

LEFOO

LFH52

Temperature and
humidity transmitter (outdoor)

[Operation Manual]



OVERVIEW AND PARAMETERS

Features

- Standard 5-layer radiation cover, protection from sunlight radiation and rain, good stability.
- The number of layers of the protective cover adjustable, so height is adjustable, convenient installation.
- The output has reverse connection protection function, high protection level up to IP65.
- Long service life and strong anti-interference ability.

Description

LFH52 Temperature&Humidity Transmitter is specially designed for outdoor temperature and humidity detection. The Radiation Cover can protect from wind and rain, and provide the best protection for the transmitter in severe weather. There are 3 output modes of current, voltage and RS485 available. Can be used in construction sites, weather monitoring and other outdoor occasions.

Parameters

1) Relative humidity

Sensor	Digital
Measurement Range	0%~100%
Output	RS485/Modbus, 0~10VDC, 4~20mA optional
Accuracy	±3%@ 20°C & 20~80%RH
Response Time	≤10s(20°C, slow flow air)

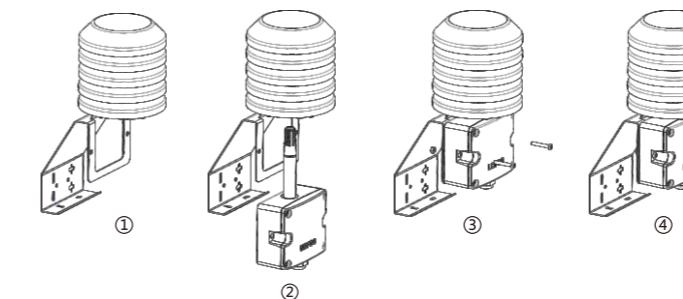
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INSTALLATION AND DIMENSIONS

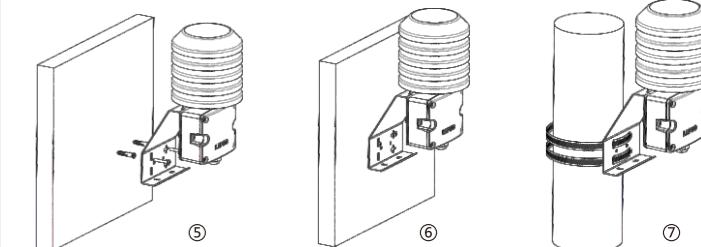
2) Temperature

Sensor	Digital or RTD, see selection table
Measurement Range	0~50°C, -20~60°C etc
Output	4~20mA, 0~10VDC, RS485/Modbus optional
Thermal Resistance	In Order Ref No. and Thermal Resistance Indexing Table
Accuracy	Digital sensor: ±0.5°C@20°C RTD:Typical ±0.2~0.4°C@25°C, see selection table
Power Supply	• Voltage type/485 type 15~35VDC/24VAC±20% (isolated power supply is required for AC power supply) • Current type 18.5~35VDC (RL=500Ω) /8.5~35VDC (RL=0Ω)
Output Load	≤500Ω(Current type), ≥2KΩ(Voltage type)
Case Material	PC shell, PC probe, ABS protective cover
Working Temperature	-20~60°C, 5%~95%RH(non-condensing)
Protection Grade	IP65

Product Installation

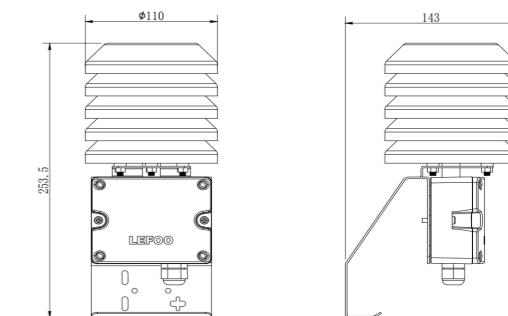


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1. Put the transmitter into the protective cover (as shown in Figure 2);
2. Fix the transmitter on the stainless steel bracket with screws and nuts (as shown in Figures 3 and 4);
3. Use screws and plastic expansion pipes to fix the transmitter on the wall (as shown in Figure 5 and 6), or fix it on a pillar with a clamp (as shown in Figure 7).

Product Size(mm)



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SELECTION INSTRUCTIONS

Selection

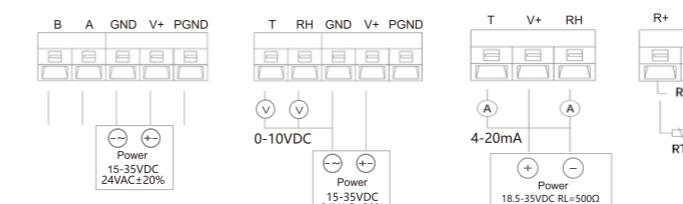
Model	LFH52-					Outdoor type temperature and humidity transmitter
Range of currency		3				±3%RH (±0.5°C)
Humidity output		V10 A4 RS				0~10VDC (3-wired) 4~20mA (2-wired) RS485/Modbus
Temperature output		V10 A4 RS 0 1 2 6				0~10VDC (3-wired) 4~20mA (2-wired) RS485/Modbus PT1000, ±0.2°C@0°C PT100, ±0.2°C@0°C NTC20K, ±0.4°C@25°C NTC10K, ±0.4°C@25°C
Temperature range		0 1 2 8				No 0~50°C -20~60°C Other (customer specified)

NOTE:

1. Only when the temperature output option is V10 or A4, you need to select the corresponding temperature range 1-8. Otherwise, need to select 0.
2. For example LFH52-3A4A42 represents the outdoor type, the temperature and humidity accuracy is ±3%RH (±0.5°C), the humidity output is 4~20mA, the temperature output is 4~20mA, and the temperature range is -20~60°C.
3. Exposure of the sensor probe of this product to high concentrations of chemical gases for a long time may cause the reading shift.

WIRING AND PRECAUTIONS

Wiring instructions



Cautions

1. Avoid installation in areas that are prone to heat transfer and will directly cause a temperature difference with the area to be measured, otherwise the temperature and humidity measurement will be inaccurate.
2. Prevent chemical reagents, oil, dust, etc. from directly invading the sensor, and do not use it for a long time in dew condensation and extreme temperature environments. Do not perform cold or thermal shock.
3. The transmitter should be installed vertically to ensure protection.
4. When not in use for a long time, please store it in a dry environment.

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