AM1660/1640/1620 Precision Industrial PRTs ACCUMAC

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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 ISO/IEC 17025 accredited calibration included

MULTIPLE SIZE OPTIONS AVAILABLE

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

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. All of these models include an ISO/IEC 17025 accredited calibration.

Technology Inc

To reach the best performance in stability and repeatability, the wirewound 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.

Address: 90 N William Dillard Drive C-107, Gilbert, AZ 85233 Phone: 480-634-0603 Web: www.accumac.com For Technical Help: lab@accumac.com For Sales: sales@accumac.com AM1660/1640/1620 Precision Industrial PRTs ACCUMAC

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SPECIFICATIONS

Model	AM1660	AM1640	AM1620		
Temperature Range	-200°C to 670°C	-200°C to 420°C	-40°C to 231°C		
Nominal Resistance at 0°C	100 Ω				
Temperature Coefficient	0.00385 Ω/Ω/°C				
Calibration	ISO/IEC 17025 accredited calibration included				
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	32mm				
Sensor Location	5mm from tip				
Insulation Resistance	>1000 M Ω at room temperature				
Sheath Material	Inconel™	Inconel™	Stainless Steel		
Sheath Dimensions	0.25in (OD) x 12in (L)	1640-12: 0.25in (OD) x 12in (L) 1640-9: 0.187 (OD)x 9in (L)	1620-12: 0.25in (OD) x 12in (L) 1620-9: 0.187 (OD)x 9in (L)		
External Leads	Teflon™ insulated copper wire, 4 leads, 2 meters				
Handle Dimension	12in models: 15mm (OD) x 65mm (L) 9in models: 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

AM1660/1640/1620 Precision Industrial PRTs ACCUMac

STANDARD ORDERING OPTIONS (All include ISO/IEC 17025 accredited calibration)

- AM1660-12 12" Precision Industrial PRT, bare wire terminations (-200°C to 670°C)
- AM1640-12 12" Precision Industrial PRT, bare wire terminations (-200°C to 420°C)
- AM1640-9 9" Precision Industrial PRT, bare wire terminations (-200°C to 420°C)
- AM1620-12 12" Precision Industrial PRT, bare wire terminations (-40°C to 231°C)
- AM1620-9 9" Precision Industrial PRT, bare wire terminations (-40°C to 231°C)

CUSTOM ORDERING OPTIONS (All Include ISO/IEC 17025 accredited calibration)

BJ Banana plugs SP Gold-plated spade lugs PIN 5-PIN connector (for AM8010 readout) X any other customizations AM1640-12- BJ BJ Banana plugs AM1640-12- SP Gold-plated spade lugs 12" Precision Industrial PRT (-200°C to 670°C) BJ Banana plugs AM1640-12- SP Gold-plated spade lugs 12" Precision Industrial PRT (-200°C to 420°C) PIN 5-PIN connector (for AM8010 readout) X any other customizations ADT ADT LEMO connector BJ Banana plugs ADT ADT LEMO connector BJ Banana plugs ADT ADT LEMO connector BJ Banana plugs SP Gold-plated spade lugs PIN S-PIN connector (for AM8010 readout) X any other customizations ADT ADT LEMO connector BJ Banana plugs ADT ADT LEMO connector BJ Banana plugs ADT ADT LEMO connector <tr< th=""><th></th><th>1</th><th></th><th></th></tr<>		1			
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PIN 5-PIN connector (for AM8010 readout)		PIN	5-PIN connector (for AM8010 readout)		
X any other customizations		Х	any other customizations		

Bare Wire (default)

ADT LEMO connector

Gold-plated spade lugs

5-PIN connector (for AM8010 readout)





(for AM8010 readout)

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