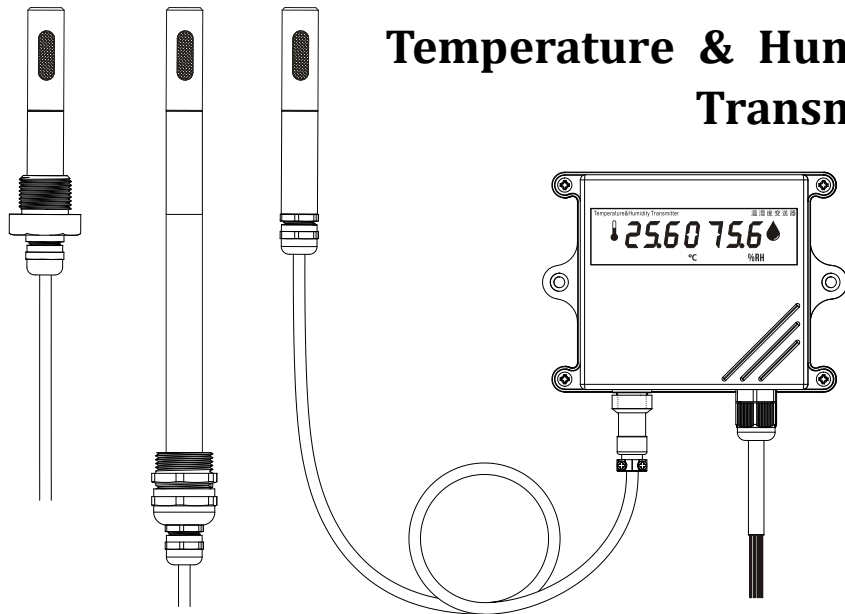


Temperature & Humidity Transmitter



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

Probe: -40 to 80 °C / -40 to 120 °C(High Temp)

[H Accuracy] $\pm 3\%$ (10 to 90%)
 $\pm 4\%$ (0 to 10% / 90 to 100%)

[T Accuracy] $\pm 0.3^{\circ}\text{C}$ (0 to 80 °C)
 $\pm 0.4^{\circ}\text{C}$ (-20 to 0 °C/ 80 to 100 °C)
 $\pm 0.5^{\circ}\text{C}$ (-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] 12-24VDC $\pm 10\%$, Consumption 2.5W

[Dimension] Host Device 117×85×41mm

[Response Time] T_{63} 8 Secs

[EMC] Burst of pulses 2000V B level

[ESD] Contact 4000V, Gap 8000V

[Protection] IP63

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

Electrical Connection

Red	24VDC
Black	0V(Comm Port)
Green	T:Current/Voltage
Yellow	H:Current/Voltage
Blue	Comm:485A
White	Comm:485B

Communication Protocol

Parameter	Reg Offset	Data Type	Authority
Address	00H	ushort, no decimal	RW
Baudrate	01H	Ushort, no decimal	RW
Parity	02H	ushort, no decimal	RW
Stopbits	03H	ushort, no decimal	RW
T Adjust	04H	short, 1 decimal	RW
H Adjust	05H	short, 1 decimal	RW
Temperature	20H	short, 1 decimal	RO
Humidity	21H	short, 1 decimal	RO

Example.: Read data (25.0 °C, 40.0%)

Query: 01 03 00 20 00 02 C5 C1

Response: 01 03 04 00 FA 01 90 DB FE

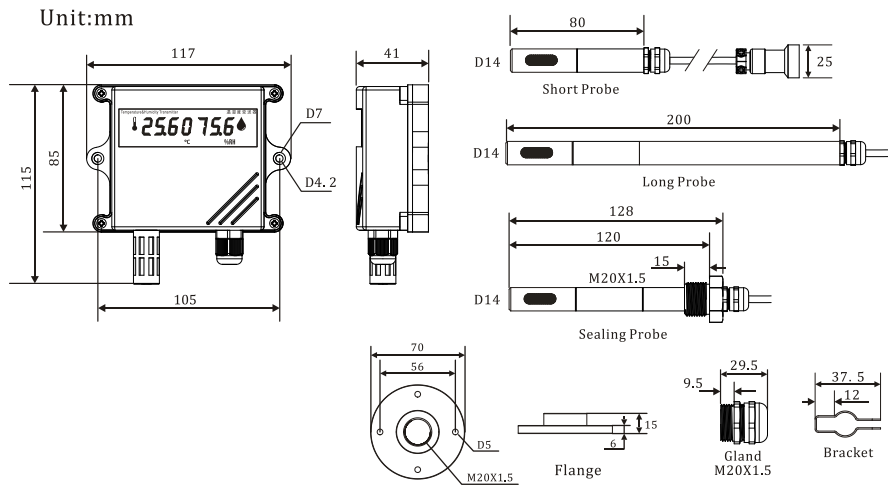
Example.: Write adjusting data (0.2 °C, 2.0%)

Query: 01 10 00 04 00 02 04 00 02 00 14 53 93

Response: 01 10 00 04 00 02 00 09

- 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



Accessory:

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