

Features

- ACCEPTS PT100, Cu100, Cu53, Ni100, Ni120 SENSORS
- (0 to 10) mA THREE WIRE OUTPUT
- USER OUTPUT TRIM (ZERO and SPAN)
- PC CONFIGURATION USING USB PORT
- LIVE DATA CAN BE VIEWED ON AN ANDROID PHONE OR TABLET

RS PRO DIN RAIL WITH RTD (Pt100) I/P AND VOLTAGE O/P

RS Stock No.: 0458742



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

This RS PRO product is a DIN rail mounted Voltage Output temperature transmitter. It has been designed to accept common RTD temperature sensor inputs and provide the user with a standard three wire (0 to 10) volt output signal. The output signal is linear to temperature. Designed for ease of use, our latest USB interface is fitted for quick and easy configuration. Connect a standard USB cable between the product and your PC. Our free configuration software will guide you through any changes you wish to make. To further help save time, the product does not need to be wired to a power supply during the configuration process, it is powered via the USB interface from your PC.

SENSOR INPUT		SPECIFICATIONS @20°C
RTD		
Type	Range	Accuracy/ Stability
PT100 (IEC)	(-200 to 850) °C	0.2°C + (°0.05% of reading) Plus sensor error
PT100 0.391	(-200 to 630) °C	
PT100 0.392	(-200 to 630) °C	
PT100 0.393	(-200 to 630) °C	
Cu53	(-40 to 180) °C	
Cu100	(-80 to 260) °C	
Ni100	(-70 to 180) °C	
Ni120	(-70 to 180) °C	
Excitation current		660 uA
Maximum lead resistance	2 or 3 wire	20 □
Thermal stability		± 0.02 °C / °C

OUTPUT		SPECIFICATIONS @20°C
Type/ Function	Range/ Description	Accuracy/ Stability/ Notes
Three wire voltage	(0 to 10) V	(V output /2000) or 3 mV (Whichever is the greater)
Thermal drift	Zero at 20°C	1 mV/°C Typical (2 mV /°C Max)
Maximum output voltage	10.5 V	In high-burnout condition
Minimum output voltage	< 0.0 V	In low-burnout condition
Minimum output load	5000 Ohms	2mA @ 10V
Supply	(15 to 30) V DC	SELV
Power		< 1 W full power

USB USER INTERFACE

Type/ Function	Range/ Description	Notes
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Configuration hardware		USB A to mini B lead
Configuration software	USBSpeedLink	
Sensor configuration	Sensor type	RTD list
	Temperature range for (0 to 10) V Output	°C or °F
	Sensor offset	±10 °C or ±18°F
	Burnout Voltage	Upscale, downscale or user-set
Pre-set temperature (diagnostics)	Any within sensor range	°C or °F
Pre-set output voltage (diagnostics)	Any within output range	V
Tag		20 characters
Button function		Trim, active range, off
Read live data	Temperature Output	°C or °F V
Save/ open configuration		To/ from PC file

USER PUSH BUTTON INTERFACE

Function	Description	
Active range	Range 0 Volt and 10 Volt points against live input	
User trim	Adjust at maximum and minimum input range value	Offset (0 V) and span (10 V) adjustment

GENERAL

Function	Description
Response time	500 ms to 70% of final value
Start-up time	8 s
Warm-up time	120 s to full accuracy
Default configuration	PT100 (0 to 100) °C, upscale burnout
LED (red)	If Voltage output < -0.1% or > 100.1 % LED ON
Protection	Reverse connection

ENVIRONMENTAL

Function	Description
Ambient temperature	Operating (-30 to 70) °C Storage (-40 to 85) °C
Ambient humidity	Operating/Storage (10 to 90) %RH non-condensing
Protection requirement	Device must be installed in an enclosure offering >IP65 Protection
USB configuration ambient	(10 to 30) °C

MECHANICAL

Function	Description
Dimensions	12.5 mm width, 56.4 mm depth from rail, 90 mm height

Enclosure	DIN rail mount
Material	Polyamide 6.6 self-extinguishing UL94-HB: Grey
Connections	Screw terminals 2.5 mm wire maximum
Weight	60 g approximate

APPROVALS

EMC	BS EN 61326: Note - Compliance tested with 30 m input wires
Ingress protection	BS EN 60529
RoHS Directives 2 & 3	2011/65/EU & EU 2015/863, and the UK designated standards

Mechanical
Dimensions in mm

