Pt500 class F0.15 with Pt/Ni-wire, ESD-optimized, lead-free



Pb-free Pt500 RTD, -200 °C to +600 °C, 5.0 x 1.6 mm, 10 mm wires

High-precision 500 Ω platinum RTD temperature sensor for reliable temperature measurement: This compact thin-film RTD temperature sensor is designed for accurate, stable, and long-lasting temperature measurement in demanding industrial and technical applications.
The 500 Ω platinum RTD temperature sensor delivers high-precision temperature measurement across an extended operating range from -200 °C to +600 °C. Based on thin-film platinum technology, it combines a TCR of 3850 ppm/K with IEC 60751 F0.15/Class A tolerance for reliable long-term stability and dependable measurement accuracy. With its space-saving 5.0 x 1.6 x 1.3 mm design and robust Pt/Ni wires, this compact RTD sensor is ideal for integration into industrial temperature sensing solutions, precision measurement systems, and applications where reliability, durability, and accuracy are essential.

Product Name: P0K5.516.6W.A.010

Nominal resistance: 500 Ω at 0 °C
Operating temperature range: -200 °C to +600 °C
TCR: Pt 3850 ppm/K
Chip size/dimensions: 5.0 x 1.6 x. 1.0 mm
Tolerance/class: IEC 60751 F0.15 (IST AG reference class A)
Connection type: Pt/Ni-wire, Ø 0.2 mm
Wire length: 10 mm
Special: ESD optimized design (IEC/EN 61000-4-2)
Packaging: Blister
Product code: 158833

Product details

Platinum Sensors

Innovative Sensor Technology IST AG platinum temperature sensors provide solutions for extreme temperature applications and are designed with the highest quality materials, allowing them to operate within a wide temperature range of -200 °C to +1000 °C. Standard IEC 60751 sensors are offered in class F0.3 (0.12 %), class F0.15 (0.06 %), F0.1 (0.04 %), and higher accuracies upon request.Our sensors are available in wireless (SMD) and wired configurations, and in sizes ranging from 0.75 mm to 10 mm (L), and 0.75 mm to 5.08 mm (W). Standard sensors can be customized with a variety of lead wire material, insulations, length, and configurations.

With many years of experience, iST also offers development of customer-specific applications in terms of sensor technology development and consultation. As part of the standard development process, we give support at the point of implementation - this way we ensure the best sensor solution for specific applications.

More information on platinum temperature sensors

ESD optimized design

To strenghten the stability of your assembled systems we are committed to the continued optimization and development of ESD-optimized temperature sensors.

With optimized design and new process technology we offer platinum temperature sensors with outstanding ESD resistance. The designs have been tested according to European Union Standards, the IEC/EN61000-4-2.

Thanks to a state-of-the art in-house ESD laboratory, we are able to test our sensors internally according to international standards.

Download flyer for more information.

Lead-free RTDs

Driven by the expiration of the RoHS exemption (Directive 2011/65/EU, Annex III, 7c.1) on June 30, 2027, we will no longer produce or ship any sensors containing lead-oxide glass. We are proactively initiating the transition from lead-containing to lead-free cover and passivation glass for our sensors, to avoid delays or shortages when the new directive comes into operation.

This material change is being implemented without altering the processing method and is fully interchangeable with previous processes and products. While the sensors do not differ visually, the material number of lead-fee sensors are being newly generated for full traceability.

For a detailed description, please refer to ECN A24.035.

Quality

Consistent with the well-known, high-quality standards in Switzerland, IST AG is certified according to ISO 9001:2015 (quality) and ISO 14001:2015 (environment). Appropriate processes are part of our daily work. They are regularly audited and extended parallel to the growth of our company.

> Read more

The online shop

Quantity (pieces)	Price (per piece)
10-49	CHF 4.63
50-99	CHF 3.67
100-150	CHF 3.25

Lager: **0**