



TEMPERATURE



FLOW



HUMIDITY



CONDUCTIVITY

# Platinum Temperature Sensor with 1/5 DIN accuracy P0K1.161.6W.K.010

1/1

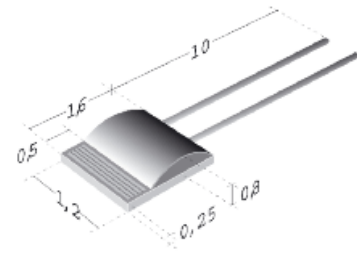


## Product

In many sectors, temperature measurement is one of the most important physically defined parameter to determine product quality, security and reliability. Temperature sensors are produced with different technologies to fit specific application requirements. To this end, IST has concentrated the development, manufacturing processes and materials to produce high-end thin-film temperature sensors. This know-how, partially derived from the semiconductor industry, allowing IST to manufacture sensors in very small dimensions. Thin-film temperature sensors exhibit a very short response time due to their low thermal mass. The technologies and processes of IST thin-film sensors combines the positive attributes of traditional wirewound platinum sensors - accuracy, long-term stability, repeatability and interchangeability within a wide temperature range. The advantages of thin-film mass-production creates an optimal price/performance ratio.

## Features

- Fast response time
- Small dimensions
- Excellent long-term stability
- Vibration and temperature shock resistant
- Low self-heating
- Simple interchangeability
- Optimal price/performance ratio



## Technical Data

|                                    |  |          |
|------------------------------------|--|----------|
| Nominal resistance:                | 100 Ohm at 0°C                                 |          |
| Temperature range:                 | -200°C - +600°C                                |          |
| Characteristic curve:              | 3850 ppm/K                                     |          |
| Long term stability:               | < less than 0.04% @ 1000 hrs. max. temperature |          |
| Response time (t <sub>63%</sub> ): | Water (v=0.4 m/s)                              | 0.08 s   |
|                                    | Air (v=1m/s)                                   | 1.2 s    |
| Self heating:                      | Water (v=0 m/s)                                | 12 mW/K  |
|                                    | Air (v=0 m/s)                                  | 1.8 mW/K |
| Dimensions (LxWxH):                | 1.6 x 1.2 x 0.8 mm (LxWxH)                     |          |
| Tolerance:                         | 1/5 DIN EN 60751 between -20°C ... +120°C      |          |
| Contacts:                          | Pt/Ni-wire, Ø 0.2 mm, 10 mm long               |          |
| Recommended applied current:       | 1mA (100 Ohm)                                  |          |



INNOVATIVE SENSOR TECHNOLOGY

