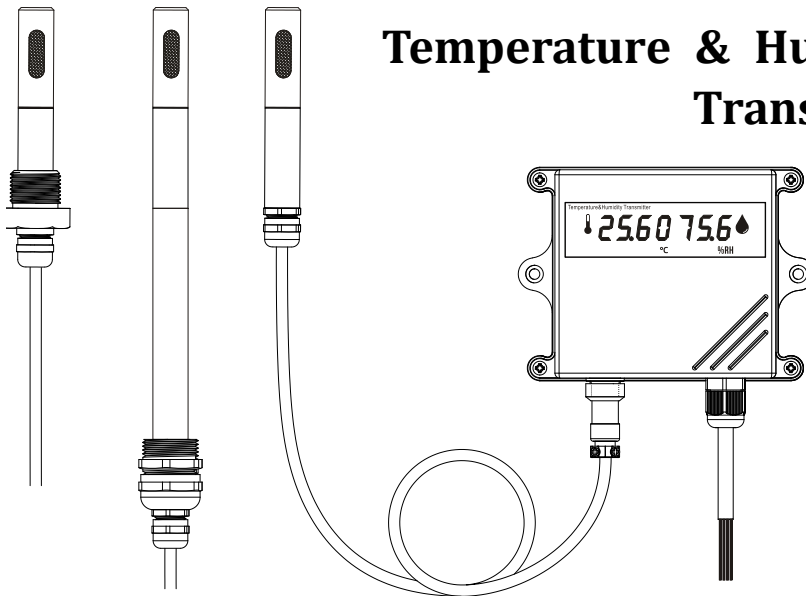


Temperature & Humidity Transmitter



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] Built-in: $\pm 4\%$ (10 to 90%) $\pm 5\%$ (0 to 10% / 90 to 100%) Probe: $\pm 3\%$ (10 to 90%) $\pm 4\%$ (0 to 10% / 90 to 100%)

[T Accuracy] Built-in: $\pm 0.5^{\circ}\text{C}$ (0 to 60 °C) $\pm 0.6^{\circ}\text{C}$ (-20 to 0 °C) $\pm 0.7^{\circ}\text{C}$ (-40 to -20 °C)

Probe: $\pm 0.3^{\circ}\text{C}$ (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] 11-26VDC, 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
Green	T: Current/Voltage
Yellow	H: Current/Voltage
Blue	Comm: 485A
White	Comm: 485B

Communication Protocol

Parameter	Register	Data Type	Authority
Address	40001	ushort, no DP	RW
Baudrate	40002	ushort, no DP	RW
Parity	40003	ushort, no DP	RW
Stopbits	40004	ushort, no DP	RW
T Adjust	40005	short, 1 DP	RW
H Adjust	40006	short, 1 DP	RW
Temperature	40033	short, 1 DP	RO
Humidity	40034	short, 1 DP	RO
Dew Point	40035	short, 1 DP	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%)

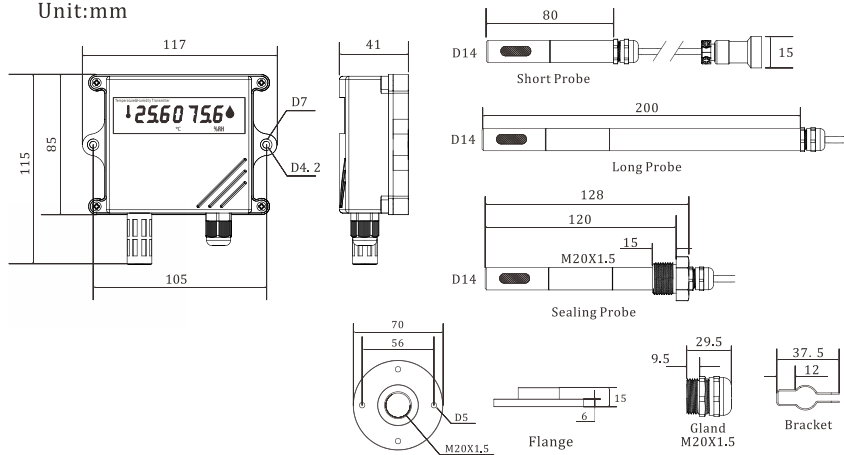
Query: 01 10 00 04 00 02 04 00 02 00 14 53 93

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

Unit:mm



Accessory:

Wall anchor: (D)6mm (L)30mm

Metal sheet screw: M4*30mm