PT100 or Thermocouple Input DIN Rail Transmitter

DS3018

Features:

- Configuration using USB port powered configurator
- PT100 or Thermocouple / mV
- Isolated input
- Input linear to temperature
- 4-20mA two wire output

Description:

The GEN1603 series is a cost effective DIN rail mounted temperature transmitter. The range consists of two versions, the GEN1603/P accepts PT100 inputs, and the GEN1603/TC accepts seven common thermocouple types plus mV input.

Designed for ease of use, this range is configured with our USB port powered configuration module. The module interfaces a PC USB port to the GEN1603, using the 4-20mA loop to communicate. You will be able to read teh current configuration data, and then perform any chages you wish to make to the configuration. To further save time, the GEN1603 and configuration module do not need to be wired to a power supply during the configuration process, both are powered by the USB interface on your PC.

Model	Input Type	Low Range	High Range	Units	Burnout
GEN1603/P	**PT100**	Input @ 4mA	Input @ 20mA	ºF, ºC	Up/Scale Down/Scale

UKAS CALIBRATION 0043

BSI UKAS QUALITY MANAGEMENT CERTIFICATE NO. FM22358

TT Electronics | Roxspur Measurement & Control
2 Downgate Drive, Sheffield, South Yorkshire, S4 8BT, UK |Ph: +44 (0) 114-244-2521
www.ttelectronics.com | RoxspurSales@ttelectronics.com

INPUT	RANGE	ACCURACY*[1]	STABILITY*[3]
K	-200 to 1370ºC	0.1% of FSR ±0.5ºC (type T 0.2% FSR ±0.5ºC)	±0.01% of FSR/ºC
J	-100 to 1200ºC		
E	-100 to 1000ºC		
N	-180 to 1300ºC		
T	-100 to 400ºC		
R	-10 to 1760ºC	±0.5ºC ±0.1% of FSR*[2]	
S	-10 to 1760ºC	±0.5ºC ±0.1% of FSR*[2]	
mV	-40 to 75mV	±0.04mV	
P	-200 to 850ºC	±0.1ºC / ±0.05% of reading	±0.005% of FSR/ºC

*[1] Accuracy for PT100 and thermocouples do not include sensor and cold junction errors.
*[2] Only over the range 800 to 1600ºC.
*[3] Ambient -10 to 50ºC.

TT Electronics | Roxspur Measurement & Control
2 Downgate Drive, Sheffield, South Yorkshire, S4 8BT, UK |Ph: +44 (0) 114-244-2521
www.ttelectronics.com | RoxspurSales@ttelectronics.com

PT100 or Thermocouple Input DIN Rail Transmitter

OUTPUT	
Type	Two wire current sink; signal range 4-20mA; full range 3.8-24mA
Supply	11-30V DC, 24V nominal giving Max loop load of 600R @ 24V
Response Time	<500ms to reach 95% of final value; start-up time <3s
Calibration Accuracy	±5µA
Loop Effects	Loop ripple 0.03% of FSR; supply sensitivity 0.05µA/ºC; supply ripple rejection <5µA error @ 1V rms 50Hz ripple
Protection	Reverse connection and over-voltage protection. Max over voltage current 100mA.
Stability	±5µA/ºC
GENERAL	
Isolation	Input to output tested at 500V DC
Ambient	Operating -20 to 70ºC, 10 to 95% RH non-condensing. Storage -40 to 85ºC
Approvals	CE tested to BS EN 61326
MECHANICAL	
Material	Polmide 6.6
Terminals	Screw terminal
Cable	2.5mm max.
Colour	Grey

TT Electronics | Roxspur Measurement & Control
2 Downgate Drive, Sheffield, South Yorkshire, S4 8BT, UK |Ph: +44 (0) 114-244-2521
www.ttelectronics.com | RoxspurSales@ttelectronics.com