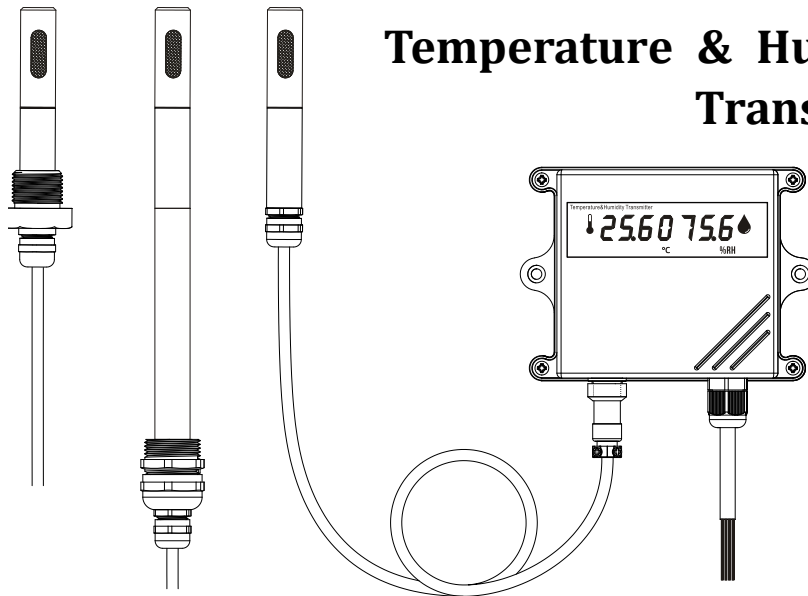


Temperature & Humidity Transmitter



Description

This device is an industrial temperature and humidity transmitter. It can be equipped with built-in probe and remote probe to monitor the ambient temperature and humidity parameters. It can be transformed into current and voltage output or digital output using RS485 communication interface.

Technical Data

[H Range] 0-100%RH [T Range] Built-in: -40 to 60 °C/-20 to 60 °C(With Display) Probe: -40 to 80 °C / -40 to 120 °C(High Temp)

[H Accuracy] Built-in: ±4%(10 to 90%) ±5%(0 to 10% / 90 to 100%) Probe: ±3%(10 to 90%) ±4%(0 to 10% / 90 to 100%)

[T Accuracy] Built-in: ±0.5°C(0 to 60 °C) ±0.6°C(-20 to 0 °C) ±0.7°C(-40 to -20 °C)

Probe: ±0.3°C(0 to 80 °C) ±0.4°C(-20 to 0 °C/ 80 to 100 °C) ±0.5°C(-40 to -20 °C / 100 to 120 °C)

[Output] Current 4-20mA, Accuracy 1%, load 500 Ohms(24VDC), load 200 Ohms(12VDC) Voltage 1V/5V/10V, Accuracy

1%, Temperature Coefficient : 50PPM/ °C

[RS485] Standard MODBUS RTU

[Power] 12-26VDC, Consumption 2.5W

[Dimension] Host Device 117×85×41mm

[Response Time] T₆₃ 8 Secs

[EMC] Burst of pulses 2000V B level

[ESD] Contact 4000V, Gap 8000V

[Protection] IP64

[Condition] Host -40 to 60 °C(With Display-20 to 60 °C)

Electrical Connection



24VDC



0V



T: Current/Voltage



H: Current/Voltage



Comm: 485A



Comm: 485B

Contamination Note

All humidity sensors may be contaminated by volatile organic compounds, including but not limited to alcohols, ketones, cleaning agents, glues, adhesives, plasticizers, etc.

Communication Protocol

Parameter	Register	Data Type	Authority
Temperature	40001	ushort, 1 DP	RO
Humidity	40002	ushort, 1 DP	RO
Dew Point	40003	ushort, 1 DP	RO
T Adjust	40257	ushort, 1DP	RW
H Adjust	40258	short, 1 DP	RW
Address	40321	short, no DP	RW
Baudrate	40322	short, no DP	RW
Parity	40323	short, no DP	RW
Stopbits	40324	short, no DP	RW

Example.: Read data(25.0 °C, 40.0%)

Query: 01 03 00 00 00 02 C4 0B

Response: 01 03 04 00 FA 01 90 DB FE

Example.: Write adjusting data(0.2 °C, 2.0%)

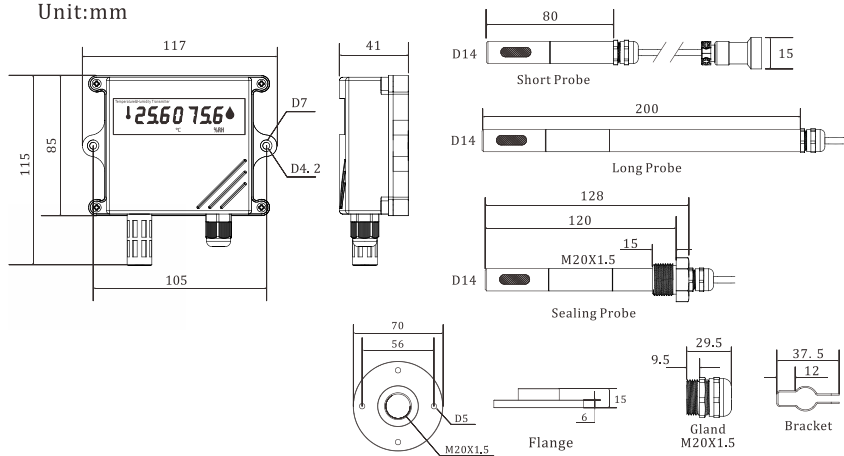
Query: 01 10 01 00 00 02 04 00 02 00 14 5F F0

Response: 01 10 01 04 00 02 40 34

- Standard ModbusRTU
Read Cmd 03H
Write Cmd 10H
- Addr: 1-247(Init: 1)
- Baudrate: (9600)
0: 9600 1: 19200 2: 38400
3: 57600 4: 115200
- Parity: (No Parity)
0: No 1: Odd 2: Even
- Stopbits: (1 bit)
0: 1bit 1: 2bits

Dimension

Unit:mm



Accessory:

Wall anchor: (D)6mm (L)30mm Metal sheet screw: M4*30mm