

Remote-Mount High-Temperature T+RH Transmitter

STH 306 / STH 806

-40 to 180 °C / -40 to 200 °C & 0 to 100 %RH

4-20 mA / 0-10 V Output Versions

15 to 35 VDC Supply Voltage

Process Precision Instruments

Vasai Road (E), Dist. Palghar - 401210,
Maharashtra, India

www.ppiindia.net

Applications

High-Temperature Environmental Chambers

Climatic chamber monitoring for product testing.

Industrial Drying Ovens

Real-time control of temperature and RH during curing or drying processes.

HVAC in Cleanroom Zones

Monitoring supply air or return ducts in temperature-controlled cleanrooms.

Food Processing Tunnels

Cooking, steaming, or drying lines with elevated temperature and moisture.

Baking or Confectionery Lines

Process monitoring in ovens or proofing chambers.

Pharmaceutical Autoclaves

Monitoring sterilization chambers with high humidity and heat.

Textile Finishing Plants

Temperature and RH control during heat setting and calendaring.



Salient Features

- High Precision, Long Term Stability & Good Anti-Interference
- Full Range Calibration for High Temperature & RH Accuracy
- Wide Working Temperature Range :
STH 306 : -40 to 180 °C **STH 806** : -40 to 200 °C
- SS304 Probe Material for Long Working Life in Harsh Environment Conditions
- Current (4-20 mA) & Voltage (0-10 VDC) Output Versions
- Reverse Polarity Protected Current Outputs
- Over-Voltage & Reverse Polarity Protected Power Supply
- Independent Relay Outputs for Temperature & RH Alarms
- Wide Supply Voltage Range : 15 to 35 VDC
- High Protection Grade of IP65 & CE Approval

General Information

Product Type Remote-Mount High Temperature T+RH Transmitter

Ordering Code STH 306 / STH 806- ☐ - ☐ - ☐

Temperature Output

C : 4 to 20 mA V : 0 to 10 V

RH Output

C : 4 to 20 mA V : 0 to 10 V

Display

0 : None 1 : LCD

Example : STH 306-C-C-0

Temperature Output : 4 to 20 mA, RH Output : 4 to 20 mA, Display : None

Quantity 1 Unit

Accessories Mounting SS Flange with Screw Sets

Remote-Mount High-Temperature T+RH Transmitter

General Specifications

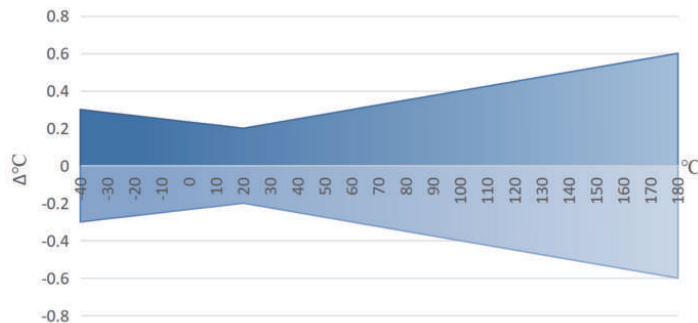
Housing Material	Shell : Aluminum Alloy A383 (ADC12) Probe, Flange, Cable Glands : Stainless Steel SUS304
Power Supply	15 to 35 VDC
Alarm Relays	2 x SPDT Rated 3A @ 30VDC / 250 VAC
Working Environment	-20 to +60°C, 5 to 95%RH (Non-condensing) (For Aluminum Alloy Shell)
Protection Class / Approval	IP65 / CE
Probe Cable Length	2 Meters Standard. Other Lengths on Request.

%RH (Relative Humidity)

Sensor Type	High-Temperature & Humidity Sensitive Capacitor
Range	0 to 100%RH
Accuracy	$\pm 2\%$ for $\leq 90\%$ RH @ 20 °C $\pm 2.3\%$ for $> 90\%$ RH @ 20 °C
Output	4 to 20 mA (Max Load : 500 Ω) OR 0 to 10 VDC (Min Load : 2 K Ω)

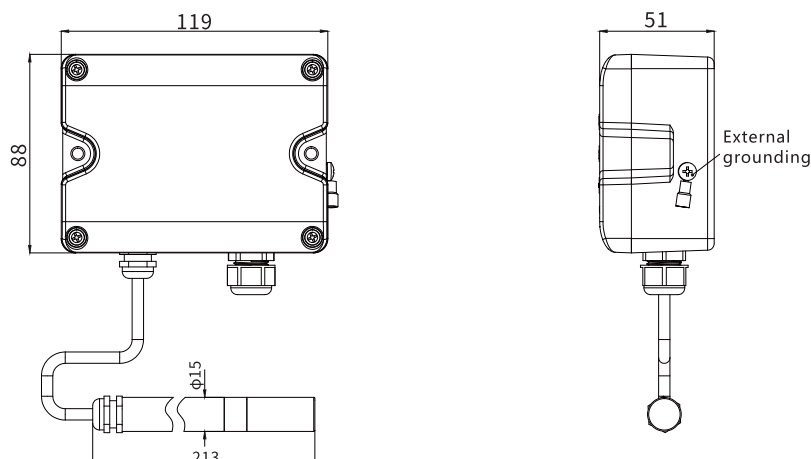
Temperature

Sensor Type	Pt1000
Range	STH 306 : -40 to 180 °C STH 806 : -40 to 200 °C
Accuracy	$\pm 0.2^\circ\text{C}$ @ 20 °C (Refer Temperature Accuracy Curve)



