Handheld Infrared Thermocouple

Specifications
Temperature Range: -73 to 650°C (-100 to 1200°F)
Automatic Emissivity Compensation System (AECS): ±1% of difference between target temperature and sensor temperature when touching surfaces of 0.8 emissivity or higher.
Accuracy: ±2% or ±1°C (2°F) + 1 digit, including AECS over temperature range
Repeatability: ±1% of reading

Time Constant: 80 msec
Field of View: 60 degrees
Minimum Spot Size: 0.45" (1.14 cm)
Spectral Response: 6.5 to 14 microns
Pot Adjustments Sensitivity: 12°C per turn @ 100°C
(22°F per turn @ 212°F)

To Order (Specify Model Number)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS-88000-K-1200</td>
<td>$199</td>
<td>Infrared thermocouple, Type K</td>
</tr>
</tbody>
</table>

Applications
- Non-Contact Scanning
- Quick Verification of Control System Temperature
- Ensuring Products Meet Temperature Specifications

OMEGA introduces a new level in the state of the art for temperature measurement. The OS-88000 handheld infrared probe provides low cost, non-contact measurements of temperatures from -73 to 650°C (-100 to 1200°F) that are independent of emissivity over the range 0.8 to 1.0. As with thermocouples, a chart of either millivolt output or equivalent temperatures as read on a typical thermocouple meter is provided for the full temperature range.

In addition, a calibration adjustment screw allows setting of the OS-88000 for correct point reading of temperatures between -17 to 650°C (0 to 1200°F).

The probe is available in a type K thermocouple output, with an impedance of 3 k ohms, a repeatability of better than ±1% of the readings, an ambient temperature operating range of -17 to 100°C (0 to 212°F), and a field of view of 60°.
Infrared Thermocouple
Handheld Design
Non-Contact Surface Measurement

Very High Performance

Model
OS-88202-(*)-(#)
$310 (shown)

Model
OS-98202-(*)-(#)
$330

With Swivel Head
A roller-surface probe, ideal for measuring outside wall temperatures. Can be used on moving or rotating surfaces of 22 to 60" dia., with 300 ft per min. max surface velocity. Max. 662°C (400°F) surface temperature.

Model OS-88010-(*)-(#)
$325

Model OS-98010-(*)-(#)
$345 (shown)

With Swivel Head
Long, 300 mm (12") reach probe. For use on ovens and furnaces. 574°C (325°F) max. surface temperature.

Model OS-88107-(*)-(#)
$350

Model OS-88201-(*)-(#)
$340

With Swivel Head
A roller-surface probe, for use on moving or rotating, smooth surfaces with velocity up to 200 ft. per minute. 662° (400°F) max. surface temperature.

Model OS-88001-(*)-(#)
$260

Model OS-98001-(*)-(#)
$280 (shown)

With Swivel Head
Standard probe for stationary surface measurements. Suiited to molds, plates, walls, glassware, etc. 527°C (325°F) max. surface temperature.

Model OS-88101-(*)-(#)
$265

Right angle design for hard-to-reach inside surfaces. For measuring stationary surface temperatures. 527°C (325°F) max. surface temperature.

Range Chart

<table>
<thead>
<tr>
<th>Range Code</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>-50°F</td>
<td>-18 to 27°C/0 to 80°F</td>
</tr>
<tr>
<td>-80°F</td>
<td>10 to 49°C/50 to 120°F</td>
</tr>
<tr>
<td>-98.6°F</td>
<td>16 to 39°C/60 to 102°F</td>
</tr>
<tr>
<td>-140°F</td>
<td>25 to 80°C/80 to 180°F</td>
</tr>
<tr>
<td>-180°F</td>
<td>70 to 104°C/160 to 220°F</td>
</tr>
<tr>
<td>-240°F</td>
<td>95 to 130°C/200 to 270°F</td>
</tr>
<tr>
<td>-280°F</td>
<td>125 to 155°C/260 to 310°F</td>
</tr>
<tr>
<td>-340°F</td>
<td>145 to 175°C/290 to 350°F</td>
</tr>
<tr>
<td>-440°F</td>
<td>170 to 250°C/340 to 480°F</td>
</tr>
</tbody>
</table>

* Specify Calibration: J, K, T or E. # Specify Range code from range chart above

Note: see complete dimensions on following page.

Ordering Example: OS-88001-K-140F, handheld infrared thermocouple for stationary surface measurements. Type K thermocouple, 25 to 80°C (80 to 180°F) range. $260.