



FEATURES

Reliable SPRT for daily use
Rtpw Drift: <4mK after 100hrs at 661°C
Temperature range: -200°C to 670°C
Short term stability: <0.002°C at 0.01°C
Inconel™ sheath to withstand harsh environments
Fully meets the ITS-90 criteria for reference thermometers

MULTIPLE SIZE OPTIONS AVAILABLE

Model	Length	OD	Nominal Resistance at 0°C	Inconel™
1762-20	20in	0.25in	25Ω	✓
1762-12	12in	0.25in	25Ω	✓
1760-20	20in	0.25in	100Ω	✓
1760-12	12in	0.25in	100Ω	✓
1760-BND	9.75in vertical	0.25in	100Ω	✓

OVERVIEW

The AM1760 series Secondary SPRTs provides our customers with reliable secondary standards that can be used daily in their labs. These SPRTs feature an accuracy of <0.006°C at 0.01°C, a short term stability of <0.002°C and a very low drift rate of less than 0.004°C after 100 hours at 661°C. These SPRTs are both available at either 12 inches or 20 inches in length. The AM1760 is also available in a bended version.

The sensing element is designed to protect the platinum sensing wire from contamination at high temperatures, giving these SPRTs a high level of stability and repeatability in performance. A uniquely designed support structure and filling material provides an excellent balance between the hysteresis effect, mechanical shock and thermal shock performance. This high performance probe fully meets the ITS-90 criteria for reference thermometers.

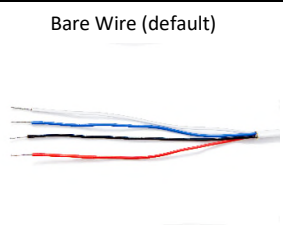
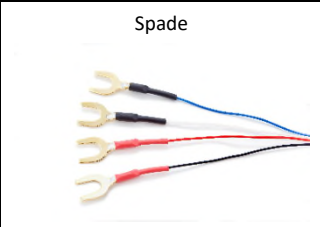

SPECIFICATIONS

	1762	1760
Temperature Range	-200°C to 670°C	
Nominal Resistance at 0°C	25 Ω	100 Ω
Temperature Coefficient	0.003925 Ω/Ω/°C	
Accuracy	<0.006°C at 0.01°C	
Long Term Drift at 0.01°C*	<0.004°C at TPW after 100 hours at 661°C	
Short Term Stability	<0.002°C	
Thermal Shock	<0.002°C after 10 thermal cycles from minimum to maximum temperatures	
Hysteresis	≤0.005°C	
Self-heating	0.0015°C at 1 mA current	0.0015°C at 0.5 mA current
Response Time**	9 seconds	
Measurement Current	0.5 mA or 1 mA	
Sensor Length	42 mm	
Sensor Location	5 mm from tip	
Insulation Resistance	>1000 MΩ at room temperature	
Sheath Material	Inconel™	
Sheath Dimensions	1762-20: 0.25in (OD) x 20in (L) 1762-12: 0.25in (OD) x 12in (L)	1760-20: 0.25in (OD) x 20in (L) 1760-12: 0.25in (OD) x 12in (L) 1760-BND: 0.25in (OD) x 9.75in vertical x 4.5in horizontal
External Leads	Teflon™ insulated copper wire, 4 leads, 2 meters	
Handle Dimension	15mm (OD) x 65mm (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" probe (included with AM1762-12/AM1760-12)			
9002	Wooden carrying case for 20" probe (included with AM1762-20/AM1760-20)			
5033	ISO 17025 accredited calibration			
Termination Options	Bare Wire (default) 	Spade 	8010 Connector 	ADT LEMO Connector 