.5 readings per second
Operating Temperature	32 to 122°F (0 to 50 °C)
Operating Humidity	< 80% RH
Storage Temperature	14 to 140°F (-10 to 60°C)
Storage Humidity	< 70% RH
Power Supply	9V battery
Battery life	400 hours (approx.)
Weight	7.0 oz. (198 g)
Size	10.6 x 2.7 x1.0" (180 x 72 x 32mm)

Measurement Specifications			
	Range	Resolution	Accuracy
% Relative Humidity	10% to 95% RH	0.1% RH	30 to 95% RH: ±3% RH 10 to 30% RH: ±5% RH
Temperature	-4 °F to 140 °F (-20°C to 60 °C)	0.1° F/C	±1.5 °F (±0.8°C)
Dew Point Temperature	-56 °F to 140 °F (-49°C to 60 °C)	0.1° F/C	

Warranty

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for **one year** from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Calibration and Repair Services

Extech offers repair and calibration services for the products we sell. Extech also provides NIST certification for most products. Call the Customer Service Department for information on calibration services available for this product. Extech recommends that annual calibrations be performed to verify meter performance and accuracy.



Support line (781) 890-7440

Technical support: Extension 200; E-mail: support@extech.com

Repair & Returns: Extension 210; E-mail: repair@extech.com

Product specifications subject to change without notice

For the latest version of this User's Guide, Software updates, and other up-to-the-minute product information, visit our website: www.extech.com

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