

# **Master Semi Standards PRT**

### **Wide Temperature Range**

SSPRT offer a wide temperature range from -200°C to 670°C

#### **Low Drift Rate**

±30m°C at 0°C after 100 hours at 670°C

### **Accredited calibration**

Each SSPRT is delivered with an accredited calibration certificate.

SSPRT is constructed with a 6 mm outer diameter metal sheath of high durability. Inside the sheath, the sensing element is protected to shield the sensor from contamination by free floating metal ions found within metal environment at high temperatures.

The electrical configuration is a four wire current potential hookup to eliminate effect of lead wire resistance.

A special powder mixture is filled into the sensor capsule to support the element wire to protect the element from mechanical shocks. The element is housed in a special protective Assembly to ensure minimum drift over long term use.

## **Calibration**

It is recommended to calibrate this PRT annually over the full temperature range in between annual calibrations, user can check the drift rate by comparing Rtpw against the last Calibration results. Refer to specifications section for normal drift rate.

# **SSPRT**

Highly accurate reference sensors for laboratory use



SSPRT provides an affordable alternative for precision temperature measurement and calibration in labs & fields. Metal Sheathed Semi Standard Platinum Resistance Thermometer are widely used as a reference to calibrate various temperature probes, particularly in secondary calibration laboratories.

#### **Ordering Code**

## Ex. Ordering Code:

Model - Dia - Length - Extension Cable Length

SSPRT - 6.0 - 450 - 1.5

# **Specifications**

Model	SSPRT
Make	Tempsens
Resistance at 0°C	100 ±1Ω
Temperature Coefficient	0.00385 Ω/ Ω/°C
Temperature Range	-200°C to 670°C
Sheath Material	Inconel 600
Drift	±30m°C at 0°C after 100 hours at 670°C
Dimension	(6.0 mm X 450 mm)
Extension leads	1.5 mtr. long teflon Insulated silver plated copper cable with gold plated spade
Short Term Stability	0.01°C
Handle Dimension	15 mm (OD) X 100 mm( L)
Calibration (Optional)	5 Fixed Point Calibration at Tempsens NABL Accredited Lab with ITS 90 Constants and Resistance Vs Temperature Chart in 1°C increment