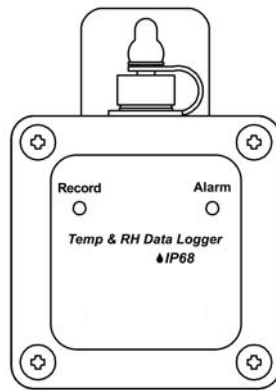


# Temperature Humidity Data Logger

## User's Manual



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## 1 Introduction

The temperature humidity data logger is designed with a high-precision capacitive humidity sensor and the temperature sensor of NTC thermistor type.

## 2 Accessories

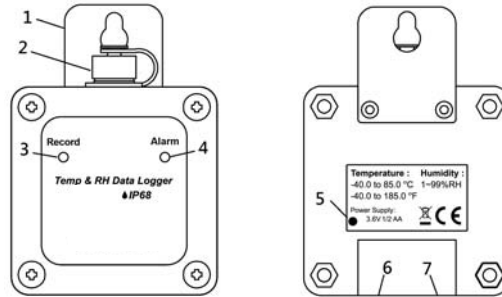
- 1 Meter
- 1 3.6V ½ AA lithium battery
- 1 USB cable
- 1 Carrying case

## 3 Safety

	Caution! Please refer to this manual. Improper use may damage the meter and its components.
	Compliance with European Directive

- Do not operate in environments with flammable gas or humid environments.
- Do not place the meter in locations with high temperature, humid, or exposed to direct sunlight.
- Operating altitude: 2000 meters below sea level.
- Operation environment: Indoor use; contamination level class 2.
- EMC: EN61326-1:CISPR 11:Group 1, Class B
  - ✧ **Class B** – Equipment is suitable for use in domestic establishments and outside facilities.
  - ✧ **Group 1** – RF energy generated is needed for internal functioning.

#### 4 Meter description

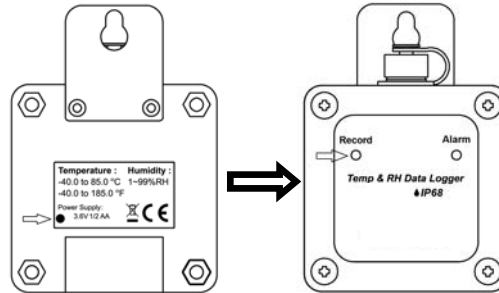


1. Wall-mount bracket
2. USB interface
3. Indicator for power on and record
4. Indicator for power off and alarm
5. Trigger point of magnetic switch
6. Temperature sensor
7. Humidity sensor

## 5 Operation

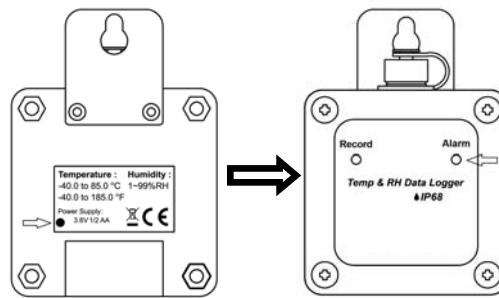
### 5.1 Power on:

Take a magnet and slightly contact the back of the meter for 1 second (as shown below), then the meter will power on; during the power on process, the green LED (RECORD indicator) will light up for 2 seconds and the meter will start recording the data at the moment.



### 5.2 Power off:

When power on, take a magnet and slightly contact the back of the meter for 1 second (as shown below), then the meter will power off; during the power off process, the red LED (ALARM indicator) will flash twice.



### 5.3 Record setting

The meter can be set up for the settings of logging operation only when it is connected to a PC. When the space for recording data is full, the meter will automatically stop recording until it is connected to a PC and the data is deleted.

## 6 General Specifications

- Compliant with: IEC 60529 IP68.  
BS EN 12830(S; D; 1).
- Low battery indication.
- Alarm function.
- Battery: One 3.6V ½ AA lithium battery
- Battery Life: 1 year
- Standby power consumption: about 66uW.
- Operation power consumption: about 1.3mW.
- Data logging 25,000 records.
- Statistics up to 10 maximum values
- Operating temperature: -40°C to 85°C, and humidity less than 95% RH ((non-condensing).
- Storage temperature:-40°C to 85°C,and humidity less than 70% RH ((non-condensing).
- Dimension: 88 (L)x61 (W)x34 (H) mm.
- Weight: about 118g(battery included).

## 7 Software Installation

1. Link website <https://www.tenmars.com/>

or scan below QR code:



2. Search TM-317.

3. Click on the TM-317 photo.

4. Click **File Download**, then select **Software Download**.

5. Download and unzip the software.

6. For the latest software information and installation procedures, please refer to the **software installation guide**.



## 8 Electrical Specifications

The environmental conditions for the best accuracy:  
23°C ± 5°C and RH <80%

### 8.1 Temperature:

Measuring range	-40.0°C~+85°C(-40.0°F~+185.0°F)
Resolution	0.1
Accuracy	-10~40°C(14~104°F): ±0.6°C (±1.5°F) Other range: ±1.0°C(±1.8°F)
Response time	< 2 seconds

### 8.2 Humidity:

Measuring range	1%~99.0%RH
Resolution	0.1 %RH
Accuracy	±3.0%(20.0~80.0%RH,@25°C) ±5.0%(< 20.0%RH>80.0%RH,@25°C)
Response time	< 3 seconds (50%→0% RH) at 23°C

### 8.3 Wet bulb temperature(WET)

Measuring range	-40.0°C~+85°C(-40.0°F~+185.0°F)
Resolution	0.1
The value is calculated from the RH and Temperature.	

### 8.4 Dew point temperature(DEW)

Measuring range	-76.0°C~+85°C(-105.0°F~+185.0°F)
Resolution	0.1
The value is calculated from the RH and Temperature.	

## 9 Maintenance

1. When battery low, the red light will flash twice and automatically shut down. Please replace the battery immediately to ensure accuracy.
2. If the meter is dirty, please wipe it with a soft cloth, such as a glasses cloth; not wipe it with chemical solvents.
3. If the meter fails, please call the authorized repairer, or sent it back to the original manufacturer for repair.

## 10 Battery Replacement

1. Turn off the power.
2. Remove the screws and nuts of the meter and open the battery cover.
3. Remove the battery and install a new one of 3.6V ½ AA lithium type. Please pay attention to the polarity positions of positive and negative.
4. Install back the battery cover and tighten the screws and nuts.

## 11 Disposal



Note: This symbol indicates that the meter and its accessories must be separated and processed properly.

