

# TT - 04H

## SMART TEMPERATURE TRANSMITTER

### Features


- 4–20 mA HART Compatible
- Single & Dual Sensor Inputs
- Differential, Average & Redundant temperature measurement
- MOC Electronics Enclosure : Die Cast Aluminum / SS316
- Enhanced display with Local Operator Interface
- Sensor Redundancy / Peak Value Measurement /  $\Delta T$  Measurement / Average
- ATEX Certified

### Description

**E**lectronet Series TT-04H are temperature transmitters used for various industrial applications. It can accept input from RTD, all types of thermocouples & temperature signal is transmitted in the form of electrical 4 – 20 mA signal. The on-line temperature indication is provided through LCD. Span / Zero adjustments are easily accessible .

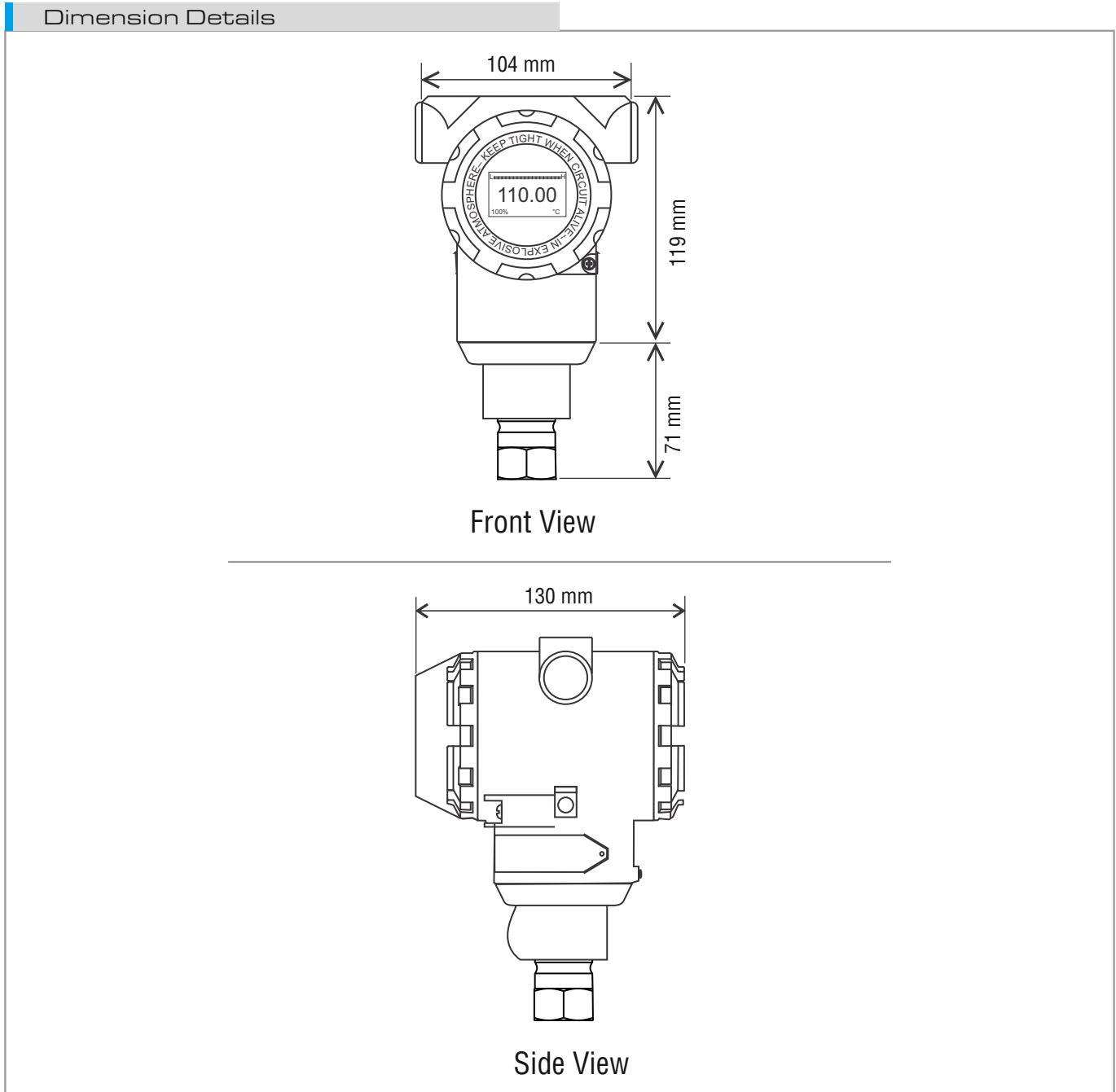


### Technical Specifications

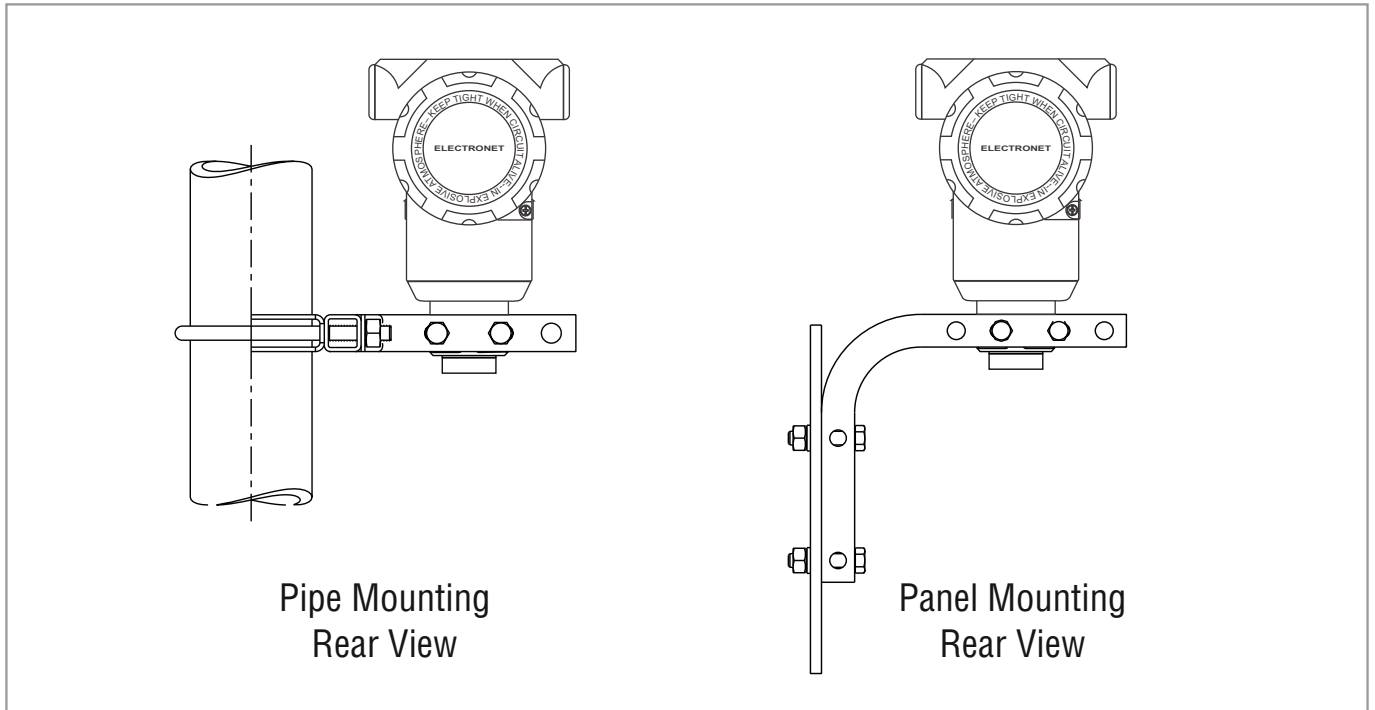
Type of Input	1) RTD (PT-100/PT-200)	2) Thermocouple (B, E, J, K, R, S, T)
	3) Resistance	4) millivolt (0 to 100 mV)
Output	4–20 mA, 4–20 mA with HART	
