



Data Centre Solutions

Temperature And Humidity Sensor



Technical parameters

Working voltage	6—20VDC	
Temperature	-20C—85°C	
Temperature precision	±0.2°C	
Humidity	0 —100% RH	
Accuracy of humidity	±2%	
Power dissipation	<0.5W	
Indicator light	Green: Working fine Red: Abnormal work	
RS485	Communication protocol	MODBUS
	Baud rate	9600
	Data format	N,8,1

Description

This temperature and humidity sensor features a high-performance imported chip, providing stable operation, wide range, and precise measurements. It supports dual RJ45 ports for easy wiring integration and RS485 communication for compatibility with various monitoring systems.

With a compact design, strong magnetic force, and positioning holes, installation is quick and flexible. The device address is easily set using a dialing switch for seamless network integration.

Ideal for environments like server rooms, data centers, and laboratories, this sensor ensures reliable environmental monitoring with simple setup and efficient performance.

Features

- Temperature Detection Range (-40°C to +125°C): Covers extreme temperatures, suitable for industrial, outdoor, and research applications.
- Temperature Accuracy (±0.2°C): High precision for reliable readings in sensitive environments.
- Operating Temperature Range (-20°C to +80°C): Stable performance in a wide range of indoor and outdoor conditions.
- Humidity Detection Range (0-100%): Monitors all humidity levels, ideal for data centers, warehouses, and greenhouses.
- Humidity Accuracy (±4%): Provides accurate humidity measurements for most practical applications.
- Operating Voltage (12VDC): Compatible with low-voltage systems for energy-efficient operation.
- Dimensions (125mm x 64mm x 37mm): Compact size for easy installation in tight spaces.



To Order

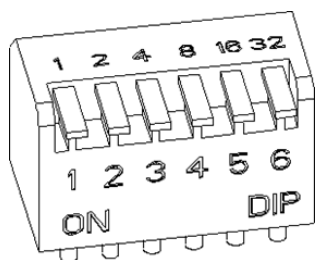
To place an order, use the contact details below.



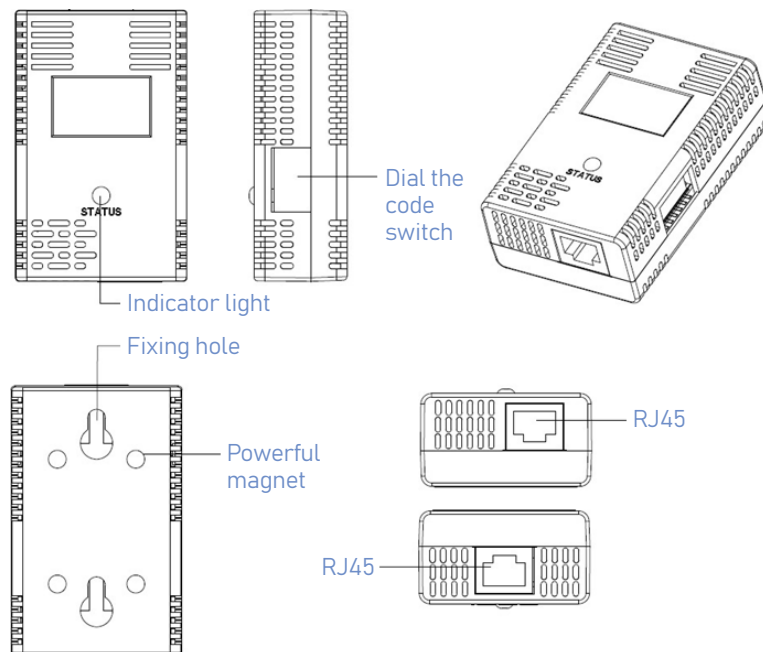
Address setting

The communication address of the temperature and humidity detection box is set through the 6-digit dialing switch, and it is set through P1~P6 in Figure 2. The binary is used. P6 is the high position, and the key does not dial on the top represents 0, but only dial down P1 represents 1, P2 represents 2, P3 represents 4, P4 represents 8, P5 represents 16 and P6 represents 32. The address is the sum of several representative values. $0+0+0+0+0+0=0$; $1+0+0+0+0+0=1$; P1, P2 dial address $1+2+0+0+0+0=3$; $1+2+4+0+0+0=7$; $1+2+4+8+0+0+0=15$; P1, P2, P3, P4, P5 dial the address $1+2+4+8+16+0=31$; P1, P2, P3, P4, P5, P6 dial the address is $1+2+4+8+16+32=63$.

Figure 2, DIP switch



Technical Drawings



RJ45 pin definition

The temperature and humidity detection box communicates with the external monitoring through the RS485 of two parallel RJ45 ports. Pin definition of two RJ45 is exactly the same, and one in and one out is connected to BUS.

P1	P2	P3	P4	P5	P6	P7	P8
RS485+	RS485-	--	+12V	--	--	GND	

Environmental requirements

1. Do not touch a conductor with strong electricity
2. No dust, corrosion and gas with electricity
3. Avoid using in places with water and fog
4. Leave a 3cm distance around the sensor

Example Part Number	
Description	Part Number
Water Leakage Sensor	eWT-A

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