LEFOO

LFH51 SERIES
PROBE TEMPERATURE AND HUMIDITY TRANSMITTER

PRODUCT OPERATION MANUAL

OVERVIEW AND PARAMETERS

- Compact sizes, Simple installation
- Over-voltage and reverse connection protection of power supply and output
- High protection grade of IP65

OVERVIEW

H51 series temperature and humidity transmitter adopts high-precision digital probe, which has good long-term stability and anti-interference ability, small size, simple installation and easy operation. There are three output modes of voltage, current and RS485 to choose from. It can be widely used in ventilation ducts, industrial workshops, warehouses and other places that need to measure temperature and humidity.

PARAMETER

1)Relative humidity

| Sensor	Digital
Range	0%~100%
Output	RS485/Modbus,0~10VDC,4~20mA optional
Response time	≤10s(20℃, slow flow air)
Precision	±3%@20℃&60%RH, other humidity points keep ±5.0%RH@20℃

2)Temperature

Sensor	Digital
Range	0~50℃, -20~60℃
Output	0~10VDC, RS485/Modbus, 4~20mA, optional
Precision	±0.3℃@20℃ (see temperature accuracy curve)
Power supply	Voltage/RS485 type: 12-36VDC; Current type:19.5~35VDC(RL=500Ω) /9.5~35VDC(RL=0Ω)
Output load	≥2KΩ(voltage type) ≤250Ω (Current type)
Shell material	PA6 CASE
Working environment	-40~85℃, 5%-95%RH(non-condensing)
Protection class	IP65

3)Digital sensor temperature accuracy curve
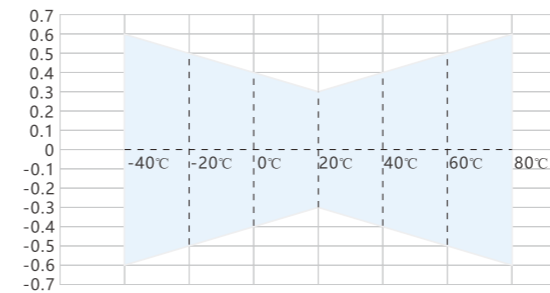
WIRING AND DIMENSIONS

WIRING INSTRUCTIONS

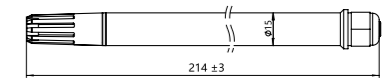RS485 Output   Voltage Output   Current Output
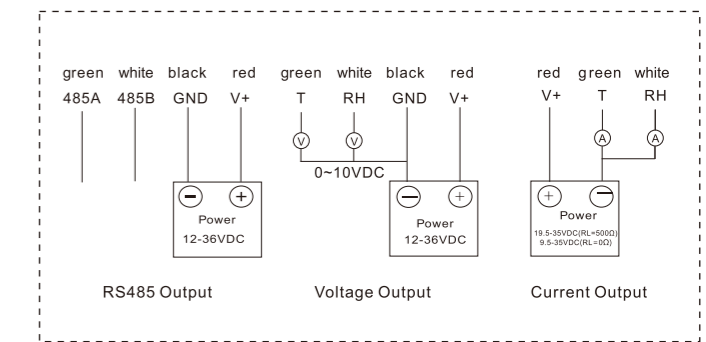
PRODUCT SIZE

Voltage type, 485 type
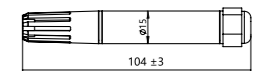
Current mode

Note: Unit (mm)

SELECTION INSTRUCTIONS

SELECTION INSTRUCTIONS

Model	H51-					Probe type temperature and humidity transmitter
Temperature and humidity accuracy		3				±3%RH(±0.3℃)
Humidity output			V10 RS A4			0~10VDC (three lines) RS485/Modbus 4~20mA(two lines)
Temperature output				V10 RS A4		0~10VDC (three lines) RS485/Modbus 4~20mA(two lines)
Temperature range					0 1 2 8	none 0~50℃ -20~60℃ Other (customer specified)

NOTICE：

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

2. The current type output adopts along pole.

3. The sensor probe of this product is exposed to high concentrations of chemical gases for a long time, which may cause the reading of the sensor to shift.

4. Example LFH51-3V10V102 represents probe type, temperature and humidity accuracy is ±3%RH@20℃&60%RH(±0.3℃@20℃) humidity output 0-10VDC, temperature output0~10VDC, temperature range -20~60℃.

INSTALLATION AND PRECAUTIONS

PRODUCT INSTALLATION
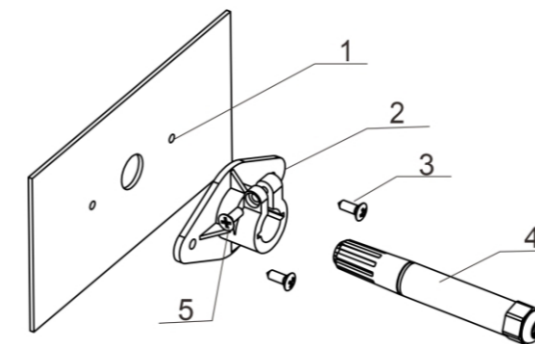
①Opening;   ②.Install the fixed flange;   ③.Tighten the set screw; ④.Insert the temperature and humidity transmitter and fine-tune the position; ⑤.Tighten the flat tail self-tapping screw   .

PRECAUTIONS

1. Avoid close to heat sources, cold sources, or direct sunlight.

2. Not suitable for use in the environment of oil pollution, organic solvent and corrosive gas.

3. When in dust and other environments, the filter membrane of the probe must be cleaned regularly.

4. When not in use for a long time, please store it in a dry environment.