

LFH30 Temperature and Humidity Transmitter

FEATURES

- Humidity accuracy up to $\pm 2\%$ RH
- Imported humidity sensitive capacitor, can resist condensation and pollution,
- Passive temperature output optional
- Stainless steel probe, sintered/stainless steel wire mesh filter optional
- CE certification, IP65, ROHS



DESCRIPTION

LFH30 sensitive components use imported polymer film humidity sensitive capacitors and PT1000 temperature sensitive resistors. The special breathable coating and SMD injection molding process can ensure the long stability of the probe in the environment of dust, salt spray pollution and high humidity condensation. It is calibrated with mature humidity and temperature measurement technology to ensure the accuracy. It is suitable for high-standard intelligent buildings, incubators, industrial dehumidifiers and other fields.

SPECIFICATION

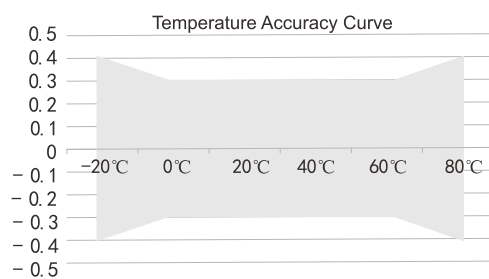
1)Relative humidity

Sensor	Humidity Sensitive Capacitor
Measurement range	0%~100%RH
Output	RS485/Modbus, 0~10VDC, 4~20mA
Accuracy	$\pm 2\%$ @ 20°C & 20~80%RH
Response time	$\leq 10s$ (20°C, slow air flow)

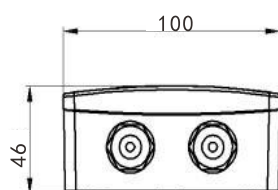
2)Temperature

Sensor	Pt1000 or passive thermal resistance, see Order Ref No.	
Measurement range	0~50°C, -20~60°C etc	
Output	4~20mA, 0~10VDC, RS485/Modbus Optional	
Thermal resistance	See Order Ref No. and Thermal Resistance Indexing Table	
Accuracy	Digital sensor: 0.3°C @ 5~60°C; Thermal resistance type: typical: $\pm 0.2 \sim 0.4^\circ\text{C}$ @ 25°C, see Order Ref No.	
Power supply	RS485 type 9~35VDC/24VAC $\pm 20\%$	Voltage type: 12~35VDC/24VDC $\pm 20\%$
	Current type: 19.5~35VDC (RL=500 Ω)/9.5~35VDC (RL=0 Ω)	
Output load	$\leq 500\Omega$ (Current type), $\geq 2K\Omega$ (Voltage type)	
Display	LCD display optional, with unit display and backlight (4~20mA without backlight)	
Shell material	PC housing, PC probe and polymer filter (optional stainless steel probe rod, sintered/stainless steel wire mesh filter)	
Working environment	-20~60°C, 5%-95%RH (Non-condensing)	
Protection level	IP65	
Electromagnetic compatibility	EN61326-1	

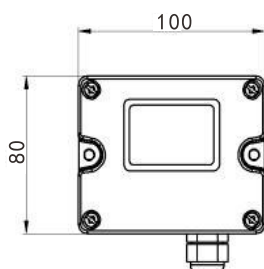
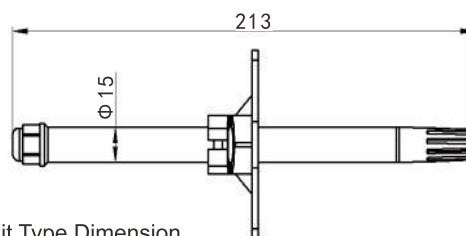
TEMPERATURE ACCURACY CURVE



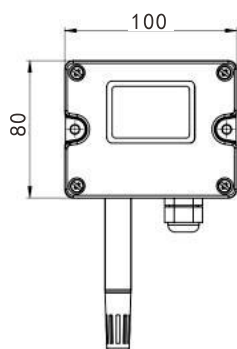
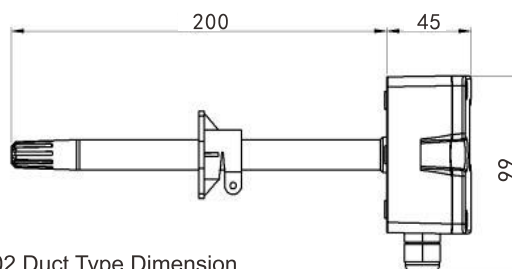
DIMENSION (mm)



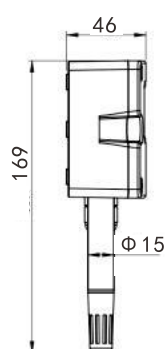
• LFH303 Split Type Dimension



• LFH302 Duct Type Dimension



• LFH303 Wall-mounted type dimension



ORDER REF NO.

Code and description							Remark	
LFH301-	Wall-mounted type temperature and humidity transmitter						Model	
LFH302-	Duct type temperature and humidity transmitter							
LFH303-	Split type temperature and humidity transmitter							
	2	±2%RH(0.3℃)					Accuracy range	
		V10	0~10VDC(3-wire)				Humidity output	
		A4	4~20mA(2-wire)					
		RS	RS485/Modbus					
		V10	0~10VDC(3-wire)	0	PT1000, ±0.2℃@0℃		Temperature output	
		A4	4~20mA(2-wire)	1	Pt100, ±0.2℃@0℃			
		RS	RS485/Modbus	2	NTC20K, ±0.4℃@25℃			
				6	NTC10K, ±0.4℃@25℃			
		0	No					Temperature range
		1	0~50℃					
		2	-20~60℃					
		8	Others (customer specified)					
		0	No					Display
		1	LCD display					
LFH301-	2	A4	A4	1	1	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. Model example LFH301-2A4A411 represents the Wall-mounted type, accuracy 2%RH (0.3 $^{\circ}C$),humidity output 4~20mA, temperature output 4~20mA, and temperature range 0~50 $^{\circ}C$ with display.
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.
4. When selecting a metal rod temperature and humidity transmitter, the specifications of the metal rod and front cover should be specified.