#### SPD-HT485-B

# **Temperature Humidity Transmitter**

SPD-HT485-B is used to measure and display the ambient temperature and humidity. The product uses high-performance imported components and is designed to resist electromagnetic interference. This product is designed for the rack environment. The product adopts RS485 communication and dual RJ45 port design, which greatly simplifies the system wiring and can be integrated with various monitoring systems to achieve remote control.



# **Specification**

Model No.	SPD-HT485-B					
Power Supply	9~32V DC					
Power Consumption	<0.1W					
Measurement Range	Temperature	-20℃ ~ 70℃				
	Humidity	0~100%RH				
Measurement Accuracy	Temperature	±0.3℃ at 25℃				
	Humidity	±3%RH at 25°C				
RS485 Communication	Protocol	MODBUS-RTU protocol				
	Baud rate	Default 9600; optional 2400, 4800, 9600, 19200bit/s				
	Data format	N,8,1;				
EMC Index	EFT(pulse train)	difference module±2KV				
	ESD(static electricity)	Contact discharge±8KV ,air discharge±2KV				
Dimension (L*W*H)	85*50*24.5mm					

## Installation

- Environmental requirements
- a. No conductive dust, no gases that corrode metals and damage insulation
- b. Avoid using in places with water and fog
- c. The horizontal distance from the sensor to the air outlet of the air conditioner should be greater than
  1.5m, and the distance to the ceiling air outlet should be greater than 0.5m
- d. Operating temperature: -20  $^\circ \rm C$   $\sim$  70  $^\circ \rm C$  , 0  $\sim$  100%RH no condensing
- e. Storage temperature:  $-30^{\circ}$ C ~  $70^{\circ}$ C
- Installation

There are 2 methods:

- a. Magnetic mount: The back of the device can be directly attached to the iron surface by magnet.
- b. Wall mount: The device can be hung on the fixing screw through the installation hole.

When Magnetic mount, you should hold the device and slowly put it on the iron surface in your hand to avoid violent impact between the magnet and the iron surface.



### Wiring

The electrical connection between the device and the outside is completed through two RJ45 interfaces. The RJ45 interface is used for power supply, communication and equipment cascading. Refer to the table below for definitions.

Pin	Pin1 & pin 2	Pin 3 & pin 6	Pin 4 & pin 5	Pin 7	Pin 8
Definition	Power positive	NC	Power negative	D+	D-

When installing, insert one end of the standard straight-through network cable into the RJ45 interface of the device, and insert the other end of the network cable into the dedicated sensor port of the upper device or the cascaded sensor.

Do not connect the power supply to the communication terminal by mistake, otherwise it will cause damage to the components

#### Address Setting

The DIP switches DIP6~DIP1 are used to set the sensor address and communicate with the upper device through the MODBUS-RTU protocol. Among them, DIP6 is the high bit and DIP1 is the low bit. Combining DIP6~DIP1 in the order from high to low plus 1 is the actual address. For example, when the address is 2, set it as shown in the figure below

1	0	0	0	0	0
П			Π		
1	2	3	4	5	6
D	DIP ON ↓		Ļ		

Note:

1. Dial the DIP switch down to "on", it means 1

2. The factory default is all off, means address is 1

DIP switch DIP6~DIP1 setting

DIP6~DIP1	Address	DIP6~DIP1	Address	DIP6~DIP1	Address
000000	1	000110	7		
000001	2	000111	8	111011	60
000010	3	001000	9	111100	61
000011	4	001001	10	111101	62
000100	5	001010	11	111110	63
000101	6	001011	12	111111	64

# **LCD display**



# Dimension

Unit: mm



85