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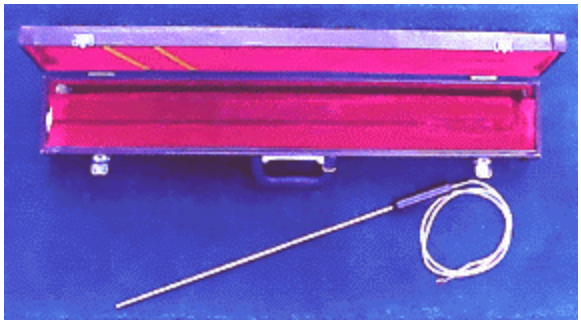

850°C Secondary Standard PRTs - NEW

This new product combines our high temperature RTD probe technique and our special reference grade RTD elements. Secondary standard PRTs with upper limit up to 850°C, and resistance drift at triple point of water less than 0.015°C after long-term test at 850°C for 500 hours.

Specifications	**How to order**	
Temperature range:		
-250 - 850°C	**SSP850**	**Model number**
Resistance at 0°C:	**01**	**Tolerance at 0°C:**
25.5 Ω, 100 Ω.		01 = 0.1% at 0°C
Temperature coefficient:	**120**	**Probe length:**
0.003925 Ω/Ω/ °C minimum		120 = 12.0 inches
Stability:		Specify in 0.5" increment
R0 typical drift <0.015°C after	**G**	**lead wire termination:**
500 hours @ 850°C		G = Gold plated banana plugs
Repeatability:		D = DIN connector
R0 typical drift <0.005°C after		
cycles from -196 to 850°C	**Sample part number: SSP85001120G**	
Dimensions:		
0.188" and 0.25" dia. x 12" L standard,		
custom sizes available		

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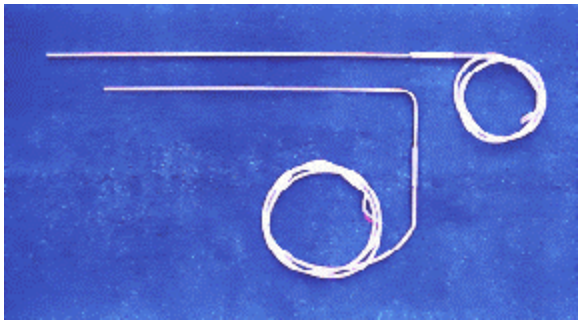

1,100°C Precision RTD Probes - New

ASP precision RTD probes can withstand temperature up to 1,100°C. R0 drifts less than 0.1°C after exposure at 1,100°C for 100 hours. Encounters no contamination of a platinum-sensing element, which is a common problem at high temperature with the metal sheath. Available in standard models and custom design.

Specifications	**How to order**
Resistance at 0°C: 10Ω, 100 Ω or custom designed **Temperature range:** -250 - 1,100°C **Temperature coefficient:** 0.003850 Ω/Ω/°C **Stability:** R0 typical drift < 0.1°C after 100 hours at 1,100°C **Thermal shock:** R0 typical drift < 0.02 °C after 10 times from -196 to 1,100 °C **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**IRP1100 Model number** **A** **Tolerance at 0°C:** A = ±0.06%, IEC DIN class A B = ±0.12%, IEC DIN class B **120** **Probe length:** 120 = 12.0 inches Specify in 0.5" increment **N4** **Number of leads:** N4 = 4 leads **L36** **Lead wire length in inches:** L36 = 36 inches **Sample part number: IRP1100A120N4L36**

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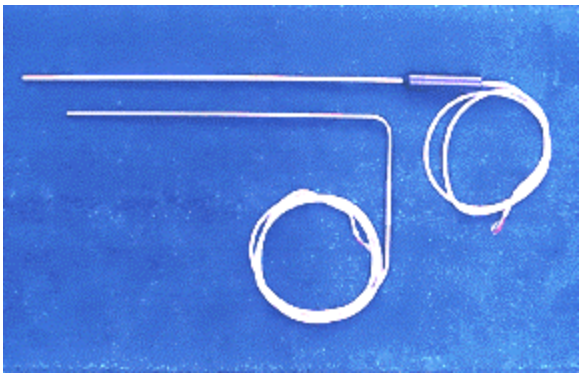

500° C Secondary Standard PRTs

Model SSP500 series secondary standard PRTs use 99.999% pure platinum wire as sensing elements to assure excellent stability. Because the platinum wire is supported by a special ceramic material with no strain, the PRTs can withstand rough environment and thermal shock.

