

# **LFH52** Outdoor Temperature and Humidity Transmitter

### **FEATURES**

- Standard 5-layer radiation cover to prevent external influences, such as sunlight radiation and rain, with good stability;
- The number of layers of the protective cover can be adjusted according to the needs of the site, the height adjustable, convenient installation;
- long service life and strong anti-interference ability;
- The output has reverse connection protection function, with a high protection level up to IP65;



### **DESCRIPTION**

LFH52 Temperature and Humidity Transmitter is a Transmitter specially designed for outdoor temperature and humidity detection. The standard radiation shield can prevent wind and rain, and provide the best protection for the transmitter in bad weather. There are three output modes of current, voltage and RS485 to choose. Can be widely used in construction site environment, weather monitoring and other outdoor occasions.

### **SPECIFICATION**

#### 1)Relative humidity

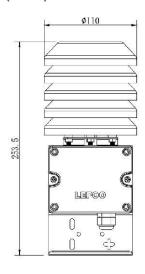
Sensor	Digital			
range	0%~100%RH			
Output	RS485/Modbus, 0~10VDC, 4~20mA			
Accuracy	±3%@ 20°C & 20~80%RH			
Response time	≤10s(20°C, slow air flow)			

#### 2)Temperature

Sensor	Digital or thermal resistance, see Order Ref No.					
Range	0~50°C, -20~60°C etc					
Output	4~20mA, 0~10VDC, RS485/Modbus					
Thermal Resistance	See Order Ref No. and Thermal Resistance Indexing Table					
Accuracy	Digital type: ±0.5°C@20°C; Thermal resistance type: typical±0.2~0.4°C@25°C, see Order Ref No.					
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)					
Display	LCD display optional, with unit display and backlight (4~20mA without backlight)					
Shell Material	PC housing, PC probe and ABS protection cover					
Working Environment	-20~60°C,5%-95%RH (Non-condensing)					
Protection Level	IP65					

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# **DIMENSION (mm)**





### ORDER REF NO.

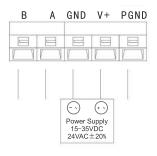
Code an	Code and description							
LFH52	H52 Outdoor Temperature and Humidity Transmitter							
	3	3 ±3%RH(±0.5°C)						
		V10 0~10VDC(3-wire)						
		A4	A4 4~20mA(2-wire)					
		RS	RS48	RS485/Modbus				
			V10	0~10	VDC(3-wire)	0	PT1000, ±0.2°C@0°C	
			A4	4~20	)mA(2-wire)	1	Pt100, ±0.2°C@0°C	Temperature
		į	RS	RS485/Modbus		2	NTC20K, ±0.4°C@25°C	Output
	į	i				6	NTC10K, ±0.4°C@25°C	
				0	NO			
	1 0~50°C				Temperature			
				2	-20~60°C			range
		į	i	8	Others (cus	tomeriz	ed)	
LFH52	3	A4	A4	2				Selection Example

- 1. Only when the temperature output option is V10 or A4, the corresponding temperature range 1-8 should be selected; otherwise, only 0 can be selected.
- 2. The example LFH52-3A4A42 represents the outdoor type, temperature and humidity accuracy is  $\pm 3\%$ RH ( $\pm 0.5^{\circ}$ C) humidity output 4~20mA, temperature output 4~20mA, temperature range 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 of the sensor to shift.

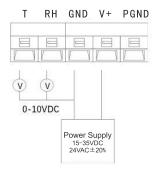
# **LEFOO**

# WIRING INSTRUCTIONS

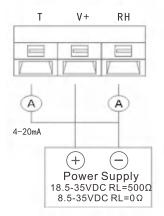
RS485 Output



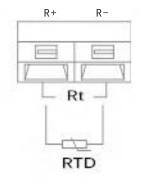
Voltage Output



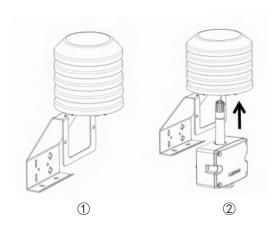
**Current Output** 

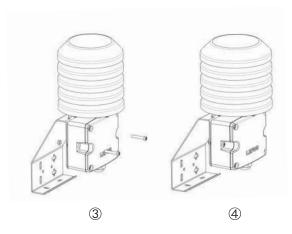


RT Output

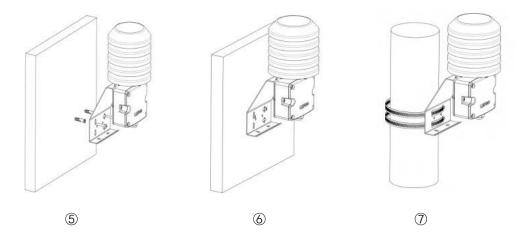


# **INSTALLATION INSTRUCTIONS**





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

#### **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. Please store in a dry environment when not in use for a long time.