

# AccuMac AM1210

## Reference Standard Type S Thermocouple

- Affordable Reference Standard
- Type S
- Short-term Stability:  $<0.2^{\circ}\text{C}$  at  $1084.62^{\circ}\text{C}$
- Temperature Range:  $-196^{\circ}\text{C}$  to  $1300^{\circ}\text{C}$



### OVERVIEW

The AM1210 Reference Standard Type S Thermocouple is made from reference grade platinum and platinum-rhodium alloy. It covers a temperature range from  $0^{\circ}\text{C}$  to  $1300^{\circ}\text{C}$  with a short term stability of  $<0.2^{\circ}\text{C}$  all the way to the Freezing Point of Copper ( $1084.62^{\circ}\text{C}$ ). It is commonly used as a reference standard to calibrate industrial thermocouples. All thermocouple wires and parts are specially cleaned and annealed before assembly. Every AM1210 thermocouple is fully annealed and tested again after assembly to meet the tolerance criteria as specified below:

$$E(\text{tCu})=10.575 \pm 0.015$$

$$E(\text{tAl})=5.860+0.37(E(\text{tCu})-10.575) \pm 0.005$$

$$E(\text{tZn})=3.447+0.18(E(\text{tCu})-10.575) \pm 0.005$$

### SPECIFICATIONS

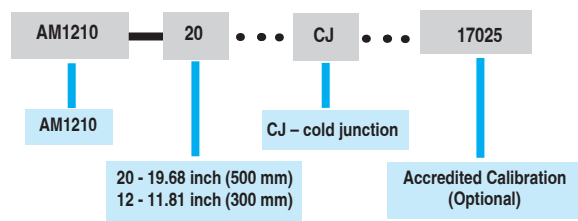
	AM1210-20	AM1210-12
Temperature Range	0°C to 1300°C	
Type	Type S: Platinum/10% Rhodium vs. Platinum	
Long Term Drift*	$<0.5^{\circ}\text{C}$ at $1210^{\circ}\text{C}$ after 1 year typical usage	
Tolerance (mV)	$E(\text{tCu})=10.575 \pm 0.015$ $E(\text{tAl})=5.860+0.37(E(\text{tCu})-10.575) \pm 0.005$ $E(\text{tZn})=3.447+0.18(E(\text{tCu})-10.575) \pm 0.005$	
Short Term Stability	$<0.2^{\circ}\text{C}$ at $1084.62^{\circ}\text{C}$	
Diameter of thermocouple wire	0.02 in (0.5 mm)	
Sheath Material	Alumina	
Sheath Dimensions	0.236 in (6mm) (OD) x 19.68 in (500 mm) (L)	0.236 in (6mm) (OD) x 11.81 in (300 mm) (L)
Total TC Wire Length	47.25 in (1200 mm)	39.37 in (1000 mm)
Documentation**	Report of test with data	

\*Long-term drift rate is for reference only. It could be affected by such facts as handling, application, and maintenance, etc.

\*\* For 17025 accredited calibration, please contact Additel.

### ORDERING INFORMATION

#### Model Number



Note: Carrying case included