

# Infrared Calibrator



This new portable infrared calibrator provides a stable blackbody target for calibrating noncontact infrared thermometers up to 500°C (932°F). This unit features a large, temperature controlled blackbody target with a diameter of 2.25" (57mm), which offers a large field of view area for optical variations in infrared thermometers. The emissivity of the isothermal target is set at 0.95 (±0.02%) and the target temperature can be controlled in setpoint increments of 0.1°C.

For even higher precision, a well is located directly behind the blackbody surface for contact calibration of the blackbody. This unit is as easy to use as "point and shoot". Simply set the desired blackbody temperature from the front panel control buttons, wait

a few minutes for equilibrium, and point the thermometer at the target. The radiated energy from the blackbody is measured by your infrared thermometer. simply compare its reading to the display on the blackbody and record the difference.

This new portable infrared calibrator can certify most handheld thermometers in the range of 50 to 500°C, with accuracy to ±0.5°C and stability to ±0.1°C. Short heating and cooling times mean you won't have to wait long to get your work done. From room temperature to 500°C, the 9132 will be stable within 30 minutes. No other infrared calibrator gives you this level of precision in such a compact package.

## Specifications:

Range:	50 to 500°C (122 to 932°F)
Accuracy:	±0.5°C at 100°C (±0.9°F at 212°F); ±0.8°C at 500°C (±1.4°F at 932°F)
Stability:	±0.1°C at 100°C (±0.18°F at 212°F) ±0.3°C at 500°C (±0.54°F at 932°F)
Resolution:	0.1°
Target Size:	2.25" (57mm)
Target Emissivity:	0.95 (±0.02 from 8 to 14µm)
Heating Time:	30 minutes (50 to 500°C)
Cooling Time:	30 minutes (500 to 100°C)
Power Supply:	115 VAC ±10%, 3A or 230 VAC ±10%, 1.5A, switchable, 50/60Hz, 340W
Dimensions:	4 x 6 x 7" (102 x 152 x 178mm)
Weight:	4 lb (1.8 kg)

Model	Description	Price
9132-156	Infrared Thermometer Calibrator	\$4164

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The 9135 IR Calibrator gives you fast, easy, and inexpensive verification of your handheld infrared thermometers. It includes three set points at 50°C, 100°C and 150°C. Simply select a temperature, wait for the ready light to come on, aim your thermometer at the 1.5" diameter blackbody, and take a reading. Set points can be reached in less than five minutes and stabilization time is only three minutes. It doesn't get any easier, or any faster. Accuracy at any of the three set points is better than ±1°C, and stability is within ±0.1°C. Emissivity of the black-body target is 0.95. At less than two inches thick and weighing less than two pounds, the 9135 is absolutely portable. It fits easily into a tool kit for on-site calibrations. Use it to check an IR thermometer at one temperature or to estimate its span error by checking at 50°C and 150°C.

## Specifications:

Temperature Range:	50°C, 100°C, 150°C (122°F, 212°F, 302°F)
Accuracy:	±1°C
Stability:	±0.1°C
Target Size:	1.5" (38mm)
Target Emissivity:	0.95
Heating Time:	25 to 150°C: 3 minutes typical
Cooling Time:	150 to 50°C: 25 minutes typical
Power Supply:	115 VAC ±10%, 1.0A or 230 VAC ±10%, 0.5A, specify 50/60Hz, 125W
Dimensions:	1.8 x 4.4 x 7.8" (46 x 112 x 198 mm)
Weight:	1.5 lb (0.7 kg)



Model	Description	Price
9135-156	Infrared Thermometer Calibrator	\$1110
9308	Carrying Case	\$227