Specifications	**How to order**	
Temperature range: -250 - 500°C **Resistance at 0°C:** 25.5 Ω, 100 Ω **Temperature coefficient:** 0.003925 Ω /Ω / °C minimum **Stability:** R0 typical drift <0.006°C after 500 hours at 500°C **Repeatability:** R0 typical drift < 0.001°C after cycling from -196 to 500°C **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**SSP500** **01** **120** **G** **Sample part number: SSP50001120G**	**Model number** **Tolerance at 0°C:** 01 = 0.1% at 0°C **Probe length:** 120 = 12.0 inches Specify in 0.5" increment **Lead wire termination:** G = Gold plated banana plugs D = DIN connector

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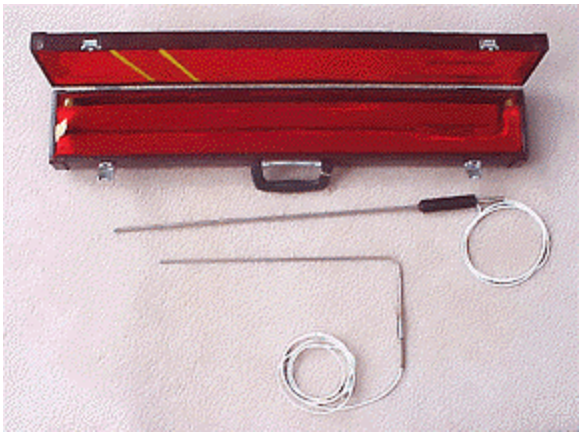

670°C Secondary Standard PRTs

Model 670 series offer higher upper limit than 500 series. They have excellent accuracy and long-term stability. The RTD element is assembled into the Inconel sheath. PRT's R0 typically drift less than 0.005°C after thermal cycling from -196 to 670°C.

Specifications	**How to order**	
Temperature range:		
-250 - 670°C	**SSP670**	**Model number**
Resistance at 0°C:	**01**	**Tolerance at 0°C:**
25.5 Ω, 100 Ω.		01 = 0.1% at 0°C
Temperature coefficient:	**120**	**Probe length:**
0.003925 Ω/Ω/ °C minimum		120 = 12.0 inches
Stability:		Specify in 0.5" increment
R0 typical drift <0.01°C after	**G**	**Lead wire termination:**
500 hours at 670°C		G = Gold plated banana plugs
Repeatability:		D = DIN connector
R0 typical drift < 0.002°C		
after cycling from -196 to 670°C	**Sample part number: SSP67001120G**	
Dimensions:		
0.188" and 0.25" dia. x 12" L standard,		
custom sizes available.		

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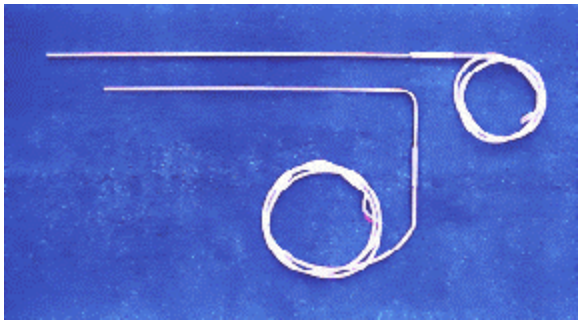

300°C Working Standard PRTs

Model WSP300 PRTs feature wire wound RTD elements, assembled into stainless steel probes or Inconel probes. WSP300 series have excellent accuracy and long-term stability. They can be used as working standard to calibrating other temperature sensors. Available in standard models and custom design.

Specifications	**How to order**
Resistance at 0°C: 100 Ω or custom design **Temperature range:** -250 - 300°C **Temperature coefficient:** 0.003850 Ω/Ω/°C or 0.003925 Ω/Ω/°C minimum **Stability:** R0 typical drift < 0.001°C after 500 hours at 300°C **Thermal shock:** R0 typical drift < 0.001°C after 100 times from 25 to 300°C **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**WSP300 Model number** **A** **Tolerance at 0°C:** A = ±0.06%, IEC DIN class A B = ±0.12%, IEC DIN class B **120** **Probe length:** 120 = 12.0 inches Specify in 0.5" increment **N4** **Number of leads:** N4 = 4 leads **L36** **Lead wire length in inches** L36 = 36 inches **Sample part number: WSP300A120N4L36**

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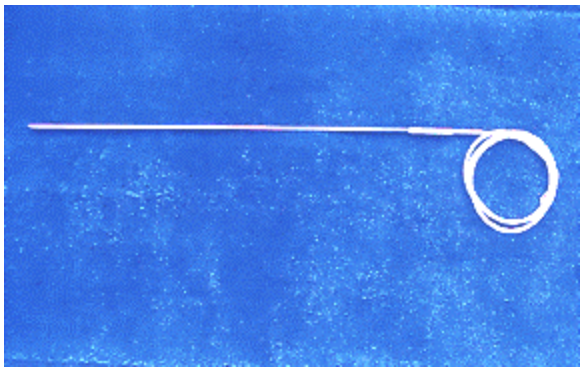

500°C Working Standard PRTs

Model WSP500 PRTs feature wire wound RTD elements, assembled into stainless steel or Inconel probes. WSP500 series have excellent accuracy and long-term stability. They can be used as working standard for dry well calibrators and other applications. Available in standard models and custom design.

