



Temperature Transmitter TxBlock-USB & TxRail-USB

The **TxBLOCK-USB** is a high precision head mount temperature transmitter. The universal input reduces inventory while the native USB port facilitates configuration, calibration and online monitoring either at the lab or in the field.

The **TxRail-USB** is a USB configurable DIN rail mount temperature transmitter. It allows selection and configuration of input type, measurement range, output type and calibration. Its output can be set to either loop powered 4-20 mA or 0-10 V. Highly accurate and user-friendly, the **TxRail-USB** performs well from simple to sophisticated measurement applications.



USB port for configuration and calibration

Features

- Universal input accepts Thermocouples J, K, T, E, N, R, S, B, Pt100, Pt1000, NTC and 0-50 mV
- Configurable measurement range
- Sensor break detection according to NAMUR Ne43 recommendations
- Internal cold junction compensation
- Pt100/Pt1000 connection for 2, 3 and 4 wires
- Accuracy (@ 25 °C): typical 0,1% of span for thermocouple, mV, Pt100 and Pt1000
- Temperature effect $< \pm 0,16\%$ @ 25° C
- **TxBLOCK-USB**: Loop powered 4-20mA output
- **TxRail-USB**: Configurable output to 4-20 mA loop powered or 0-10 V
- Output Linearized according to measured temperature
- Output resolution: 4-20 mA output: 2 μ A
0-10 V output: 2,5 mV
- Power supply:
 - TxRail-USB**: 10 to 35 Vdc (4-20 mA output)
12 to 30 Vdc (0-10 Vdc output)
 - TxBLOCK-USB**: 8 to 35 Vdc
- Operating temperature: -40 to 85 °C
- Free Windows® configuration software
- USB micro-B port allows direct PC connection for configuration
- USB Class CDC
- Dimensions:
 - TxRail-USB**: 99,5 x 114 x 12,5 mm
 - TxBLOCK-USB**: 43.5 mm x 20.5 mm D x H

Configuration Software

The USB port makes configuration easy. By using an ordinary USB Micro-B cable and **NOVUS** free configuration software, the transmitter can be totally configured and calibrated. The **TxConfig II** software, required to communicate with the **TxBLOCK-USB** and the **TxRail-USB** is available for download at www.novusautomation.com.

