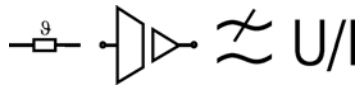


TSA-Pt100



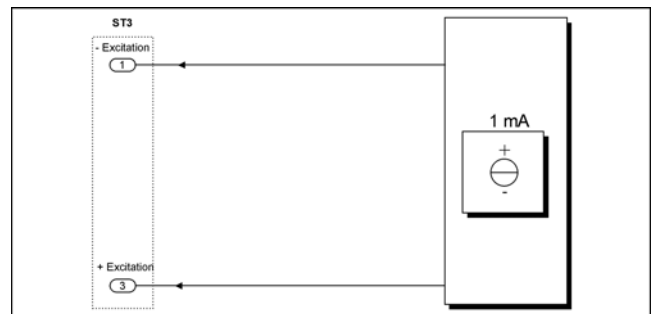
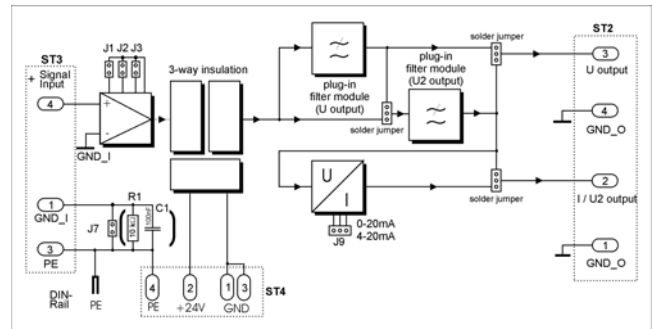
Characteristics

The **TSA-Pt100 Module** offers signal conditioning of Pt100 sensors in 4-wire technology. Linearisation is done by the module, with a fixed range of -100 to +100, +200, or +500°C, to be specified with order. Sensor supply of 1 mA constant is isolated, provided by the module. Depending on the base configuration the module has voltage and current outputs.

Technical Data

Supply voltage	24 V DC \pm 10 %
Power consumption at nominal voltage (without sensor / without load)	65 mA
Electrical isolation (3-way isolation)	1000 V DC
Accuracy	0.2 %
Cut-off frequency (standard / maximum)	5 Hz / 10 kHz
Linearity (typical)	0.1 %
Input Sensor Input resistance	Pt100 RTD 10 M Ω
Output – Voltage Output range (V1 / V2)	\pm 10 V / 0..10 V
Output – Current Output range (A1 / A2 / A3)	\pm 20 mA / 0..20 mA / 4..20 mA
Max. load current (U output)	\pm 12 mA
Residual ripple @ $f_g = 5$ kHz $f_g = 10$ kHz	typ. 2 mV _{pp} typ. 5 mV _{pp}
Sensor supply	Constant current 1 mA
Multi-wire technology	4-wire
Range 1 fixed range to be specified with order	-100°C..+100°C -100°C..+200°C -100°C..+500°C
Environmental temperature	0..50 °C
Plug-in filter Standard frequencies in Hz	10, 30, 50, 100, 300, 500, 1 k, 3 k, 5 k, 10 k

Block Diagram



Dimensions

Housing ME 22.5:
 22.5 x 99 x 114.5 mm (WxHxD)

Ordering Code

TSA-PT100 1. - 2. - / - 4. - / - 5.

1. Model	
1	1 output
2	2 outputs
2. Measuring ranges (°C)	
T1	-100..+100
T2	-100..+200
T5	-100..+500
	Non-standard value
3. Output filter frequencies (Hz)	
XXX	Enter standard values: 10, 30, 50, 100, 300, 500, 1k, 3k, 5k, 10k
	Enter non- standard value: 1..30k
4. Filter characteristics	
BW	Butterworth 4th order
BS	Bessel 4th order
BW8	Butterworth 8th order (for 1 output only)
BS8	Bessel 8th order (for 1 output only)
5. Output (not all combinations feasible)	
V1	\pm 10 V
V2	0..10 V
A1	\pm 20 mA
A2	0..20 mA
A3	4..20 mA

Example: TSA-PT100 1-T5-1k-BW-V1