USER MANNUAL
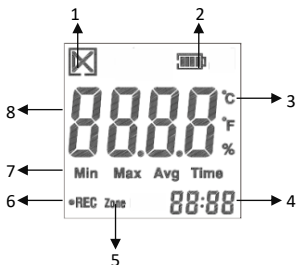
This manual applies to
1. M502-T 30N USB PDF Temperature Data logger
2. M502-TH 30N USB PDF Temp & Humi Data logger

REV 1.1

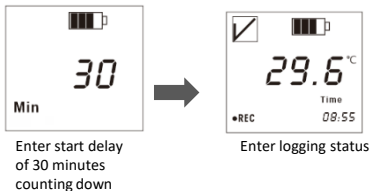|	
1	Alarm status **X** Alarm, √ No alarm
3	Battery Indicator ▥ Full ▥ Sufficient ▯ medium ▯ low ▯ Exhausted
4	Data unit ° **C** centigrade ° **F** Fahrenheit degree **%** Relative humidity
5	Current logger system time
6	PDF report time zone
7	Running status: Data logging
8	Statistical value **Min Max AVG** *D 88* Logging time of days
9	Measured value

1. **WORKING PARAMETER CONFIGURATION**

Connect the logger to the computer, open the **Hloggertool** software, click the software to enter the configuration logger mode, enter the required configuration parameters, and click **START** to complete the configuration.

- Do not disconnect the logger from the computer until the prompt of successful setting pops up in the software.
- If the logger is not configured, the previously configured parameters will be used after the logging started
- The logger can only be configured before logging started

2. **START LOGGING**

Press and hold the key ⏵ on the logger for 5 seconds until START DELAY TIME counting or ●REC displayed on the LCD screen, as shown in the following pictures:

Enter start delay of 30 minutes counting down	Enter logging status

- ●REC appears on the LCD, indicating that the logger has entered into the logging state

3. Stop logging

Press and hold the key (▶) for 5 seconds or connecting the logger with computer until the LCD screen displays stop (as shown in the pictures below), indicating that the logger has successfully stopped data logging.

- If the logger is configured as the key stop logging disable, the logger can stop logging only after connecting the computer USB, or it can automatically stop logging when the logging capacity is full.
- Within 60 minutes after starting logging, the logger is in the logging protection state. At this time, pressing the key cannot stop logging.

4. View statistics

After the logger starts logging, you can click (▮▮) to view the working statistics of the logger. The statistics that can be viewed by the logger are:

Minimum, maximum, average value of data

PDF report time zone

Data recorded days

1. Event marked

Click ▶ once when the logger is logging, and the logging figure flashes one time, indicating that the data event marked is successful, and this event will be recorded in the PDF report. The events can be marked at most 8 times, and can only marked once in the same logging interval.

2. Download data

Without installing any software, connect the logger to the USB interface of the computer. Just wait for about ten seconds, and the logger will automatically generate a data report in PDF format. Copy the PDF report to your computer to complete the data download.

3. Logger reset

If the logger is configured to be used repeatedly, press and hold ▶ ⓘ with both hands for 5 seconds, the logger will reset to the standby mode, the LCD will display SLEP, and the LCD screen will be turned off after 3 minutes, as shown in the figure below, the logging can be directly started. At this time, the logger will work with the current system time and working parameters.

STOP	SLEP
Before reset	After reset

- After the logger is reset, the previously recorded data and generated PDF report will be cleared. Please reset the logger carefully.
- The working parameters can be re-configured with Hloggertool after the logger is reset

➤ BATTERY

1. Battery life

Work environment	Battery life
Above 0 ℃	4.5 months
Below - 10 ℃	3 months

The length of battery life is different due to the influence of working temperature, logging interval and battery brand. We recommend that customers use CR2450 batteries produced by regular manufacturers.

2. Power indication

▯▮▮▮	Full
▯▮▮	sufficient
▯▮	medium
▯	Low ,replace battery as soon as possible
▯	Exhausted, Replace the battery immediately

Under low temperature conditions, the power indicator may not accurately reflect the actual remaining power.

3. Replace the battery

a) Put a coin into the groove on the battery cover, open the battery cover along the open direction, and take out the old battery.
b) Put the new CR2450 battery positive pole upward into the logger battery compartment.
c) Screw it clockwise in the close direction with a coin.

- The accurate power indication will not refresh until 10 minutes after replacing the new battery.
- After replacing the battery, if there is no configuration, the system cannot set the time. At this time, the logger system time will be delayed by 1-2 minutes.
- When the logger is in the logging state, please try not to replace the battery.

➢ INPORTANT INFORMATION

- Do not place the data logger (- 30 ° C... 70 ° C) or external probe in an environment beyond its tolerance range to avoid logger damage.
- High concentration of chemical pollution will cause damage to the senser polymer layer. Therefore, the product should be kept and used away from chemical pollution environment.
- Do not use this product in flammable and explosive environment.
- Do not shake, knock or impact this product.
- It is strictly prohibited to put this product into fire or water to avoid the risk of fire and explosion.
- If the product has liquid leakage, do not continue to use it.
- Please dispose batteries according to environmental protection regulations.

➢ WARRANTY

The warranty period of the product is one year from the date of sale. Please inform us in time of any problems caused by the quality defects within the warranty period, and we will provide one of the following treatment methods according to the specific situation.
1) Free repair or component replacement
2) Free device replacement
3) Refund the payment (the device to be refunded must be returned to our company)

This warranty does not apply to:
a) Consumable accessories, such as batteries, unless the damage is caused by defects in materials;
b) Surface damage, including but not limited to scratches, dents, etc;
c) Damage not caused by the products;
d) Damage caused by improper operation, flood, fire, earthquake or other external factors;
e) Damage caused by operating logger beyond the scope of product technical indicators;
f) The products or parts are modified without the written permission of our company

➤ PRODUCT CHARACTERISTICS

- Encrypted PDF report generated with software free
- Repeat start without need of re-configuration
- Users programmable
- Compatible with USB2.0
- Factory 3-point calibration
- Battery replaceable

➤ TECHNICAL DATA

Use type	Reusable
sensor	Digital temperature and humidity sensor
measuring range	-30…70℃ 0%RH…100%RH*
measurement accuracy	± 0.3 ℃ (- 10... - 70 ℃) ± 0.5 ℃ (other ranges), ±5%RH (20…80%RH)* ± 8% RH (other range)*
logging capacity	14400 readings
Battery life	3 to 4.5 months
Shelf life	2 years

*Applicable to temperature and humidity logger

Distributor information