



Infrared Quick Help

When to Use Infrared Temperature Measurement:



OS520 Series Handheld Infrared Thermometer

Surface Is:

- ✓ Too Hot to Be Measured With Thermocouples
- ✓ Too Large to Be Measured Without a Very Large Number of Thermocouples
- ✓ Moving Too Much for Thermocouple Lead Wire to Accept Without Breaking
- ✓ At So High an Electrical Potential That Use of a Thermocouple Would Be Dangerous
- ✓ So Low in Mass That The Thermocouple Itself Will Affect the Unknown Surface Temperature
- ✓ Too Fragile or Wet to Accommodate Thermocouple Contact
- ✓ Too Active (Chemically) to Accept a Thermocouple or Its Probe
- ✓ In an Atmosphere That Is Hostile to a Thermocouple
- ✓ Inaccessible to a Thermocouple or Its Instrumentation
- ✓ Near Noise Producing Electric or Magnetic Fields



OS550 Sensor Head Industrial Noncontact Infrared Thermometer/Transmitter and OS550-MB Mounting Bracket

Key Infrared Application Factors

- ✓ Target Spot Size and Distance
- ✓ Target Material (for Emissivity)
- ✓ Fixed or Handheld Unit
- ✓ Temperature Range
- ✓ Response Time
- ✓ Sighting System
- ✓ Environment
- ✓ Viewing Port
- ✓ Options Needed

Determination of Infrared Emissivity

- ✓ Measure Surface Temperature by Some Other Means (After Stopping Motion)
- ✓ Place Masking Tape on Surface (Emissivity 0.95)
- ✓ Drill Hole in Surface At Least Six Times as Deep as It Is Wide (Emissivity 0.95)
- ✓ Paint Surface Dull Black (M IR Region)
- ✓ Look up Emissivity in Table (Last Resort)



BB704 Series Blackbody Calibration Source with Portable Design



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