

Humidity & Temperature Datalogger

Model RHT20

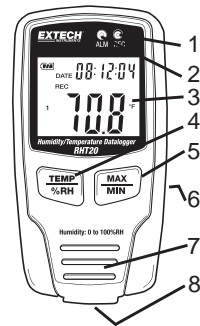


Introduction



Congratulations on your purchase of this Temperature and Humidity datalogger. With this meter, you can monitor and log data over long periods of time and then easily transfer the data to a pc for viewing and evaluation. The LCD display provides current or Max/Min temperature, humidity and time information. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

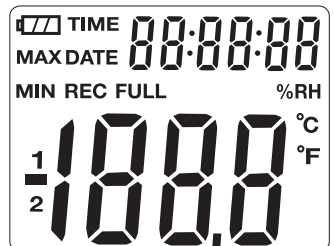
Description

- 1 Record LED
- 2 Alarm LED
- 3 LCD Display
- 4 Temperature – Humidity display selection
- 5 MAX/MIN display selection
- 6 Battery Compartment (rear)
- 7 Temperature and Humidity sensors
- 8 USB PC port (bottom)



Display Description

-  Full battery symbol.
-  Weak battery symbol. Replace battery when this appears. Battery life is more than 3 months.
- DATE:** Current date is displayed
- TIME:** Current time is displayed
Time and Date automatically swap every 10 sec.
- MAX:** Maximum value during a datalogging session is displayed
- MIN:** Minimum value during a datalogging session is displayed
- REC:** Recording in progress indicator
- FULL:** Memory is full indicator
- %RH:** Humidity value is displayed
- °C:** Celsius temperature units
- °F:** Fahrenheit temperature units



Operation:

The display and front panel buttons provide a means to view the status of the datalogger, observe the current Temperature or Relative Humidity and to view the MAX and MIN values recorded during a recording session. The datalogger setup conditions such as sample rate, temperature units and alarm values are programmed via the provided software. Refer to the software Help File on the disk for those procedures.

1. Press the MAX/MIN button to view the recorded Max and Min values with the time they were recorded. If, while in this mode, no button is pressed for 40 seconds the display will automatically return to the real time display.
2. The Time and Date display will automatically toggle every 10 seconds
3. When downloading the data to the PC, "-PC-" will be displayed on the LCD. After the download is complete, the datalogger will display the last value recorded, but it will stop recording. The logger needs to be re-set from the software to begin a new recording session.
4. The "REC" LED will flash at the programmed rate when the unit is datalogging.
5. Alarm function: When the measured value exceeds the programmed upper or lower limit and the LED function is selected in the software, the ALM LED will flash one time per minute.
6. If "-LO-" is displayed, the temperature and humidity sensors need attention.
7. The datalogger should be placed upright when in use.
8. If used in low temperature, high humidity environment, the datalogger should be placed upright in a dry area to remove any condensation before downloading the data.
9. Battery life can be extended by leaving the datalogger connected to a pc.
10. Disabling the REC and ALM LED's will extend battery life.
11. The LCD display will stop functioning at very low temperatures and will become active again when the unit is returned to higher temperatures.

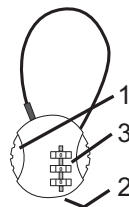
NOTE: The logger needs to be re-set from the software to begin a new recording session.

Combination Lock

The logger is supplied with a wall mount case and security combination lock. The lock is shipped with a -0-0-0- code as viewed from the side with the alignment bar.

To change the code:

1. Press the release to open the lock (1)
2. Using a pointed object, press IN and HOLD the locking pin on the bottom of the lock (2).
3. Set the new code (3) and release the locking pin



Software Installation

1. Place the CD in the drive and then follow the on-screen installation instruction.
2. After the software is installed, keep the CD in the drive and connect the datalogger to the PC by the USB cable.
3. A USB Driver installation window will pop-up; follow the directions to install the driver.

Software application

The Datalogger USB software is a program for collecting data from the DATA LOGGER when it is connected to a PC or notebook computer. The data may be displayed graphically, as Excel or similar programs. The major functions are all listed in the main window.

System Requirements

Check the software download page of the extech.com website for the latest version of the PC software and its operating system compatibility.

Minimum Hardware Requirements:

PC or NoteBook with Pentium 90MHz or higher, 32 MB RAM;

At least 7 MB byte hard disk space available to install HT Datalogger USB software

Recommended display resolution 1024 x 768 with High Color (16 bit)

Software Operation

The Software operation is described in the HELP file.

Maintenance



WARNING: To avoid electrical shock, disconnect the meter from any circuit and turn OFF the meter before opening the case. Do not operate with an open case.

Battery Replacement

1. Remove the green protective cover by pushing the bottom of the meter until it slides through the opening at the top.
2. Remove the two Phillips head screws that secure the battery compartment at the back of the meter.
3. Open the battery compartment and replace the 3.6V lithium battery observing correct polarity.
4. Re-assemble the meter before use.

Safety: Please dispose of batteries responsibly; never dispose of batteries in a fire, batteries may explode or leak. If the meter is not to be used for 60 days or more, remove the battery and store separately.



Never dispose of used batteries or rechargeable batteries in household waste.

As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store where the batteries were purchased, or wherever batteries are sold.

Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment

Specifications

Display	Multi-function LCD
Measurement ranges	0 to 100% RH -40 to 158°F, -40 to 70°C
Resolution	0.1°, 0.1RH
Maximum data points	16,350 Temperature and 16,350 Humidity values
Sample rate	1s to 24h selectable
Analysis software	Check the software download page of the extech.com website for the latest version of the PC software and its operating system compatibility.
Open input indication	"LO" appears on the LCD
Low battery indication	Empty battery symbol appears on the LCD
Power supply	3.6V Lithium Battery
Battery life	3 months (approximately)
Operating Temperature	-40 to 158°F, -40 to 70°C
Operating Humidity	0 to 100% RH
LCD Operating Temperature	-13°F to 158°F (-25°C to 70°C)
Dimensions	3.7x1.9x1.2") (94.4x48.9x31.2mm)
Weight	3.2oz (90.7g)

	Range	Accuracy
Relative Humidity	0 to 20% and 80 to 100%	±5.0%
	20 to 40% and 60 to 80%	±3.5%
	40 to 60%	±3.0%
Temperature	14 to 104°F	±1.8°F
	-13 to 14°F and 104 to 158°F	±3.6°F
	-40 to -13F	±8°F typical
	-10 to 40°C	±1°C
	-25 to -10°C and 40 to 70°C	±2°C
	-40 to -25C	±4°C typical

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