## AM1762/1760 Secondary SPRTs





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## 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<sup>™</sup> sheath to withstand harsh environments Fully meets the ITS-90 criteria for reference thermometers

Model	Length	OD	Nominal Resistance at 0°C	Inconel™
1762-20	20in	0.25in	25Ω	$\checkmark$
1762-12	12in	0.25in	25Ω	$\checkmark$
1760-20	20in	0.25in	100Ω	$\checkmark$
1760-12	12in	0.25in	100Ω	$\checkmark$

### MULTIPLE SIZE OPTIONS AVAILABLE

### **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. Two different lengths of these SPRTs are available at either 12 inches or 20 inches.

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.

Address: 90 N William Dillard Drive C-107, Gilbert, AZ 85233 Phone: 480-634-0603 Web: www.accumac.com

For Technical Help: info@accumac.com For Sales: sales@accumac.com

# AM1762/1760 Secondary SPRTs



#### **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)			
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)				
5007	NIST traceable calibration				
5033	ISO 17025 accredited calibration				
Termination Options	Bare Wire (default)	Spade	8010 Connector	ADT LEMO Connector	

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