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## FEATURES

Temperature range: -200°C to 670°C

Accuracy: <0.035°C

Long term drift: <0.03°C

Short term stability: <0.01°C

Durable and shock resistant

Temperature Coefficient 0.00385 Ω/Ω/°C

Follows DIN/IEC-751 curve precisely

Inconel™ sheath on AM1660/1640 models

## OVERVIEW

The AM1660/1640/1620 series Precision Industrial PRTs (IPRTs) are rugged probes with excellent accuracy and stability. These IPRTs cover a wide range of temperatures from -200°C to 670°C, with an amazing accuracy of ±0.035°C and a short term stability of ±0.01°C.

To reach the best performance in stability and repeatability, the wire-wound sensing element has been specially designed to protect the platinum sensing wire from contamination at high temperatures. A unique supporting structure and filling material provide the best balance among the hysteresis effect, mechanical shock and thermal shock performance. This probe conforms to the standard 385 curve so the resistance ratio of the PRT follows the DIN/IEC-751 curve precisely.

## MULTIPLE SIZE OPTIONS AVAILABLE

Model	Length	OD	Inconel™
1660	12in	0.25in	✓
1640-12	12in	0.25in	✓
1640-9	9in	0.187in	✓
1620-12	12in	0.25in	
1620-9	9in	0.187in	

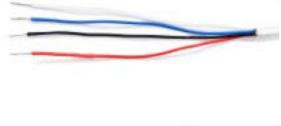
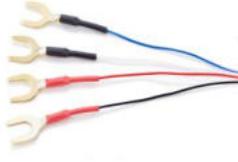
## SPECIFICATIONS

	1660-12	1640-12	1640-9	1620-12	1620-9
Temperature Range	-200°C to 670°C	-200°C to 420°C		-60°C to 300°C	
Nominal Resistance at 0°C	100 Ω				
Temperature Coefficient	0.00385 Ω/Ω/°C				
Accuracy	<0.035°C at 0°C				
Long Term Drift at 0.01°C*	<0.03°C at 0°C after 100 hours at maximum temperature				
Short Term Stability	<0.01°C				
Thermal Shock	<0.007°C after 10 thermal cycles from minimum to maximum temperatures				
Hysteresis	≤0.01°C				
Self-heating	50 mW/°C				
Response Time**	5 seconds				
Measurement Current	0.5 mA or 1 mA				
Sensor Length	32 mm				
Sensor Location	5 mm from tip				
Insulation Resistance	>1000 MΩ at room temperature				
Sheath Material	Inconel™			Stainless Steel	
Sheath Dimensions	0.25in (OD) x 12in (L)	0.25in (OD) x 12in (L)	0.187in (OD) x 9in (L)	0.25in (OD) x 12in (L)	0.187in (OD) x 9in (L)
External Leads	Teflon™ insulated copper wire, 4 leads, 2 meters				
Handle Dimension	15mm (OD) x 65mm (L)	15mm (OD) x 65mm (L)	10mm (OD) x 50mm (L)	15mm (OD) x 65mm (L)	10mm (OD) x 50mm (L)
Handle Temperature Range	-50°C to 180°C				

\*Long-term drift rate is for reference only. It could be affected by such facts as handling, application, and maintenance, etc.

\*\*for 63% response to step change in water moving at 3 feet per second

## ORDERING OPTIONS

Model	Description			
9001	Wooden carrying case for 12" and 9" probe			
5007	NIST traceable calibration			
5033	ISO 17025 accredited calibration			
Termination Options	Bare Wire (default) 	Spade 	8010 Connector 	ADT LEMO Connector 

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