



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
- ISO/IEC 17025 accredited calibration included

MULTIPLE SIZE OPTIONS AVAILABLE

Model	Length	OD	Nominal Resistance at 0°C	Inconel™
AM1762-20	20in	0.25in	25Ω	✓
AM1762-12	12in	0.25in	25Ω	✓
AM1760-20	20in	0.25in	100Ω	✓
AM1760-12	12in	0.25in	100Ω	✓
AM1760-BEND	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. All versions include an ISO/IEC 17025 accredited calibration.

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

Model	AM1762	AM1760
Temperature Range	-200°C to 670°C	
Nominal Resistance at 0°C	25 Ω	100 Ω
Temperature Coefficient	0.003925 Ω/Ω/°C	
Calibration	ISO/IEC 17025 accredited calibration included	
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	
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-BEND: 0.25in (OD) x 9.75in vertical x 4.5in horizontal
External Leads	Teflon™ insulated copper wire, 4 leads, 2 meters	
Handle Dimensions	15mm (OD) x 65mm (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

ACCESSORY 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)

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

AM1762-20 20" nominal 25Ω Secondary SPRT, bare wire terminations, 9002 case included

AM1762-12 12" nominal 25Ω Secondary SPRT, bare wire terminations, 9001 case included

AM1760-20 20" nominal 100Ω Secondary SPRT, bare wire terminations, 9002 case included

AM1760-12 12" nominal 100Ω Secondary SPRT, bare wire terminations, 9001 case included

AM1760-BEND Bended nominal 100Ω Secondary SPRT, bare wire terminations

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

AM1762-20-	ADT	ADT LEMO connector	20" nominal 25Ω Secondary SPRT, 9002 case included
	BJ	Banana plugs	
	SP	Gold-plated spade lugs	
	PIN	5-PIN connector (for AM8010 readout)	
	X	any other customizations	
AM1762-12-	ADT	ADT LEMO connector	12" nominal 25Ω Secondary SPRT, 9001 case included
	BJ	Banana plugs	
	SP	Gold-plated spade lugs	
	PIN	5-PIN connector (for AM8010 readout)	
	X	any other customizations	
AM1760-20-	ADT	ADT LEMO connector	20" nominal 100Ω Secondary SPRT, 9002 case included
	BJ	Banana plugs	
	SP	Gold-plated spade lugs	
	PIN	5-PIN connector (for AM8010 readout)	
	X	any other customizations	
AM1760-12-	ADT	ADT LEMO connector	12" nominal 100Ω Secondary SPRT, 9001 case included
	BJ	Banana plugs	
	SP	Gold-plated spade lugs	
	PIN	5-PIN connector (for AM8010 readout)	
	X	any other customizations	
AM1760-BEND-	ADT	ADT LEMO connector	Bended nominal 100Ω Secondary SPRT
	BJ	Banana plugs	
	SP	Gold-plated spade lugs	
	PIN	5-PIN connector (for AM8010 readout)	
	X	any other customizations	

Bare Wire (default)



ADT LEMO connector



Gold-plated spade lugs



5-PIN connector
(for AM8010 readout)

