

TEMPERATURE & HUMIDITY SIGNAL TRANSMITTER

**MODEL
STH-1**



■ FEATURES

- Accuracy $\pm 0.15^{\circ}\text{C}$ (Temperature), $\pm 1\%$ RH (Humidity)
- Measuring $-40\sim+80^{\circ}\text{C}$ (Temperature), $0\sim 100\%$ RH (Humidity)
- Response time within 20 second (0~90% at 1.0M/s air flow)
- Field-rangeable supply voltage from DC10 to 28V
- Two 12 Bit DAC analog output function (option)
- Digit RS-485 interface function (option)
- Double waterproof treatment
- Protection class NEMA 4/IP65

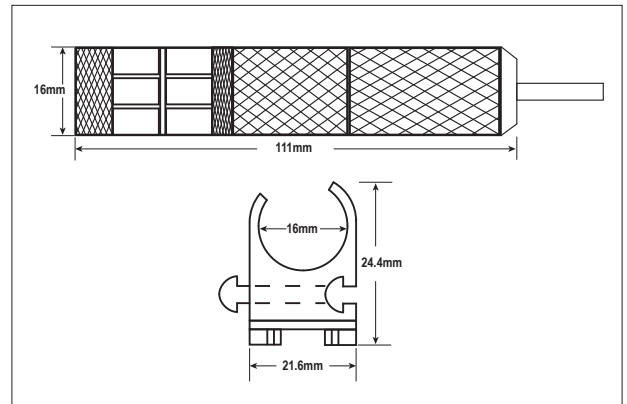
1. MODEL: STH1-□ □ □

NO	Temperature/Humidity input type	NO	Output Type	NO	Output Cable Length
1	0~50°C/0~100%RH	V	DC1~5Vx2	A	1.8M(standard)
2	0~80°C/0~100%RH	R	RS-485	B	Customer specified
3	-20~80°C/0~100%RH	O	SPECIFIED		*4 cond.+shield #28AWG, PVC
4	-40~80°C/0~100%RH				
9	SPECIFIED				

2. SPECIFICATION

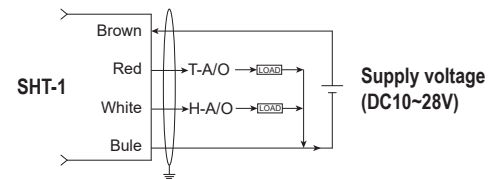
- Supply voltage: DC10~28V (<25mA) (Analog output)
DC10~28V (<10mA) (RS-485 output)
- Measuring accuracy (23 \pm 5°C): $\pm 1\%$ RH (10~80% RH) (Humidity)
 $\pm 1.5\%$ RH (10~90% RH) (Humidity)
 $\pm 2\%$ RH (0~10% RH & 90~100% RH) (Humidity)
 $\pm 0.15^{\circ}\text{C}$ (0~+50°C) (Temperature)
 $\pm 0.3^{\circ}\text{C}$ (-40~0°C & +50~+80°C) (Temperature)
- Response time: 20 second (0~90% at 1M/s air flow)
- Output load capability: <10mA for voltage output mode
- Output ripple: <0.05% F.S.
- RS-485 address: "00" ~ "FF" (0~255)
- RS-485 baud rate: :38400/19200/9600/4800/2400 selective
- RS-485 protocol: :Modbus RTU mode
- Repeatability: $\pm 0.04\%$ RH (Humidity)
 $\pm 0.08\%$ RH (Temperature)
- Long-term drift: $\pm 0.2\%$ RH/Year (Humidity)
 $\pm 0.03^{\circ}\text{C}$ /Year (Temperature)
- Dielectric strength: :2KVac/1 min. (output/case)
- Operating Storage temperature: :-40~80°C (0 to 100% RH non-condensed)
- Case materials: :PE (Ontolog)
PE (Filter probe)
NYLON 66 fire rating 94V-2 (cable gland)
- Construction: :PE material clip-on mount
- CE EMC Certification: :EN 55022:1998/A1:2000 Class A
EN 61000-3-2:2000
EN 61000-3-3:1995/A1:2001
EN 55024:1998/A1:2001

3. DIMENSION AND MOUNT (unit:mm)

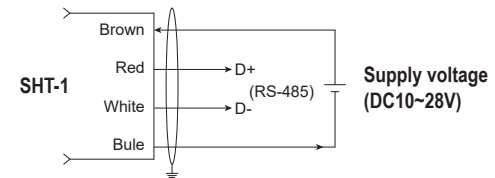


4. TERMINAL CONNECTION

• Analog output type (DC1~5V)

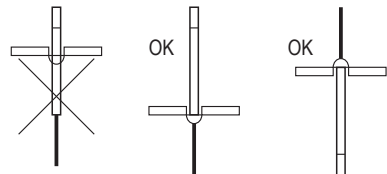


• RS-485 output type



5. INSTALLATION METHOD

• Installation in the air



• Installation in pipe