Display	LCD Display	
Isolation	1 kV between Input, Output & Power Supply	
Accuracy	± 0.1% F. S	
Power Supply	24V DC Two Wire Loop Powered	
Power Consumption	< 50 mW	
Response Time	< 300 mSec	
Temperature Coefficient	± 0.01% per °C	
MOC Electronics Enclosure	Die Cast Aluminum / SS316	
Ambient Conditions	Temperature : -20 to 55 °C, Humidity : 5 to 95% non condensing	
Electrical Connection	½" NPT (F) / M20 X 1.5 (F)	
Mounting	DIN Rail & Pipe Mount	
Calibration	Software calibration	
Turn-on Time	Less than 5 seconds	
Power Supply Effect	Less than ±0.005% of span per volt	
Surge Protection	In-built	
EMC	EMC compliance with IEC-61000-4-3 & IEC-61000-4-6	
Repeatability	±0.1%	
Linearity	±0.05% of Full Scale	
Stability	±0.2% of URL / year	
Reverse Polarity	In-built provided	
Self Diagnosis	Sensor open indicator	
Certification	CE	
	 ATEX Certification : ATEX (II 2 GD Ex d IIC T6 Gb -20°C ≤ Ta ≤ +60°C)	

Note: Accuracy specified is for RTD input, for other type of inputs please refer instruction manual.

