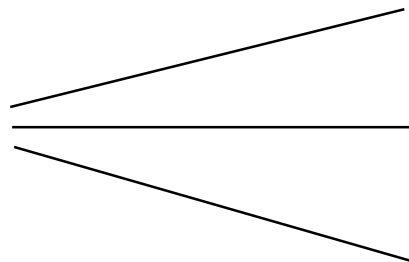
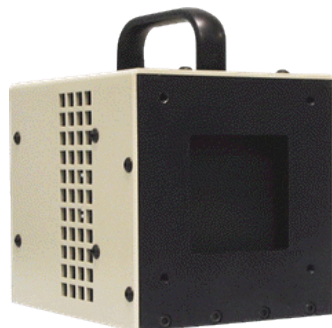
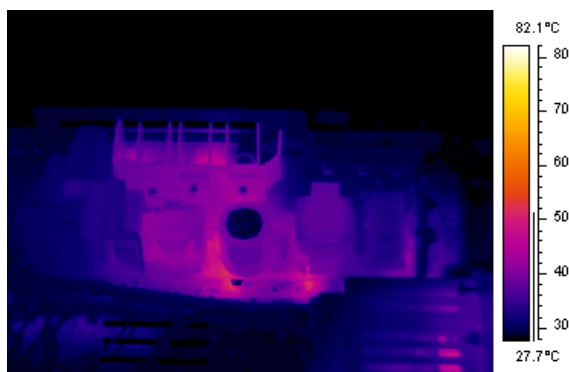


## **Φ INFRARED SYSTEMS DEVELOPMENT** CORPORATION



*Validate  
your Images*

The Correct Calibration of an IR Camera or Thermal Imager allows the Inspector to be certain of the Temperature Measurements Presented in the Image. Without Proper Calibrations, the Thermal Imager can only provide an Interesting Picture, not a useful, valid Thermal Image. Calibrations are usually done with Near Perfect Energy Sources in Near Perfect Conditions. In Reality there are few "Near Perfect" Environments in the Real World of Thermal Analysis. Many of the Components to be inspected are located in Hostile Environments that Require the User to View the Target through an Inspection Window, Dense or Smoke Atmospheres, or Chemical Vapor Conditions. These Obstructions in the IR Path result in Erroneous IR Measurements. Viewing through an IR Window Preserves the Equipment under Test, but unless the Exact Transmission of the Window is known, the Image will present False Data. Application of the proper Compensation is required for Valid Thermal Measurements. Our IR-2100 Blackbody provides a Low-Cost Reference Standard that allows the Operator to take Measurements through different Environments and Window Materials to determine the Proper Compensation Values to Correct the Image with Proper Temperature Values.



UNCALIBRATED Image



CALIBRATED Image

Uncalibrated Image (left) shows operation of this Power Supply is within required limits. After correction for the IR Window, the Power Supply is 10 °C above the Maximum Rated Temperature.

# DIMENSIONS AND SPECIFICATIONS

**Temperature Range:** -5 – + 145 C  
**Emittance Watts/Cm<sup>2</sup> (Watts):** .17 (5.4)  
**Wavelength Range:** 1-99 um  
**Emissivity:** 0.96 +/- 0.02  
**Emitter Size: in (mm)** 2.5" x 2.5" (63.5 x 63.5)  
**Source Type:** Extended Area  
**Temperature Resolution:** 0.1 C  
**Calibration Accuracy:** +/- 0.2 C to NIST Standard  
**Stability: Short (Long) Term:** +/- 0.1 C (+/- 0.2C)  
**Response Time:** Ambient – Max <20 Min  
**Temperature Sensors:** Platinum RTD & Type T  
**Control Type:** Active Multi-Band P.I.D.  
**Line Voltage:** 90 to 125 or 208-240 VAC 50-60 Hz  
**Power Requirements:** 200 Watts Max  
**Cable Length:** 8 Feet (2.4 m)  
**Dimensions: in (mm)** **Source:** 4.25" H x 4.25" D x 5" W (108x108x127)  
**Controller:** 5.1"H x 13.4"D x 12"W (130x340x304)  
**Warranty:** 1 Year  
**Standard Apertures:** 2.5" x 2.5" (63.5 x 63.5)  
**Remote Interface:** RS-232, RS-485 or IEEE-488/GPIB

Infrared Systems Development Corporation is a Leading Manufacturer of Calibration and Test Equipment for Thermal Imagers and IR Cameras. We offer a full line of Calibration Sources suited for all Applications and Temperature Ranges. The IR-2100 is an ideal source for Temperature and Uniformity Calibration of IR devices. Please Contact Us for More Information.

***WE HAVE A SOLUTION FOR YOU***

