



## SERIES: TTH108

- RTD OR THERMOCOUPLE INPUT
- ZERO AND SPAN ADJUSTMENTS
- HIGH ELECTROMAGNETIC NOISE RESISTANCE
- DIN-RAIL VERSION OR IP65 PROTECTION BOX AVAILABLE (OPTION)



### INTRODUCTION

Indumart *TTH108 Series* of Temperature Transmitters provide accurate and reproducible conversion of RTD or thermocouple signals to 4-20 mA output.

One model is designed to accept RTD input. The others accept types J, K, E, L, N and T thermocouple inputs and also provide automatic thermocouple cold junction compensation.

The transmitters will be supplied in standard factory calibrated ranges, but on board links allow the transmitter to be easily re-ranged to operate over most industrial and commercial applications. ZERO and SPAN potentiometers are provided to allow fine re-calibration at both ends of the scale.

The *TTH108 Series* are mounted on the standard 33 mm fixing centers of miniature RTD or thermocouple connection heads. Optionally, the transmitter maybe ordered as DIN rail mounting or secured in an IP65 rated box.

### Input signals of TTH108 Series

Input Type	Range
Pt100 (3-wire)	-50...+50°C
Pt100 (3-wire)	-50...+100°C
Pt100 (3-wire)	0...+50°C
Pt100 (3-wire)	0...+100°C
Pt100 (3-wire)	0...+150°C
Pt100 (3-wire)	0...+200°C
Pt100 (3-wire)	0...+250°C
Pt100 (3-wire)	0...+300°C
Pt100 (3-wire)	0...+400°C
Pt100 (3-wire)	0...+500°C
Thermocouple E	0...+600°C
Thermocouple J	0...+800°C
Thermocouple K	0...+1200°C
Thermocouple L	0...+700°C
Thermocouple L-GOST	0...+600°C
Thermocouple N	0...+1200°C
Thermocouple T	0...+300°C

### SPECIFICATIONS

Range Selection	By jumper soldering
Thermocouple Selection	By jumper soldering
Measurement Error	0.3% of span
Nonlinearity for RTD	0.3% of span
RTD Linearity Proportional to T/C Linearity Proportional to Temperature Drift	Temperature
Cold Junction Compensation	Input voltage
Zero Adjustment	0.02% of span for 1°C
Span Adjustment	Automatic
Output Current Limit	±50°C
T/C Output @ Sensor Break	±10% of range
RTD Output @ Sensor Break	Low = 3mA; High = 28mA
Output Signal	> 23 mA
Power Supply (2-wire Output)	> 25 mA
Power Consumption	4...20 mA
Maximum Line Load (RTD)	8...30 VDC (RTD & linear inputs)
Maximum Line Load (T/C)	Up to 2 mA (3-wire output)
Operating Condition	620 Ω at 24 V / 20 mA
Case Material	800 Ω at 24 V / 20 mA
Mounting	-30...80°C; 0...95% RH
Protection Case/Terminal	Hard plastic
Dimensions (mm)	<b>DIN-Rail</b> <b>In Head</b> <b>In Box</b>
Weight (g)	IP20 IP20 IP65
	90x17x60 043x17 80x80x60
	90 30 180

### ORDER CODE

Model: **TTH108** -

#### Input Signal

RTD  
Thermocouples

R  
T

#### Mounting

In-head  
In box (box included)  
35-mm DIN-rail

H  
B  
R

#### DIN-rail Mounting Snap

None  
Required (in-head model only)

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