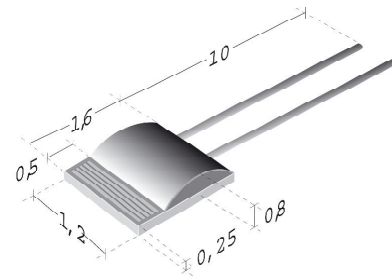# Platinum - 600℃ MiniSens
The World's Smallest Platinum Thin-Film Temperature Sensor

Product

In the combination of sensor knowledge and advanced production technology, we have succeeded in producing the smallest platinum thin-film temperature sensors in the world. The sensors are available in basic values of 100, 500 and 1000 ohms and applicable to temperature range of -200℃ to +400℃ and +600℃. The miniaturised design opens up totally new applications in temperature measurement and is characterised by many advantages. The chip dimensions of 1,6 x 1,2 mm (length x width) are available on the basis value of 100, 500 and 1000 ohms at DIN EN 60751 tolerance class or better.

Advantages

- Extremely short response time
- Thanks to its small dimensions, there is space for it anywhere
- More accurate measurements through low heat transfer
- Precise spot measurements on objects
- Excellent long term stability
- Simple interchangeability
- Wide temperature range
- Vibration resistant

Technical Data

Nominal resistance:	PT100Ω, PT500Ω, PT1000Ω
Temperature range:	-200℃ to +600℃
Classes:	⅓ DIN class B ; DIN class A ; DIN class B
Tolerance classes:	⅓ DIN class B: -50℃ to 150℃
	DIN class A: -90℃ to 300℃
	DIN class B: -200℃ to 600℃
Temperature coefficient:	TCR = 3850ppm/K
Dependence of Resistivity:	DIN EN 60751
Wires:	Pt-Ni clad wire, $\varnothing$ 0.2 mm
Long-term stability:	max. Drift = 0.03% after 1000h at 600℃
Response time:	Water (0.4 m/s) : $T_{0.63} = 0.08$ s
	Air (1m/s) : $T_{0.63} = 1.2$ s
Measuring current:	0.5mA (100 Ω) ; 0.4mA (500 Ω) ; 0.3mA (1000 Ω)
Self heating:	Water [mW/℃]: 12
	Air [mW/℃]: 1.8

Other Chipsizes, Nominal resistances, tolerances, length of wire or materials on request.

IST
INNOVATIVE SENSOR TECHNOLOGY

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