

Specifications

Analog Input

Accuracy	0.01 % typical 0.02 % in controlled environment ¹ 0.05 % in industrial area ²
Repeatability	0.003 % typical (within 24 h)
Type of measurement	PT100
Measuring range	-200 °C to +850 °C
Accuracy	0.05 °C
Resolution	0.003 °C
Temperature drift	0.025 °C / 10 K
Type of measurement Pt1000	
Measuring range	-200 °C to +850 °C
Accuracy	0.125 °C
Resolution	0.01 °C
Temperature drift	0.05 °C / 10 K
Type of measurement	Resistance
Measuring range	0 Ω to 400 Ω
Accuracy	0.015 Ω
Resolution	0.001 Ω
Temperature drift	0.01 Ω / 10 K
Type of measurement	Resistance
Measuring range	0 Ω to 4000 Ω
Accuracy	0.5 Ω
Resolution	0.03 Ω
Temperature drift	0.15 Ω / 10 K
Measuring current	1 mA
Linearity deviation	0.01 % of final value

Analog/Digital Conversion

Resolution	19 bit
Sample rate	10 samples/sec (2 sensors, 4-wire) 4 samples/sec (6 sensors, 2-wire)
Conversion method	Sigma-Delta
Filter	variable digital low pass filter 1st order averaging

Digital In/output

Input	Status, tare, reset
Input voltage	max. 30 VDC
Input current	max. 1.5 mA
Upper switching threshold	> 10 V (high)
Lower switching threshold	< 2.0 V (low)
Output	Process or host controlled
Type of output	Open Collector
Output voltage	max. 30 V
Output current	max. 100 mA

Communication Interface

Standard	RS 485, 2-wire
Data format	8E1
Protocols	ASCII, Modbus-RTU, Profibus-DP Local-Bus
Baud rate	19.2; 38.4; 57.6; 93.75; 115.2 kBaud
ASCII and ModBus-RTU	19.2; 93.75; 187.5; 500; 1500 kBaud
Profibus-DP	19.2; 38.4; 57.6; 93.75; 115.2;
Local-Bus	187.5; 500; 1500 kBaud
Connectable devices	up to 32
Galvanic isolation	500 V

Power Supply

Power supply	10 to 30 VDC overvoltage and overload protection approx. 1.5 W
Power consumption	
Influence of the voltage	0.001 %/V

Mechanical

Case	Aluminium and ABS
Dimensions (W x H x D) and weight	45 x 90 x 83 mm, 160 g
Protective system	IP20
Mounting	DIN EN-Rail

Environmental

Operating temperature	-20 °C to +60 °C
Storage temperature	-40 °C to +85 °C
Relative humidity	5 % to 95 % at 50 °C non condensing

Warm Up Time

All declarations are valid after a warm up time of 45 minutes.

¹ according to EN 61326: 1997, appendix B

² according to EN 61326: 1997, appendix A