

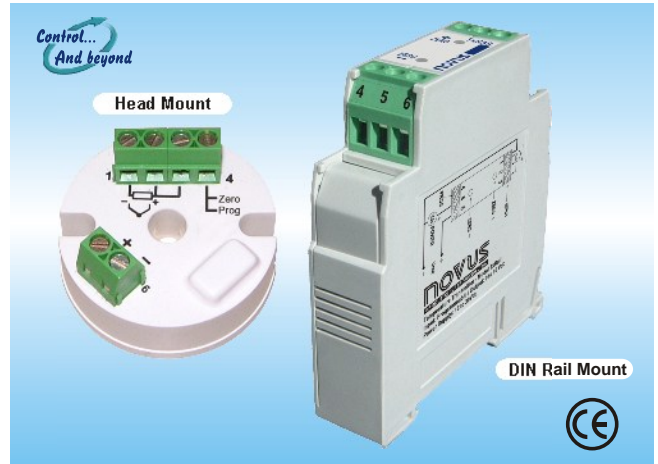
**INTRODUCTION**

**TxBLOCK** is a fully customer programmable head mount temperature transmitter.

In-the-field configuration of input type and working range can be achieved by means of a cable and an RS232 port from a PC.

**TxRail** represents the utmost technology in DIN rail mount temperature transmitters.

Input type, working range and output calibration can be achieved by means of a cable and an RS232 port from a PC.



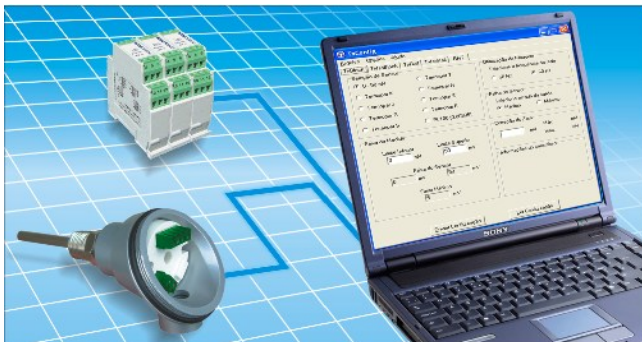
**FEATURES**

**TxBLOCK** and **TxRail** comprehends a family of head mount and DIN rail mount 4-20mA temperature transmitters for the most common temperature applications.

One single model can be configured to accept several thermocouple types and Pt100 RTDs.

**CONFIGURATION**

Configuration is achieved by means of an RS232 cable connected to a PC with the convenient configurator software.



**CONFIGURATION from the PC**

File Option Help

Input Sensor

0 - 50 mV     Thermocouple T

Thermocouple K     Thermocouple N

Thermocouple J     Thermocouple E

Thermocouple R     Thermocouple B

Thermocouple S     PT 100 (0,00385)

Line Noise Rejection

Select Mains Frequency

50 Hz     60 Hz

Sensor Failure Detection

Select Output Action

Downscale     Upscale

Measuring Range

Lower Range Value    Upper Range Value

0 °C    1370 °C

Maximum Measuring Range

0 °C    1370 °C

Minimum Span

100 °C

Zero Correction

0,3 °C    Min: -68,5 °C    Máx: 68,5 °C

Device Information

Serial Number: 001 22988  
Device Firmware Version: 1.00  
Model: TxRail  
Output type: 4 - 20mA

Read Device    Apply

**SPECIFICATIONS**

- Programmable input: thermocouples type J, K, T, E, N, R, S, and Pt100 RTD with programmable working range.
- 2-wire loop powered 4-20 mA output.
- Linearized 4 to 20 mA or 20 to 4 mA output for t/c and Pt100.
- Cold junction compensation for thermocouples.
- Optional 0 to 10 Vdc for **TxRail** only.
- 2 or 3-wire Pt100 with linearization.
- Windows configurator (optional).
- Configuration with a PC via an RS232 cable.
- Manual zero (offset) adjustment can be done by means of a wire jumper simulating a keyboard for the **TxBLOCK** or with 2 front keys in the **TxRail**.
- Digital filter can be set for best 50 or 60 Hz performance.
- Power supply: 12 to 30 Vdc.
- Accuracy: Pt100 and 0 to 50 mV ±0.2% full scale. Thermocouples ±0.3% max. of full scale
- Temperature effect: 0.003% SPAN/°C.
- Working temperature: -40 to +85°C (-40 to 185°F).
- Sensor failure protection: programmable burnout upscale or downscale.
- Dimensions:
  - TxBLOCK: 44 mm (Diam.) x 25 mm (H including bornes)
  - TxRail: 72 mm (H) x 78 mm (D) x 19 mm (W).

