



## FEATURES

Gradient Measurement of  
Dry Blocks/Dry Wells  
6mm long sensing element  
Temperature range: -200°C to 670°C  
Short term stability: <0.003°C  
Inconel™ sheath to withstand harsh  
environments

## MULTIPLE SIZE OPTIONS AVAILABLE

Model	Length	OD	Sensor Length	Inconel™
1758-20	20in	0.25in	6mm	✓
1758-12	12in	0.25in	6mm	✓

## OVERVIEW

The AM1758 is specifically designed to measure gradients of dry blocks or dry wells. The length of the sensing element is only 6mm, which allows the AM1758 to measure detailed temperature changes inside the dry wells with pinpoint precision.

The short sensing element has adopted many of AccuMac's PRT technologies to offer a high level of stability across the temperature range from -200°C to 670°C. A uniquely designed support structure and filling material provides an excellent balance between the hysteresis effect, mechanical shock and thermal shock performance.

It has long been a challenge for temperature calibration labs across the world to measure the gradient of a dry block. With its 6mm sensing element, the AM1758 meets the challenge and requirement, such as one from The Euramet Calibration Guide CG-13 Version 3.0 "Calibration of Temperature Block Calibrators".

## SPECIFICATIONS

Model	AM1758-20	AM1758-12
Temperature Range	-200°C to 670°C	
Nominal Resistance at 0°C	25 Ω	
Temperature Coefficient	0.003925 Ω/Ω/°C	
Short Term Stability	<0.003°C at 0.01°C	
Thermal Shock	<0.005°C after 10 thermal cycles from minimum to maximum temperatures	
Hysteresis	≤0.005°C	
Self-heating	0.0015°C at 1 mA current	
Response Time**	9 seconds	
Measurement Current	1 mA	
Sensor Length	6 mm	
Sensor Location	3 mm from tip	
Insulation Resistance	>1000 MΩ at room temperature	
Sheath Material	Inconel™	
Sheath Dimensions	0.25in (OD) x 20in (L)	0.25in (OD) x 12in (L)
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	

\*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 AM1758-12)
9002	Wooden carrying case for 20" probe (included with AM1758-20)