Specifications

Resistance at 0°C:
100 Ω or custom design
Temperature range:
-250 - 500°C
Temperature coefficient:
0.003850 Ω/Ω/°C or 0.003925 Ω/Ω/°C minimum
Stability:
R0 typical drift < 0.010°C after
500 hours at 500°C
Thermal shock:
R0 typical drift < 0.004°C after
100 times from 25 to 500°C
Dimensions:
0.188" and 0.25" dia. x 12" L standard,
custom sizes available

How to order

WSP500 Model number
A **Tolerance at 0°C:**
A = ±0.06%, IEC DIN class A
B = ±0.12%, IEC DIN class B
120 **Probe length:**
120 = 12.0 inches
Specify in 0.5" increment
N4 **Number of leads:**
N4 = 4 leads
L36 **Lead wire length in inches**
L36 = 36 inches
Sample part number: WSP500A120N4L36

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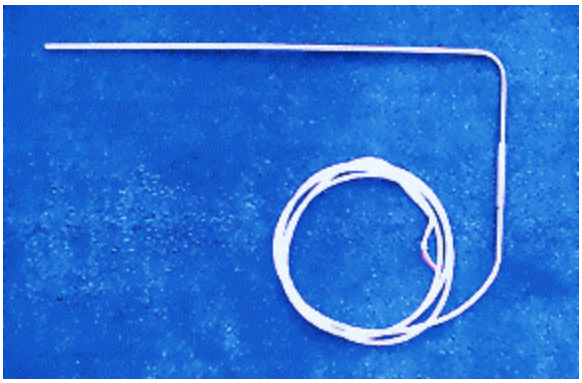

660°C Working Standard PRTs

Model WSP660 PRTs are used our special wire wound RTD elements, assembled into inconel probes. WSP660 series have similar accuracy and long-term stability of SSP670 secondary standard PRTs. They can be used for calibration furnaces and other calibration work. Available in standard models and custom design.

Specifications	**How to order**
Resistance at 0°C: 100 Ω or custom design **Temperature range:** -250 - 660°C **Temperature coefficient:** 0.003850 Ω/Ω/°C or 0.003925 Ω/Ω/°C minimum **Stability:** R0 typical drift < 0.02°C after 500 hours at 660°C **Thermal shock:** R0 typical drift < 0.008°C after 100 times from 25 to 660°C **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**WSP660 Model number** **A** **Tolerance at 0°C:** A = ±0.06%, IEC DIN class A B = ±0.12%, IEC DIN class B **120** **Probe length:** 120 = 12.0 inches Specify in 0.5" increment **N4** **Number of leads:** N4 = 4 leads **L36** **Lead wire length in inches** L36 = 36 inches **Sample part number: WSP660A120N4L36**

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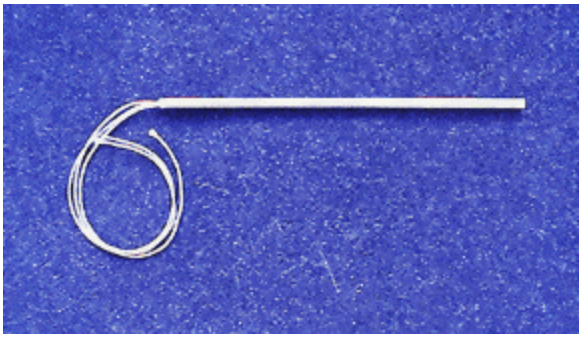

500°C RTD Probes

RTD probes feature thin film RTD elements or wire wound RTD elements, assembled into stainless steel sheaths. Available in standard models and custom designs.

