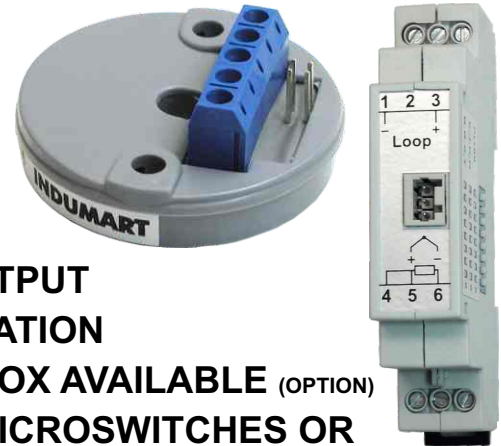




SERIES: TTH109

- RTD OR THERMOCOUPLE INPUT
- 2-WIRE CURRENT OR 3-WIRE VOLTAGE OUTPUT
- RS232 SERIAL INTERFACE FOR CONFIGURATION
- DIN-RAIL VERSION OR IP65 PROTECTION BOX AVAILABLE (OPTION)
- CAN BE BOTH PROGRAMMED THROUGH MICROSWITCHES OR JUMPERS AND VIA SERIAL INTERFACE AND SOFTWARE



INTRODUCTION

Indumart *TTH109 Series* of Programmable Temperature Transmitters provide accurate and reproducible conversion of pt100 RTD and thermocouple signals to 2-wire 4-20 mA or 3-wire 0-10 VDC output.

The user may configure the transmitter through microswitches (for rail-mounted model) or jumpers. Using the RS232 serial interface along with the programming software allows selections of the input sensor, the input range, the output direction and the sensor failure action by the user. Configuration is fast and easy.

The user must select between a 2-wire current output or a 3-wire voltage output at the time of ordering.

The *TTH109 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 TTH109 Series

Input Type	Range
Pt100 (3-wire)	-200...+600°C
Thermocouple T	-40...+400°C
Thermocouple E	-20...+600°C
Thermocouple J	-20...+900°C
Thermocouple K	-20...+1200°C
Thermocouple N	-20...+1200°C
Thermocouple R	0...+1700°C
Thermocouple S	0...+1700°C
Thermocouple B	200...+1800°C

The transmitter's input/output conversion may be programmed to act in direct or reverse manner.

SPECIFICATIONS

Measurement Error	0.3% of span
Nonlinearity for RTD	With in the error limit
Temperature Drift	0.01% of span for 1°C
Cold Junction Compensat'n	Automatic with in 0.5°C
3-wire RTD line Compensat'n	up to 25Ω per wire
Current Output Signal	4...20 mA with maximum load of 800Ω @ 24V / 20mA
	0...10 V (min. load of 1 MΩ)
Power Supply	8...36 VDC (2-wire mA Output)
	12...36 VDC (3-wire volt Output)
Output @ Sensor Break	<3.8 mA or >20.2 mA
	Programmable
Interface Type	RS232 with special cable*
Operating Condition	-30...80°C; 0...95% RH
Case Material	Hard plastic
Mounting	DIN-Rail In Head In Box
Protection Case/Terminal	IP20 IP20 IP65
Dimensions (mm)	90x18x58 Ø44x19 80x80x60
Weight (g)	90 30 170

* The RS232 cable must be ordered separately.

ORDER CODE

Model: TTH109	-	<input type="checkbox"/>	<input type="checkbox"/>
Output Signal		1	2
4..20 mA (2-wire)			
0...10 V (3-wire)			
Mounting			H
In-head			B
In box (box included)			R
35-mm DIN-rail			

