

Technote #1

Pre-calibrated models: Quick installation guide

All infrared-based sensing systems must be calibrated for the specific surface properties of the materials they will measure. This calibration takes many factors into consideration, including the amount of heat radiated from the target surface, reflections of environmental heat, and so on. Calibration is performed using a reliable independent surface temperature probe to measure the target surface temperature.

The Exergen Microscanner D-Series hand-held Infrared Thermometer offers easy, fast and accurate calibration. It uses a patented Automatic Emissivity Compensation System, delivering a true reading regardless of emissivity. CleverIR will be pleased to make a D-Series available for your installation.

The following procedure is recommended:

1. Install the IRt/c as close as practical to view the target material to be measured.
2. Wire the IRt/c to the controller, PLC, transmitter, etc. in standard fashion (including ground shield as in Tech Note #54). As with conventional thermocouples, red wire is always (-).
3. Bring the process up to normal operating temperature and measure the actual temperature of the target material with the Microscanner D-Series Infrared Thermometer.
4. Adjust "input offset," "zero," "low cal," on the readout device to match the Microscanner reading. Installation Complete. (For OEM installations preset the same adjustments. Individual alibration is not required.)