Specifications	**How to order**
Resistance at 0°C: 100 Ω, 500 Ω, 1,000 Ω **Temperature range:** -50 - 500°C **Temperature coefficient:** 0.003850 Ω/Ω/°C **Stability:** R0 typical drift < 0.15°C after 1,000 hours at 500°C **Thermal shock:** R0 typical drift < 0.05°C after 100 times from 25 to 500 °C **Vibration:** Withstand 10 to 2,000 HZ at 20 G's **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**IRP500 Model number** **A** **Tolerance at 0°C:** A = ±0.06%, IEC DIN class A B = ±0.12%, IEC DIN class B **120** **Probe length:** 120 = 12.0 inches Specify in 0.5" increment **N4** **Number of leads:** N4 = 4 leads **L36** **Lead wire length in inches** L36 = 36 inches **Sample part number: IRP500A120N4L36**

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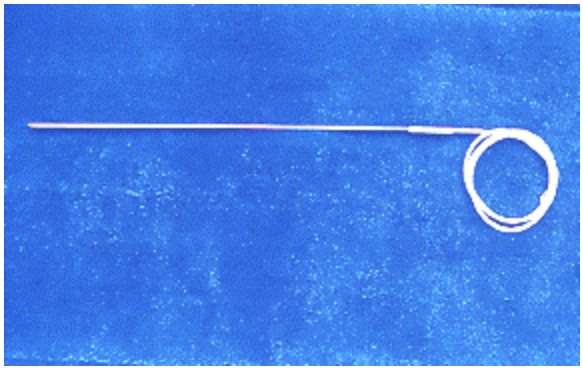

660°C Precision RTD Probes

Model PRP660 is tightly controlled resistance - temperature curve which is very close the IEC-751 Standard. The RTD thermometer can be designed with dual RTD sensing elements in one metal probe for critical temperature measurement such as nuclear power pant. Also, the RTD is designed for industrial environment such as mechanical shock.

Specifications	**How to order**
Resistance at 0°C: 100 Ω or custom design **Temperature range:** -200 - 660°C **Temperature coefficient:** 0.003850 Ω/Ω/°C **Stability:** R0 typical drift < 0.03°C after 1,000 hours at 660°C **Thermal shock:** R0 typical drift < 0.01°C after 100 times from 25 to 660 °C **Vibration:** Withstand 10 to 2,000 HZ at 20 G's **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**PRP660 Model number** **A Tolerance at 0°C:** A = ±0.06%, IEC DIN class A B = ±0.12%, IEC DIN class B **120 Probe length:** 120 = 12.0 inches Specify in 0.5" increment **N4 Number of leads:** N4 = 4 leads **L36 Lead wire length in inches** L36 = 36 inches **Sample part number: PRP660A120N4L36**

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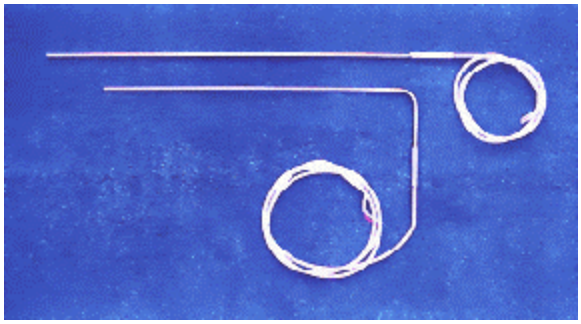

850°C Precision RTD Probes

Model 850 series cover full temperature scale of IEC 751 or DIN. Capable of measurements from -200 to 850°C with excellent stability. Available in standard models and custom design.

Specifications	**How to order**
Resistance at 0°C: 100 Ω or custom design **Temperature range:** -250 - 850°C **Temperature coefficient:** 0.003850 Ω/Ω/°C **Stability:** R0 typical drift < 0.05°C after 1,000 hours at 850°C **Thermal shock:** R0 typical drift < 0.03°C after 100 times from 25 to 850 °C **Vibration:** Withstand 10 to 2,000 HZ at 20 G's **Dimensions:** 0.188" and 0.25" dia. x 12" L standard, custom sizes available	**IRP850 Model number** **A Tolerance at 0°C:** A = ±0.06%, IEC DIN class A B = ±0.12%, IEC DIN class B **120 Probe length:** 120 = 12.0 inches Specify in 0.5" increment **N4 Number of leads:** N4 = 4 leads **L36 Lead wire length in inches** L36 = 36 inches **Sample part number: IRP850A120N4L36**

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Calibration Service

ASP Calibration Capability

Temperature Range	Calibration Uncertainty	Technique
-196 to 500°C	0.004 to 0.008°C	Comparison method on the ITS-90 to SPRT
-196 to 660°C	0.004 to 0.010°C	
-196 to 850°C	0.004 to 0.050°C	

Order Information

Order No	Calibration
CAL500	ITS-90 coefficients and R vs. T90 table from -196 to 500°C in 1°C increment
CAL660	ITS-90 coefficients and R vs. T90 table from -196 to 660°C in 1°C increment
CAL850	ITS-90 coefficients and R vs. T90 table from -196 to 850°C in 1°C increment

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