INTRODUCTION

TxIsoPack - USB is a fully isolated 4 to 20 mA two-wire loop powered temperature transmitter for in-head assembly.

Complete sensor type selection and range configuration is achieved by connecting the device directly to a PC USB port thus not requiring any other interface, special converter or any additional driver.

The isolated and linearized current output represents the sensor input signal according to the temperature sensor selected.

direct USB comm

CE

C

TEMPERATURE TRANSMITTERS

CONFIGURATION

This product can be supplied pre-configured from factory in large quantities or it can be easily configured by the end user by means of a simple USB cable connected to a regular USB port using the intuitive **NOVUS TxConfig** software.

The Configuration kit comprehends a USB cable and the **TxConfig** software which can be acquired from **NOVUS** or from any **NOVUS** authorized distributor. The **TxConfig** configuration software can be updated free of charge from **NOVUS** website.

Sensor type, operating range, sensor offset and upscale or downscale protection are some of the available parameters which can be configured by using the **TxConfig** software.

Mini B Plug   USB CABLE   Plug A

Powered Current Loop
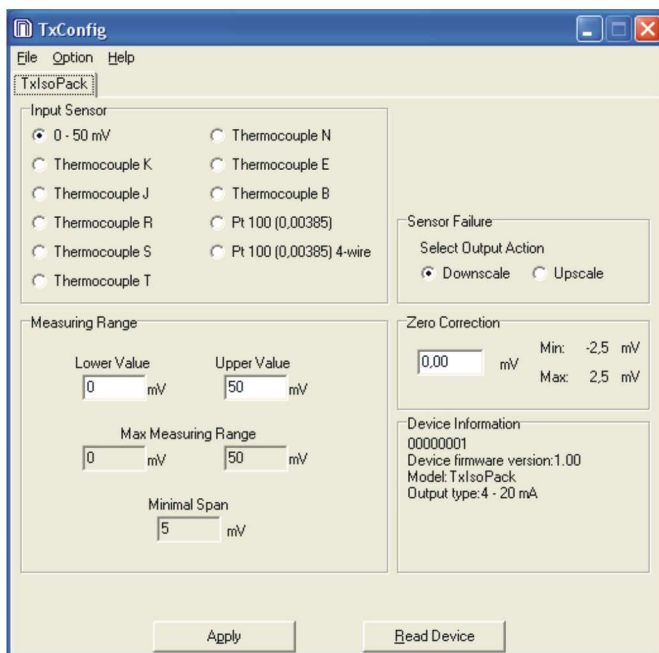
TRANSMITTER

Connect to the USB port
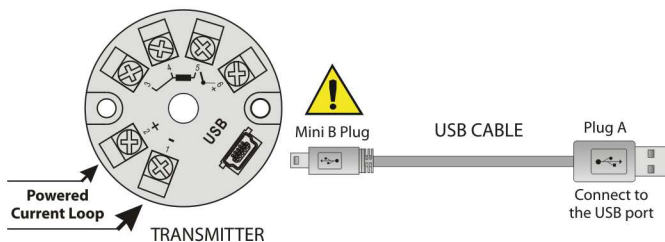
USB Cable Connection

During configuration the transmitter is powered by the USB cable connection thus not requiring any external power supply over the current loop.

TxConfig Software Main Screen

SPECIFICATIONS

- INPUT SENSOR: configurable
- Pt100: 2, 3 or 4-wire, 0.170 mA excitation current, Alpha = 0.00385 according to IEC 751 (NBR 13773)
- VOLTAGE: 0 to 50 mVdc. Impedance > 1 MΩ
- TOTAL ACCURACY: maximum error of 0.3 % of maximum range for thermocouples; 0.2 % of maximum range for Pt100 and voltage
- RESPONSE TIME: ≤ 500 ms
- ISOLATION: 1000 Vac for 1 minute between input and output
- OUTPUT: 4-20 mA current or 20-4 mA, two-wire type; linear in respect to the measured temperature
- OUTPUT RESOLUTION: 0.004 mA (12 bits)
- POWER: 12 to 35 Vdc, voltage over the transmitter
- MAXIMUM LOAD in series: RL = (Vdc – 12) / 0.02 Ω where Vdc is the power voltage
- OPERATING TEMPERATURE: -20 to 75 °C
- RELATIVE HUMIDITY: 0 to 90 % RH
- ELETROMAGNETIC COMPATIBILITY: EN 50081-2, EN 50082-2
- Internal protection against reversed power voltage polarity
- Internal cold junction compensation for thermocouples
- ABS enclosure, 44 mm diameter and 24 mm maximum height
- Communication cable: mini-B USB cable, 5 pins

INPUT TYPES AND MAXIMUM RANGES

SENSOR TYPE	MAXIMUM RANGE	MINIMUM RANGE
T/C type K	-150 to 1370 °C	100 °C
T/C type J	-100 to 760 °C	100 °C
T/C type R	-50 to 1760 °C	400 °C
T/C type S	-50 to 1760 °C	400 °C
T/C type T	-160 to 400 °C	100 °C
T/C type N	-270 to 1300 °C	100 °C
T/C type E	-90 to 720 °C	100 °C
T/C type B	500 to 1820 °C	400 °C
Pt100	-200 to 650 °C	40 °C
Voltage	0 to 50mV	5 mV

Maximum measuring ranges

info@novus.com.br
www.novus.com.br

NOVUS PRODUTOS ELETRÔNICOS LTDA
TEL. 55 51 3323-3600 FAX: 55 51 3323-3645