Range Table	Sensor Options	Input Ranges		Recommended Min. Span		Accuracy
	2-, 3-, 4-wire RTDs	°C	°F	°C	°F	
	<b>Note:</b> The stated transmitters do not include temperature sensors. Any requirement of sensors should be mentioned separately.	PT 100	-200 to 850	-392 to 1562	85	156
PT 200		-200 to 850	-392 to 1562	85	156	±0.1% of SPAN
<b>Thermocouples</b>						
Type B		0 to 1000	0 to 1832	100	183	±0.25% of SPAN
Type E		-270 to 1000	-518 to 1832	100	183	±0.25% of SPAN
Type J		-210 to 1200	-410 to 2192	120	219	±0.25% of SPAN
Type K		-270 to 1370	-518 to 2498	137	249	±0.25% of SPAN
Type R		-50 to 1760	-122 to 3200	176	320	±0.25% of SPAN
Type S		-50 to 1760	-122 to 3200	176	320	±0.25% of SPAN
Type T		-270 to 400	-518 to 752	40	75	±0.25% of SPAN

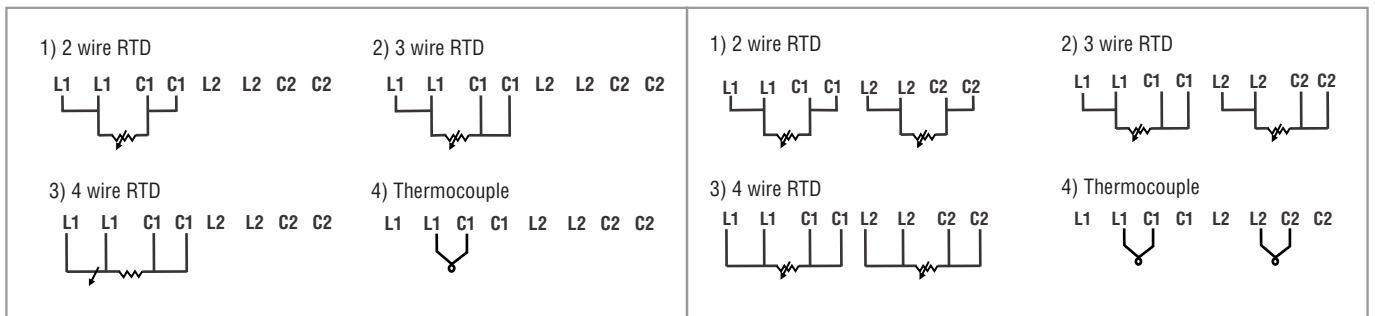


Mounting Details



Single Sensor Connection Diagram

Dual Sensor Connection Diagram



Ordering Information

Sample Order Code : TX 1 | A2 | B3 | C2 | F2 | G2 | H1 | I2

Parameter	Code	Description	Parameter	Code	Description	
TX	Transmitter Mounting Type	TX 1	DIN Rail	C	C1	RTD PT-100
		TX 3	2 Inch Pipe Mount		C2	RTD PT-200
A	Type of Input	A1	RTD		C3	Thermocouple B-Type
		A2	Thermocouple		C4	Thermocouple E-Type
		A3	Resistance		C5	Thermocouple J-Type
		A4	Milivolt (0 to 100 mV)		C6	Thermocouple K-Type
B	Type of Input Sensor 1	B1	RTD PT-100		C7	Thermocouple R-Type
		B2	RTD PT-200		C8	Thermocouple S-Type
		B3	Thermocouple B-Type		C9	Thermocouple T-Type
		B4	Thermocouple E-Type		CX	NA
		B5	Thermocouple J-Type			
		B6	Thermocouple K-Type			
		B7	Thermocouple R-Type			
		B8	Thermocouple S-Type			
		B9	Thermocouple T-Type			
		BX	NA			
F	Electronics Enclosure	F2	Field Mount Weather Proof IP67			
		F3	ATEX			
G	MOC Electronics Enclosure	G1	Die Cast Aluminium			
		G2	SS316			
		G3	ABS Plastic			
H	Electrical Connection	H1	M 20 x 1.5 (F)			
		H2	½" NPT (F)			
I	Output (Any one)	I1	4 to 20 mA			
		I2	4 to 20 mA with HART			

**Note :**

- Due to our continuous product revisions, design specification and model numbers are subject to change without notice.
- Accuracy defined at Lab Conditions.
- For other requirement please consult factory.

ELECTRONET EQUIPMENTS PVT. LTD.

Factory Address:

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