

Temperature Transmitter

Product features

- Pt 100 input
- 3 or 4 wire measurement
- -200 - +600 °C measurement ranges
- Two wire 4-20 mA transmitter
- 0.2 °C accuracy
- 875 uA measuring current
- TS-35 rail mounting, 12.5 mm width



Type designation

DT1000 I4		Range [°C]*					
		50	100	200	400	600	800
Starting Point [°C]*	-200	-200...-150	-200...-100	-200...0	-200...200	-200...400	-200...600
	-100	-100...-50	-100...0	-100...100	-100...300	-100...500	--
	0	0...50	0...100	0...200	0...400	0...600	--
	100	100...150	100...200	100...300	100...500	--	--
	200	200...250	200...300	200...400	200...600	--	--
	300	300...350	300...400	300...500	--	--	--
	400	400...450	400...500	400...600	--	--	--
	500	500...550	500...600	--	--	--	--

\* Other ranges for customer request also available.

The **DT1000 I4 Temperature Transmitter** provide a 4-20 mA signal in proportional to the Pt 100 sensor element connected to their input. The device is loop-powered from 4-20 mA signal. Sensor element can be connect in 3 or 4 wire measuring mode. The temperature ranges are fix configured, see on the above table. Different ranges for customer request also available. Input and output is not isolated.

**Safety data:**

The connection terminals of the supply voltages are isolated from each other, the isolation is in compliance with the standard EN 61010-1, taking into consideration the following:

Pollution level:	2
Measurement category:	II

**Input parameters:**

Input signal:	Pt 100 sensor
Measurement range:	see the table on the previous page
Connection:	3 or 4 wire
Measuring current:	800 µA (at 100 ohm sensor resistance)
Power dissipation on Pt 100:	0.25 mW (max.)
Wire resistance:	100 ohm (max.)

**Output parameters:**

Output signal:	4-20 mA
Overloading:	22 mA
Error:	< 0.2 °C + 10 µA (Tk: 23 °C ±2 °C) < 0.6 °C + 50 µA (Tk: 0 °C - 60 °C)
Supply-voltage effect:	practically zero

**Power supply:**

Supply voltage:	10-30 VDC
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**Ambient conditions:**

Operating temperature range:	0-60 °C (-20 - +60 °C for customer request)
Relative humidity:	90% (max., non-condensing)
Place of installation:	cabinet

**Electromagnetic compatibility (EMC)  
accordance with the standard EN 61326**

Immunity:	industrial area
Noise emission:	Group 1, Class B

**General data:**

Housing:	terminal assembly box, rail mounting on TS-35 rail, material: polyamide PA6.6
Connection:	screw terminal
Connection cable:	0.25-2.5 mm <sup>2</sup> (max.)
Dimensions:	12.5 × 99 × 115 mm (width × height × depth)
Weight:	0.15 kg
Protection:	IP 20

Detailed information see in operating instructions. The Manufacturer maintains the right to change the technical data!