#### **FEATURES**

## **LEFOO**

# LFH20 SERIES TEMPERATURE AND HUMIDITY TRANSMITTER

Product Brochure



#### **Features**

- Meet the standard 86-box installation mode
- Lightweight and beautiful shell design, using LCD backlight temperature and humidity dual display, easy to use

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- Adopt imported high-precision sensor and main control, with good long-term stability and anti-interference ability
- Optional passive temperature output
- CE certification, ROSH

#### Overview

LFH20 series temperature and humidity transmitter is specially designed for indoor temperature and humidity detectionA transmitter with small size, simple installation and easy operation. Its pair of lightning strikesSurge, electrostatic discharge, group pulse, withstand voltage, etc. have special design, anti-interference abilityStrong force. There are three output modes available: current voltage, and RS485. Can be widelylt is used in computer rooms, buildings, warehouses and other places where temperature and humidity measurement is required.

#### PARAMETER AND SIZE

#### 1) Relative Humidity

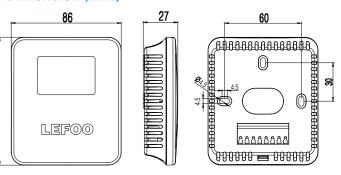
Transmitter	Digital 0%~100%RH			
Measurement Range				
Output	RS485/Modbus,0~10VDC,4~20mA optional			
Accuracy	±3%@ 20°C & 20~80%RH			
Response Time	≤10s(20°C,slow flow air)			

#### 2) Temperature

Transmitter	Digital or thermal resistance, see models selection table			
Measurement Range	0~50°C,-20~60°C			
Output	4~20mA,0~10VDC, RS485/Modbus optional			
Thermal Resistance	See models selection table and thermal resistance index table			
Accuracy	Digital type: $\pm 0.3^{\circ}$ C@20°C; Thermal resistance type: $\pm 0.2^{\circ}$ 0.4°C@25°C, See selection table			
Power Supply	Voltage/485 type 15~35VDC/24VAC±20%			
	Current Type:19.5~35VDC (RL=500Ω) /9.5~35VDC (RL=0Ω)			
Output Load	≤500Ω(Current type),≥2KΩ(Voltage type)			
Display	LCD display optional, with unit display and backlight (4~20)mA output without backlight			
Case Material	PC case			
Working Environment	-20~60°C,5%-95%RH(Non-condensing)			
Protection Grade	IP30			
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# DIGITAL SENSOR TEMPERATURE ACCURACY CURVE 0.5 0.4 0.3 0.2 0.1 -0.2 20 0 40 60 -0.3 -0.4 -0.5

#### Dimension (mm)



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#### MODEL SELECTION INSTRUCTIONS

#### **Selection instructions**

Model	LFH20-						Indoor temperature and humidity transmitter
Temperature and humidity accuracy		3					±3%RH(±0.3°C)
Humidity output			V10 A4 RS N				0~10VDC(3-wire) 4~20mA(2-wire) RS485 / Modbus No output
Temperature output				V10 A4 RS 0 1 2 3 N			0~10VDC(3-wire) 4~20mA(2-wire) 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 No output
Temperature range					0 1 2 8		NO 0~50°C -20~60°C Other(customized)
Display						0	NO LCD display

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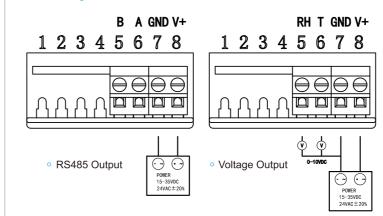
## WIRING AND INSTALLATION

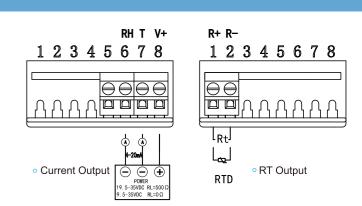
1. Only when the temperature output option is V10 or A4, the corresponding temperature range 1-8 needs to be selected; otherwise, only 0 can be selected.

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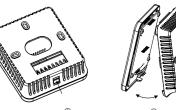
- 2. Example LFH20-3A4A411 represents indoor type, temperature and humidity accuracy is  $\pm 3\%$ RH ( $\pm 0.3^{\circ}$ C), humidity output 4~20mA,temperature output 4~20mA, temperature range 0~50°C, with display. Example 2: LFH20-3NRS01 represents indoor type, temperatureaccuracy is  $\pm 0.3^{\circ}$ C, no humidity output,temperature output RS485, no temperature range, with display Example 3: LFH20-3A4N01 representsindoor type, humidity accuracy is  $\pm 3\%$ RH , humidity output 4 ~ 20 mA,no temperature output, no temperature range, with display.
- 3. Prolonged exposure of this product's sensor probe to high concentrations of chemical gases may cause the sensor's readings to shift.

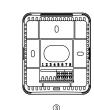
#### Wiring instructions





#### Installation Instructions











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#### **PRECAUTIONS**

- 1. Press the open button under the back cover of the transmitter to open the transmitter (as shown in Figures 1 and 2);
- 2. Complete the electrical connection according to the wiring diagram, and introduce the cable through the wire hole (as shown in Figure 4);
- 3. There are three mounting holes on the back cover of the transmitter, which can be fixed on the wall with expansion screws (as shown in Figure 5), or on the 86 boxes embedded in the wall with screws (as shown in Figure 6);
- 4. Align and fasten the front cover with the bottom case to complete the installation (as shown in Figure 7);

#### **Precautions**

- 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. Install in a relatively stable environment, avoid direct sunlight away from windows, air conditioners, heating and other equipment and avoid facing windows and doors.
- 3. Not suitable for use in environments with oil, organic solvents and corrosive gases.
- 4. When not in use for a long time, please store it in a dry

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