



## FEATURES

- Sensor Length: 30mm
- Temperature range: -40°C to 160°C
- Accuracy: <0.05°C
- Durable and shock resistant
- Extremely low stem conduction
- ISO/IEC 17025 accredited calibration included

## OVERVIEW

With a 30mm long sensor, the AM1610 precision industrial PRT (IPRT) provides users an excellent temperature probe with extremely low stem conduction (heat loss along the sheath) in precision temperature measurement. It is a great tool for measuring and testing the vertical temperature uniformity of heat sources. Both variations of AM1610 include an ISO/IEC 17025 accredited calibration.

The AM1610 uses a specially aged and tested 30mm long sensing element to achieve the best performance in stability and repeatability. A unique assembly procedure provides the best balance among the hysteresis effect, mechanical shock and thermal shock performance.

## MULTIPLE SIZE OPTIONS AVAILABLE

Model	Length	OD	30mm sensor
1610-12	12in	0.25in	✓
1610-9	9in	0.187in	✓

## SPECIFICATIONS

Model	AM1610-12	AM1610-9
Temperature Range	-40°C to 160°C	
Nominal Resistance at 0°C	100 Ω	
Temperature Coefficient	0.00385 Ω/Ω/°C	
Calibration	ISO/IEC 17025 accredited calibration included	
Accuracy	<0.05°C over full range	
Long Term Drift at 0.01°C*	<0.04°C at 0°C after 100 hours at 160°C	
Short Term Stability	<0.01°C	
Thermal Shock	<0.01°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	30 mm	
Sensor Location	5 mm from tip	
Insulation Resistance	>1000 MΩ at room temperature	
Sheath Material	Stainless Steel	
Sheath Dimensions	0.25in (OD) x 12in (L)	0.187in (OD) x 9in (L)
External Leads	Teflon™ insulated copper wire, 4 leads, 2 meters	
Handle Dimensions	15mm (OD) x 65mm (L)	10mm (OD) x 50mm (L)
Handle Temperature Range	-30°C to 100°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

# AM1610 Precision Industrial PRT



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

**AM1610-12** 12" Precision Industrial PRT, bare wire terminations

**AM1610-9** 9" Precision Industrial PRT, bare wire terminations

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

<b>AM1610-12-</b>	<b>ADT</b>	ADT LEMO connector	12" Precision Industrial PRT
	<b>BJ</b>	Banana plugs	
	<b>SP</b>	Gold-plated spade lugs	
	<b>PIN</b>	5-PIN connector (for AM8010 readout)	
	<b>X</b>	any other customizations	
<b>AM1610-9-</b>	<b>ADT</b>	ADT LEMO connector	9" Precision Industrial PRT
	<b>BJ</b>	Banana plugs	
	<b>SP</b>	Gold-plated spade lugs	
	<b>PIN</b>	5-PIN connector (for AM8010 readout)	
	<b>X</b>	any other customizations	

Bare Wire (default)



ADT LEMO connector



Gold-plated spade lugs



5-PIN connector  
(for AM8010 readout)

