

PMA 2165 THERMOCOUPLE PROBE

SENSORS
INDUSTRIAL LIGHT MEASUREMENT
LABORATORY LIGHT
MEASUREMENT



Delivery on all products is Stock to 2 weeks.

Every product is calibrated to NIST traceable standards before shipment.

The PMA 2165 thermocouple probe, is compatible with the PMA2100 Personal Measurement Assistant. The probe comes in two versions, either with J or K type thermocouple.

The thermocouple element itself is plugged into a socket mounted in an easy to hold plastic handle. The socket accepts both standard OST and subminiature SMP probes. The PMA 2165 can be used with any thermocouple of the designated type.

The thermocouple element that comes with the PMA 2165 thermocouple probe is sealed in a stainless-steel envelope forming an 8" long insertion probe. The thermocouple operation is based on the Seebeck potential. In general, this function is non-linear, that is the Seebeck coefficient in microVolts/°C is temperature-dependent. Knowing this function and the voltage generated by the thermocouple, a temperature differential can be calculated. In order to know the absolute temperature of one of the junctions the temperature of the other one has to be known. In the PMA 2165 the reference junction is thermally coupled with a calibrated semiconductor temperature transducer that generates a signal proportional to the temperature. The PMA2100 calculates the thermocouple temperature differential and adds it to the reference junction temperature.

Uses

The PMA2165 measures temperature between -200-1260°C for Industrial, Environmental, Agricultural and many other applications

Alternate Views



Applications

Laboratory and industrial measurements
Environmental monitoring

Features

Metallurgy
Heating and air-conditioning
Agriculture

Wide temperature range
Linearization formula programmed into the sensor

Excellent long term stability
Selectable units

Convenient plastic molded handle
Interchangeable probes

Specifications

Temperature range :
-200-1260°C (-330-1600°F) - see selection guide for applicability
Temperature accuracy:
±2°C
Stability better than 0.1%/year
Display resolution:
1°
Units:
°F, °C, K
Diameter:
1.5" handle, 0.125" sensor
Length: 15" with handle
Weight:
10oz
Cable:
5ft (1.5m)