

HTS HUMIDITY & TEMPERATURE Transmitter

FEATURE

- Accuracy: Temperature : $\pm 0.3^{\circ}\text{C}$; Humidity : $\pm 2\%$
- Dual display for 0.0~50.0 $^{\circ}\text{C}$ and 0~100%RH
- RS 485 Modbus RTU mode in standard
- Dual current output for Temperature & Humidity
- Low output ripple
- High stability & low cost
- CE approved



ORDER INFORMATION

HTS — **D** **D** — **D** **8** — **W** — **24**

CODE	RANGE	CODE	OUTPUT	CODE	MOUNTING	CODE	AXU. POWER
D	0 ~ 50.0 $^{\circ}\text{C}$	D	4 ~ 20 mA	W	Wall Mounting	24	DC 24V
D	0 ~ 100%RH	8	RS 485				

SPECIFICATION

Measuring Range	Output	Load Resistance
Temperature 0 ~ 50.0 $^{\circ}\text{C}$	4 ~ 20 mA (4-Wires)	$\leq 500\Omega$
Humidity 0 ~ 100 %RH	4 ~ 20 mA (4-Wires)	
	RS 485 Modbus RTU Mode	

Accuracy (at 25 $^{\circ}\text{C}$):

Temperature: $\leq \pm 0.3^{\circ}\text{C}$ at 25 $\pm 20^{\circ}\text{C}$;
 Humidity: $\leq \pm 2\%$ RH between 10~90%RH
 $\leq \pm 4\%$ RH at 0~10% and 90~100%

Sensing Elements:

Temperature: RTD Pt100 Ω , DIN43760

Response time:

Temperature: ≤ 10 sec.(still air)
 Humidity: ≤ 4 sec. (still air)

Span adjustment:

Digital compensation

Zero adjustment:

Digital compensation

Display

LCD:

123x123 pixel LCD with backlight
 Temperature reading: 0.0~50.0 $^{\circ}\text{C}$
 Humidity reading: 0~100%RH
 Modbus Device Group: 1~4
 Modbus Device no.: 01~64
 Communication port status: TX/RX

Analogue output(option)

Resolution:

12 bits AD converter

Output ripple:

$\leq 0.25\%$ of F.S.

Response time:

≤ 200 m-sec. (10~90% of input)

Output range:

4~20mA, max load 500 Ω

RS 485 communication

Device No.:

1~255, Group (1~4) * Device no(1~64)

Baud Rate:

9600

Parity:

N, 8, 1

Power

Power Supply:

DC 24V $\pm 10\%$

Power consumption:

$\leq 2\text{W}$

Environmental

Operating temperature:

0 ~ 50 $^{\circ}\text{C}$

Operating relative humidity:

0 ~ 100 %RH, non-condensing

Temperature coefficient:

$\leq 0.008\%$ RH/ $^{\circ}\text{C}$ (Effect at 0%RH)

$\leq 0.008\%$ / $^{\circ}\text{C}$ (Effect at 28 $^{\circ}\text{C}$)

Storage temperature:

-10~70 $^{\circ}\text{C}$

Enclosure:

P30

Electrical safety

EMC:

EN61326

Safety:

EN61010

Mechanical

Dimensions:

120mm(W) x 119mm(H) x 22mm(D)

Housing:

ABS white, fire-protection (UL 94V-0)

Mounting

Wall mounting with loose flange

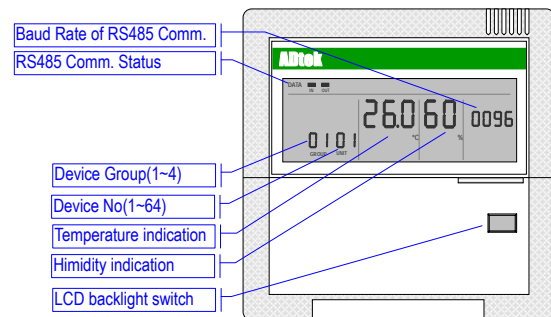
Connection:

9 PIN Plug in connector with wires

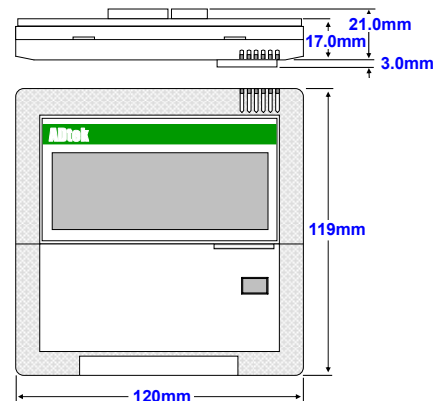
Weight:

About 200g

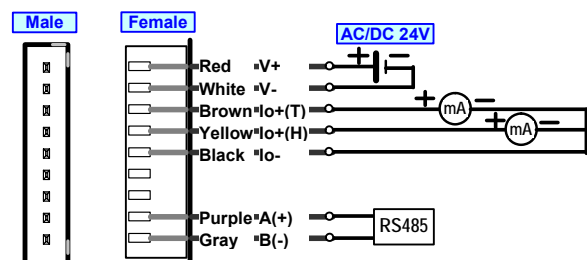
FRONT PANEL



DIMENSIONS



CONNECTION DIAGRAM



HTS RS485 ModBus RTU Mode

BAUD RATE: 9600 N , 8 , 1

NAME	Address	Range	Explain	initial	Unit
ofsettemp	40001	10.0 ~ -10.0	Temprature Calibration	0.0	°C
ofsethumi	40002	10.0 ~ -10.0	Humidity Calibration	0.0	%
temp_pwm2	40003	0.0 ~ 100.0	High temprature setting	50.0	°C
temp_pwm	40004	0.0 ~ 100.0	Low temprature setting	0.0	°C
humil_pwm2	40005	0.0 ~ 100.0	High humidity setting	100.0	%
humil_pwm	40006	0.0 ~ 100.0	Low humidity setting	0.0	%
NowTemp	40007	0.0 ~ 50.0	Actual temprature	none	°C
NowHumil	40008	0.0 ~ 100.0	Actual humidity	none	%
output1	40009	4.00 ~ 20.00	AO1 output	none	mA
output2	40010	4.00 ~ 20.00	AO2 output	none	mA