



## EXERGEN TECH NOTE 01 Infrared Temperature Sensors Installation Guide

[Home](#) » [EXERGEN](#) » EXERGEN TECH NOTE 01 Infrared Temperature Sensors Installation Guide 



### TECH NOTE 01 Infrared Temperature Sensors Installation Guide

#### QUICK INSTALLATION GUIDE PRE-CALIBRATED MODELS

#### Contents

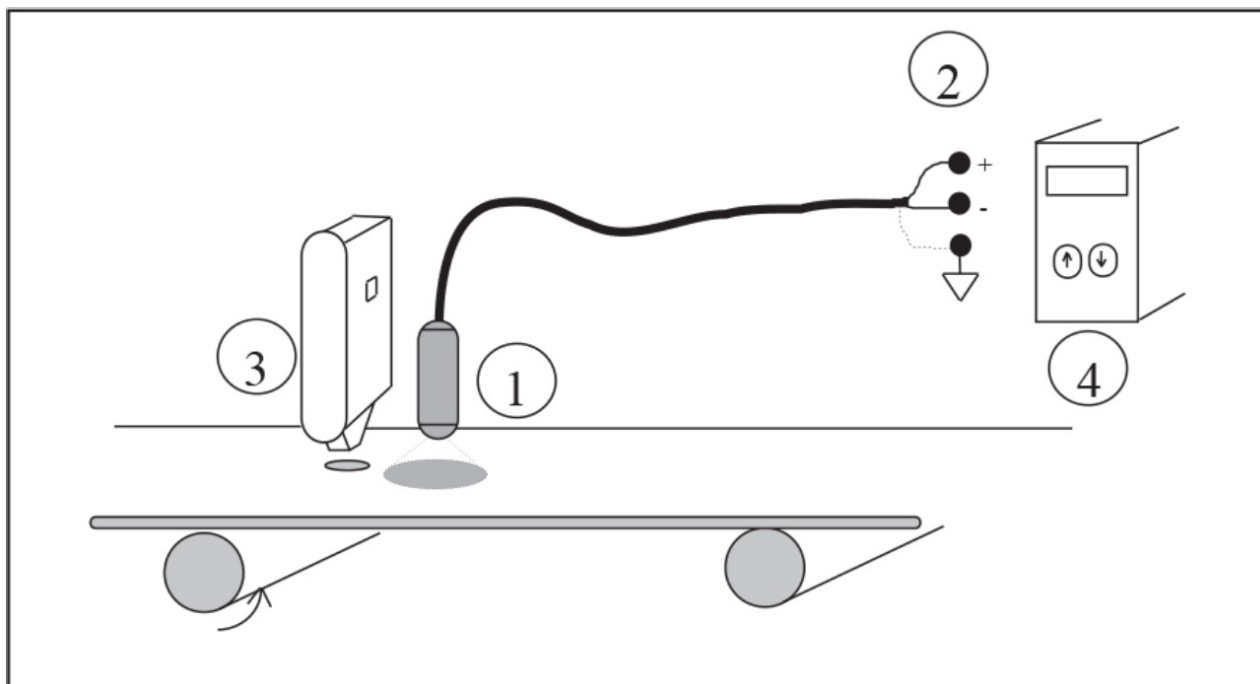
- [1 TECH NOTE 01 Infrared Temperature Sensors](#)
- [2 Documents / Resources](#)
- [3 Related Posts](#)

### TECH NOTE 01 Infrared Temperature Sensors

All infrared-based sensing systems must be calibrated for specific material surface properties (for example, the amount of heat radiated from the target surface, environmental heat reflections etc.). This calibration is performed by measuring the target surface temperature with a reliable independent surface temperature probe. The easiest and fastest method of accurately calibrating out these effects is to use an Exergen Microscanner D-Series hand-held Infrared Thermometer with a patented Automatic Emissivity Compensation System, which gives a true reading regardless of emissivity. Your Authorized IRT/c Distributor will be pleased to make a D-Series available for your installation. To calibrate Adjustable models (IRT/c. xxA) see Tech Note No. 60.

**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 #82). 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 calibration is not required.)

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C O R P O R A T I O N

**Exergen Corporation office:**

**USA**

400 Pleasant Street  
Watertown, MA 02472

**Tel:** +1 617 923 9900 press 4 for industrial

**Fax:** +1 617 923 9911

**Exergen Industrial International/OEM Sales office:**

**Clever IR**

The Netherlands  
Pastoor Clercxstraat 26  
5465 RH Veghel

**Tel:** +31 (0)413 376 599

[industrial@exergen.com](mailto:industrial@exergen.com)

[www.exergen.com](http://www.exergen.com)

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[EXERGEN TECH NOTE 01 Infrared Temperature Sensors](#) [pdf] Installation Guide  
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, Temperature Sensors, Sensors