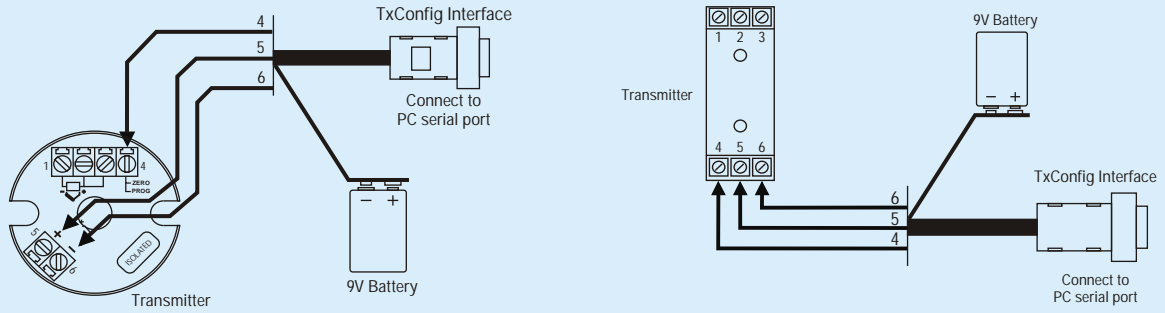
**INPUT TYPES AND RANGES**

User can easily program input type and temperature range as below:

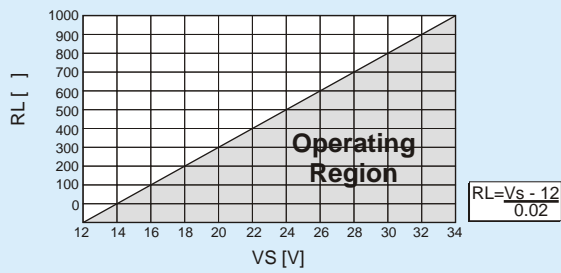
INPUT	RANGE	MIN SPAN
• Thermocouple K	0 to 1370°C / 32 to 2500°F	100°C
• Thermocouple J	0 to 760°C / 32 to 1400°F	100°C
• Thermocouple R	0 to 1760°C / 32 to 3200°F	400°C
• Thermocouple S	0 to 1760°C / 32 to 3200°F	400°C
• Thermocouple T	0 to 400°C / 32 to 752°F to	100°C
• Thermocouple N	1300°C / 32 to 2372°F	100°C
• Thermocouple E	0 to 720°C / 32 to 1328°F	100°C
• Pt100	-200 to 650°C / -328 to 1202°F	40°C
• Voltage	0 to 50mV	5mV

TRANSMITTERS

**TxConfig CONNECTIONS**



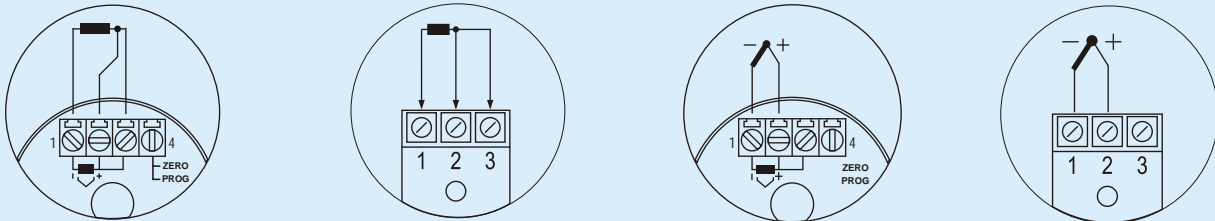
**LOAD & POWER SUPPLY**



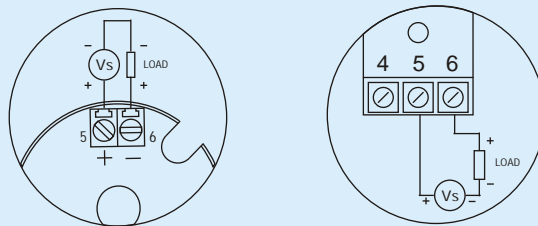
**ELECTRICAL CONNECTIONS**

Pt100

Thermocouple

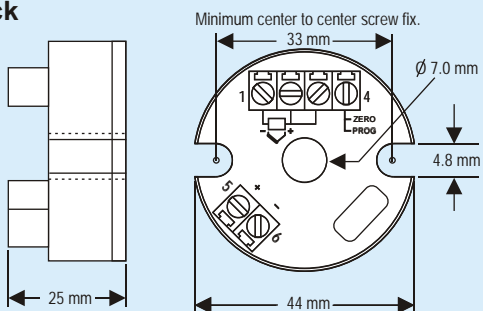


Output

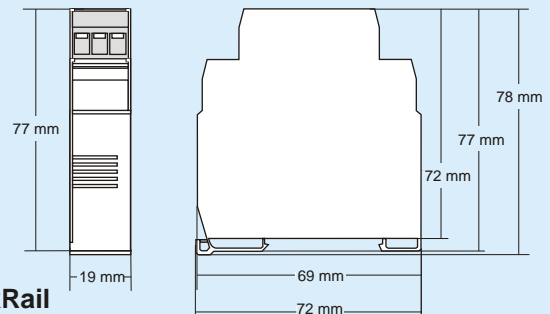


**DIMENSIONS**

TxBlock



TxRail



TRANSMITTERS