

# 9132 and 9133 Portable Infrared Calibrators

## Highlights

### Precision when you need it for infrared temperature calibration

Fluke 9132 and Fluke 9133 Portable Infrared Calibrators features:

- Certify IR pyrometers from  $-30\text{ }^{\circ}\text{C}$  to  $500\text{ }^{\circ}\text{C}$  ( $-22\text{ }^{\circ}\text{F}$  to  $932\text{ }^{\circ}\text{F}$ )
- Large 57 mm (2.25 in) blackbody target
- RTD reference well for contact temperature measurement
- Small, compact design in a blackbody calibrator

Whether you're using in-line or handheld infrared pyrometers, you need good calibration standards to verify their accuracy. Our portable IR calibrators provide stable blackbody targets for calibrating noncontact IR thermometers from  $-30\text{ }^{\circ}\text{C}$  to  $500\text{ }^{\circ}\text{C}$ .

These blackbody calibrator units feature a temperature controlled measurement surface with a diameter of 2.25 in (57 mm). The target temperature can be controlled in set-point increments of  $0.1^{\circ}$  from  $-30\text{ }^{\circ}\text{C}$  to  $500\text{ }^{\circ}\text{C}$  and a well is located directly behind the blackbody surface for contact calibration.

## Description

### Fluke 9132: blackbody calibration up to $500\text{ }^{\circ}\text{C}$

For IR calibrations above normal ambient, the Fluke 9132 blackbody calibration source provides a stable measurement surface up to  $500\text{ }^{\circ}\text{C}$  ( $932\text{ }^{\circ}\text{F}$ ). Short heating and cooling times mean you won't have to wait long to get your work done.

### Fluke 9133: blackbody calibration from $-30\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$

If you're calibrating IR thermometers at cold temperatures, you'll love our new Fluke 9133 blackbody calibration source. With solid-state cooling technology, this new IR calibrator reaches  $-30\text{ }^{\circ}\text{C}$  ( $22\text{ }^{\circ}\text{F}$ ) in normal ambient conditions. With a conveniently located dry gas fitting on the front bezel, ice build up on the target can be avoided. At the upper end of its range, the Fluke 9133 provides stable temperatures to  $160\text{ }^{\circ}\text{C}$  ( $320\text{ }^{\circ}\text{F}$ ).

With heating and cooling times of about 15 minutes from ambient to either extreme, the Fluke 9133 gets you to temperature quickly and performs when it gets there.

## Specifications

Specifications	9133	9132
Temperature Range	$-30\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$ at $23\text{ }^{\circ}\text{C}$ ambient ( $-22\text{ }^{\circ}\text{F}$ to $302\text{ }^{\circ}\text{F}$ at $73\text{ }^{\circ}\text{F}$ ambient)	$50\text{ }^{\circ}\text{C}$ to $500\text{ }^{\circ}\text{C}$ ( $122\text{ }^{\circ}\text{F}$ to $932\text{ }^{\circ}\text{F}$ )
Accuracy	$\pm 0.4\text{ }^{\circ}\text{C}$ ( $\pm 0.72\text{ }^{\circ}\text{F}$ )	$\pm 0.5\text{ }^{\circ}\text{C}$ at $100\text{ }^{\circ}\text{C}$ ( $\pm 0.9\text{ }^{\circ}\text{F}$ at $212\text{ }^{\circ}\text{F}$ ) $\pm 0.8\text{ }^{\circ}\text{C}$ at $500\text{ }^{\circ}\text{C}$ ( $\pm 1.4\text{ }^{\circ}\text{F}$ at $932\text{ }^{\circ}\text{F}$ )
Stability	$\pm 0.1\text{ }^{\circ}\text{C}$ ( $\pm 0.18\text{ }^{\circ}\text{F}$ )	$\pm 0.1\text{ }^{\circ}\text{C}$ at $100\text{ }^{\circ}\text{C}$ ( $\pm 0.18\text{ }^{\circ}\text{F}$ at $212\text{ }^{\circ}\text{F}$ ) $\pm 0.3\text{ }^{\circ}\text{C}$ at $500\text{ }^{\circ}\text{C}$ ( $\pm 0.54\text{ }^{\circ}\text{F}$ at $932\text{ }^{\circ}\text{F}$ )
Target Size	57 mm (2.25 in)	
Target Emissivity	0.95 ( $\pm 0.02$ from 8 to $14\text{ }\mu\text{m}$ )	

<b>Resolution</b>	0.1 °	
<b>Heating Time</b>	15 minutes (25 °C to 150 °C)	30 minutes (50 °C to 500 °C)
<b>Cooling Time</b>	15 minutes (25 °C to -20 °C)	30 minutes (500 °C to 100 °C)
<b>Computer Interface</b>	RS-232 I/O included with 9930 Interface-it software	
<b>Power</b>	115 V ac (± 10 %), 1.5 A, or 230 V ac (± 10 %), 1.0 A, switchable, 50/60 Hz, 200 W	115 V ac (± 10 %), 3 A or 230 V ac (± 10 %), 1.5 A, switchable, 50/60 Hz, 340 W
<b>Size (HxWxD)</b>	152 x 286 x 267 mm (6 x 11.25 x 10.5 in)	102 x 152 x 178 mm (4 x 6 x 7 in )
<b>Weight</b>	4.6 kg (10 lb)	1.8 kg (4 lb)
<b>NIST-Traceable Contact Calibration</b>	Data at -30°C, 0°C, 25°C, 75°C, 100°C, 125°C, and 150°C	Data at 50°C, 100°C, 200°C, 250°C, 300°C, 400°C, and 500°C

## Models and Accessories

Model Name	Description			
9132	Portable IR Calibrator, 500 °C			
	<table border="1"> <thead> <tr> <th>Accessory</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><a href="#">9308</a></td> <td>Rugged Carrying Case : 9102, 9132, 9140</td> </tr> </tbody> </table>	Accessory	Description	<a href="#">9308</a>
Accessory	Description			
<a href="#">9308</a>	Rugged Carrying Case : 9102, 9132, 9140			
9133	Portable IR Calibrator, -30 °C			
	<table border="1"> <thead> <tr> <th>Accessory</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><a href="#">9302</a></td> <td>Rugged Carrying Case (holds 1560 and up to five modules)</td> </tr> </tbody> </table>	Accessory	Description	<a href="#">9302</a>
Accessory	Description			
<a href="#">9302</a>	Rugged Carrying Case (holds 1560 and up to five modules)			

## Accessories common to all models:

Accessory	Description
Priority Gold Instrument CarePlan	Fluke Calibration Priority Gold Instrument CarePlans are available for most calibration products. Please contact your local Fluke Calibration sales representative for details or to request a quote. You may also call the Customer Care Center at 877-355-3225 or send email to <a href="mailto:careplans@flukecal.com">careplans@flukecal.com</a> .
Silver CarePlan	Fluke Calibration Silver CarePlans are available for most calibration products. Please contact your local Fluke Calibration sales representative for details or to request a quote. You may also call the Customer Care Center at 877-355-3225 or send email to <a href="mailto:careplans@flukecal.com">careplans@flukecal.com</a> .





---

©1995-2015 Fluke Corporation

-----  
**Source URL:** <http://us.flukecal.com/products/temperature-calibration/industrial-calibrators/9132-and-9133-portable-infrared-calibrators>