

TEMPERATURE TRANSMITTERS - TxIsoPack & TxIsoRail-HART

INTRODUCTION

The **TxIsoPack-HART** and **TxIsoRail-HART** are high performance temperature transmitters which convert RTDs, Thermocouples and voltage signals into a 4-20 mA current along with a superimposed HART protocol digital communication.

Complete configuration, calibration and parameters monitoring can be fully achieved through the two-wire current loop by means of a convenient PC software and USB interface called **TxConfig-HART**.

Sensor type input is fully programmable for most relevant RTDs, thermocouples, variable resistors, and voltage in mV.

High Isolation between input and output drastically improves stability and reliability with greater immunity to electromagnetic noises in extremely harsh industrial environments.



FEATURES

The **TxIsoPack-HART** (for head mounting) and **TxIsoRail-HART** (for DIN rail mounting) are easily programmable devices for the most demanding industrial applications. One single model can be configured to accept RTDs, most thermocouple types, variable resistors and voltage upto 2000 mV.

SPECIFICATION

- ❖ Programmable Input:
 - Thermocouples B, E, J, K, R, S, T, N
 - Pt100,Pt500,Pt1000
 - Cu50,Cu100
 - Ni100,Ni500,Ni1000 (5000ppm/K)
 - Ni100,Ni500,Ni1000 (6180ppm/K)
 - 0to400 ,0to2000 ,0to10KOO
 - 10to75mV, -100 to100mV, -100 to500mV, -100 to2000mV
- ❖ User programmable working range
- ❖ 2-wire loop powered 4-20mA output
- ❖ 2, 3 or 4-wire RTD and thermocouples with linear output
- ❖ Cold junction compensation for thermocouples
- ❖ Configurator software Windows® (optional)

- ❖ Selectable digital filter for input signal
- ❖ Power: 10 to 35 Vdc
- ❖ Accuracy : Pt100 and 0 to 50 mV $\pm 0.2\%$ full scale. Thermocouples $\pm 0.3\%$ max. of full scale
- ❖ Working temperature: -40 to +85°C (-40 to 185°F)
- ❖ Programmable sensor failure detection for upscale or downscale
- ❖ Resolution : 0.3 μ A
- ❖ Maximum load : $(V_{Power} - 10.5V) / 0.022A$
- ❖ Galvanic isolation: 1.5KV

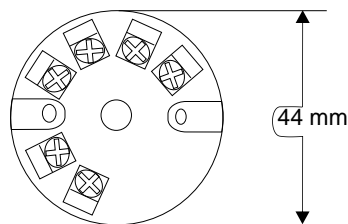
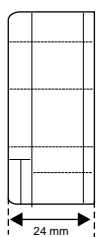
CONFIGURATION



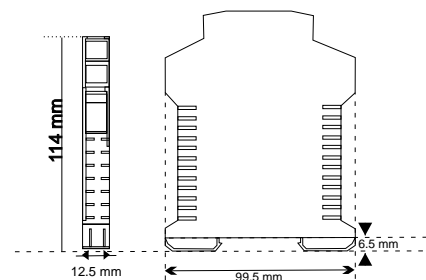
PC Configurator

Configuration is achieved by means of the configurator software with the TxConfig-HART interface connected to a USB port.

DIMENSIONAL DETAILS



TxIsoPack-HART



TxIsoRail-HART