Output	4 to 20 mA (Max Load : 500 Ω) OR 0 to 10 VDC (Min Load : 2 K Ω)
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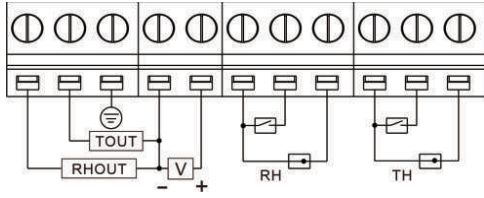
Dimensions (mm)



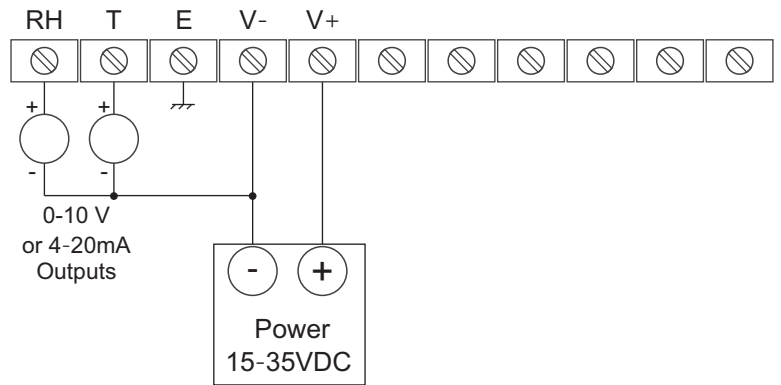
Remote-Mount High-Temperature T+RH Transmitter

Wiring Instructions

Wiring Diagram



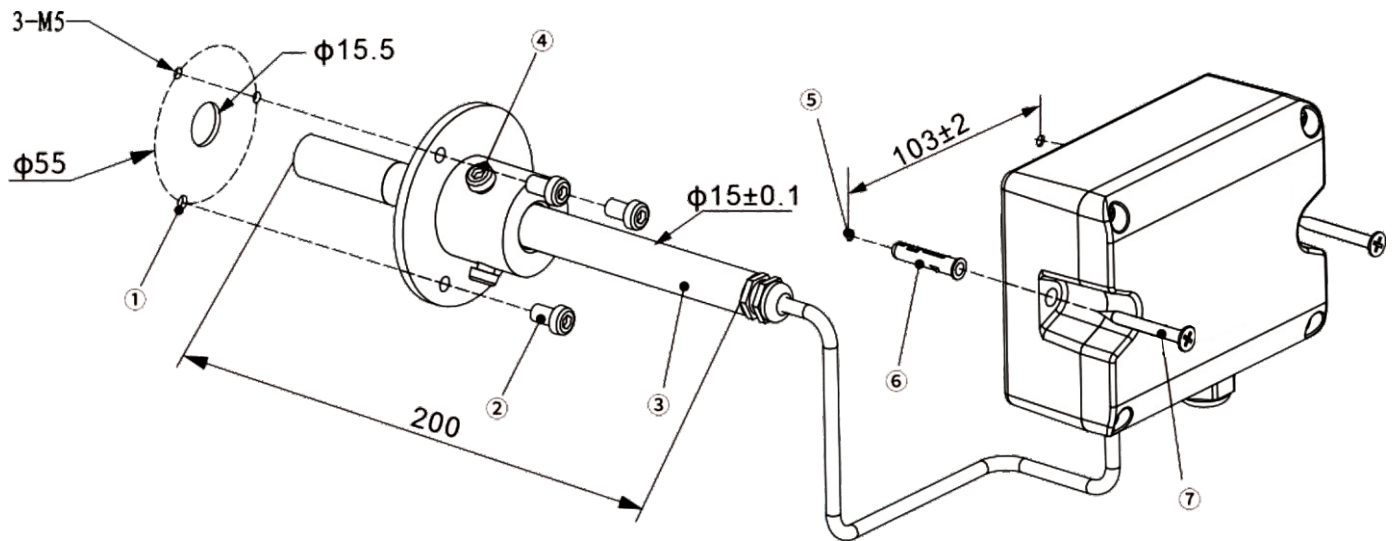
Illustrative Wiring Connections



Earthing Selection

1. Use internal terminal marked "E" for grounding.
2. Use the screw provided on the outside of shell.

Installation



Probe

1. Drill holes for probe insertion and flange mounting.
2. Install the flange and lock the screws.
3. Insert the probe and adjust the insertion length.
4. Lock the screw for gripping the probe.

Shell

5. Drill holes for mounting the shell.
6. Insert the plastic expansion pipe into the drilled holes.
7. Install the shell and fix the mounting screws

Process Precision Instruments (An ISO 9001 : 2008 Company)

101, Diamond Industrial Estate, Navghar, Vasai Road (E), Dist. Palghar - 401210, Maharashtra, India

Sales : 8208199048 / 8208141446 Support : 07498799226 / 08767395333

sales@ppiindia.net www.ppiindia.net