User's Guide

EXTECH ®
INSTRUMENTS
A F L I R C O M P A N Y

Humidity & Temperature Datalogger

Model RHT20

EXTECH ®
INSTRUMENTS
A FLIR COMPANY

ALM   REC

DATE   **08:12:04**

REC

1   **70.8** °F

Humidity/Temperature Datalogger
RHT20

TEMP   MAX
%RH   MIN

Temperature: - 40 to 158°F
- 40 to 70°C
Humidity: 0 to 100%RH
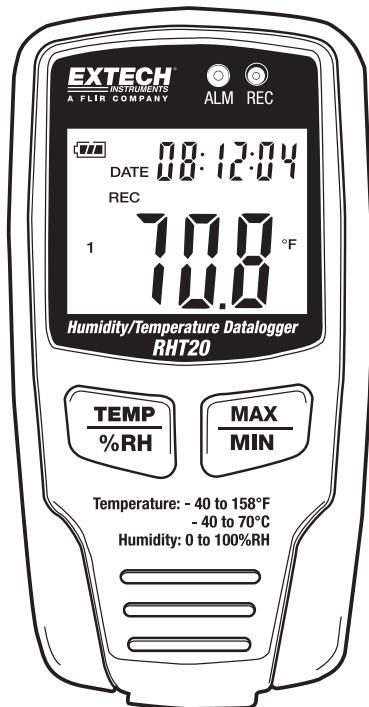
Introduction

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 meter 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)
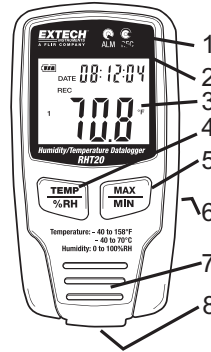
Display Description

|	
▯▨	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 adatalogging 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
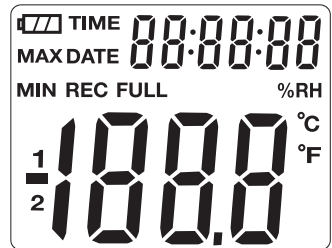
Operation:

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.

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
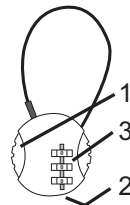
Software Installation

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

Windows 2000 or Windows XP or Vista

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 1024X768 with High Color(16 bit).

Software Operation

The Software operation is described in the HELP file.

Battery Replacement

You, as the end user, are legally bound (**EU Battery ordinance**) to return all used batteries, **disposal in the household garbage is prohibited!** You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold!

Disposal: Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifecycle

RHT20-EU-EN-V1.2- 02/12

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	2000/XP/ Vista
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