

# DIN Rail Temperature Transmitter



## DS3016

### Features:

- PT100 (3 types), Ni100, Ni120, Cu100, 10-400 ohm
- Simple push button configuration
- Advanced user configuration for access to 56 pre-set temperature ranges
- User push button trim
- 4-20mA output



### Description:

The GEN213/P is a cost effective "smart" DIN rail mount transmitter that accepts resistance temperature sensors and converts sensor output over a configured range to a standard industrial 4-20mA transmission signal.

A simple push button operation allows the user to select RTD type, burnout direction, fixed ranges and trim 4 and 20mA points.

The GEN213/P transmitter incorporates the latest digital technology to ensure accurate drift free performance.

If required the desired range can be specified at the time of order, removing the need for user configuration. If the range is not specified then the transmitter will be supplied at the default range of 0-100°C type PT100 IEC.

Sensor	Range (°C)	Accuracy
<b>PT100 IEC 0.003851</b>	-200-850	±0.2°C + (±0.05% of reading)
<b>PT100 IPTS-68 0.00391</b>	-200-630	
<b>PT100 IPTS-68 0.00392</b>		
<b>Ni100 DIN 0.00618</b>	-60-180	
<b>Ni120 DIN 0.00672</b>	-80-260	
<b>Cu100 0.00427</b>		
<b>Cu53</b>	-50-180	
	<b>Range (ohm)</b>	
<b>Ohms</b>	10-400	±0.01% FSR



### General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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<b>Sensor Burnout</b>	Either up or down scale output
<b>Stability</b>	±RTD 0.005% FSR/°C ±Ohms 0.025% FSR/°C
<b>OUTPUT</b>	
<b>Output Type</b>	2 wire 4-20mA current loop
<b>Output Range</b>	4-20mA
<b>Output Connection</b>	Screw terminal
<b>Max Output</b>	21.5mA (in high burnout conditions)
<b>Min Output</b>	<3.9mA (in low burnout conditions)
<b>Accuracy</b>	(mA output / 2000) or 5µA (whichever is greater)
<b>Loop Voltage Effect</b>	±0.2µA/V
<b>Thermal Drift</b>	±1µA/°C typically ±1.5µA
<b>Max Output Load</b>	$[(V_{supply} - 10)/21]$ K ohms (E.g. 700 ohms @ 24V)
<b>APPROVALS</b>	
<b>EMC - BS EN 61326:1998</b>	Electrical equipment for measurement control and laboratory use.
<b>Annex A</b>	Immunity test requirements for equipment intended for use in industrial locations.
<b>Annex F</b>	Test configurations, operational conditions and performance criteria for transducers with integrated or remote signal conditioning.
<b>IEC 61000-4-2</b>	Electrostatic discharge
<b>IEC 61000-4-3</b>	EM Field
<b>IEC 61000-4-4</b>	Transient Burst (output)
<b>IEC 61000-4-5</b>	Surge (output)

**NB:** Sensor input wires to be less than 3 meters to comply.

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