Thermal Imaging
IR Camera

Model 1950

Exceptional ergonomics for simplified use

Saves you time and money.
Provides ease with professional reports, fast start up, focus free operation and simple to use tools. Get quality measurements in seconds!

Real-time thermal inspection.
The Model 1950 features a 20°x 20° field of view, allowing you to inspect a wide area in real-time. You can toggle between displaying a thermogram or digital image. The camera can quickly identify hot and cold spots, display the temperature of a selected point, show the minimum, maximum and average temperatures within a selected screen area, display temperature profile, and selectively show all the points within the same selected temperature range.

Thermal imaging.
The Model 1950 can capture thermal images, called thermograms, and save them in the instrument. You can then add audio narration to each image, as well as measurement data provided by a clamp-on meter or multimeter connected to the camera via Bluetooth. Thermograms can be downloaded from the instrument to a computer for processing, analysis, and report generation using the provided CAmReport software.

Advanced user interface.
The instrument features quick and easy setup via a robust and intuitive user interface. The interface also allows you to customize colors to highlight thermal data of particular interest. Setup files can be saved and recalled for configuring the instrument for specific applications and environments.

Easy maintenance.
The Model 1950 runs on AA rechargeable or Alkaline batteries, providing up to 13 hours of continuous operation between recharges/replacements. The instrument is easily cleaned with common cleansers and is rugged enough to withstand an accidental 6 foot drop on any of its surfaces.

Our products are backed by over 100 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.

Technical Hotline: (800) 343-1391
www.aemc.com

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CHAUVIN ARNOUX GROUP

A revolutionary infrared,

Versatile tool for performing infrared thermography. This technology is an indispensable means for ensuring safety in industrial production

Protective elastomer flap

Mini USB connector

Micro SD card slot

320 x 240 pixel graphic display (2.8" wide)

Multiple-function keys associated with display on the screen

Automatic brightness sensor

ON/OFF key

Navigation keys:
Up ▲
Down ▼
Right ▶
Left ◀

Thermal Imaging IR Camera Model 1950 is a simple-to-use "focus free" instrument that features a 20° x 20° field of view. The camera can be used as a real-time viewer for detecting hot spots and other thermal anomalies. Thermal images (also known as thermograms) can be recorded and stored on the instrument. You can also add audio comments and measurement data (provided by a compatible clamp-on meter or multimeter) to the stored image files.

The instrument features *Bluetooth* technology for connecting to electrical measurement instruments and a headphone for recording narration. You can download stored thermograms to a computer running CAmReport software (provided with the instrument) for image processing, analysis, and report generation.

Roll top lens protection flap

Infrared camera lens

Visible camera lens

Multiple-function trigger

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real-time inspection method

Key features & functions

Provides a wide 20° x 20° field of view with an IFOV spacial resolution of 4.4mrad.
This allows you to quickly inspect a large area in real-time, and capture a high level of thermal information in a single thermogram. Focus on a 0.086" (2.2mm) object from 9.8' (3m) away. Capture desired measurements from a distance with the camera's 75:1 ratio.

Focus free quality.
Provides crisp, clear thermal and digital images without the need for adjustments.

Accurate temperature measurement over the full range.
From -4 to 482°F (-20 to 250°C) with a stability of 80mk at 86°F (30°C).

Audio narration can be recorded with thermograms.
You can describe the circumstances of each image, providing additional text and description to be stored with each image.

Automatic non-uniformity temperature correction.
Compensates for any internal drift to improve accuracy.

Measurement data can also be stored with each thermogram.
The Model 1950 can wirelessly connect via *Bluetooth* to a compatible AEMC® clamp-on meter or multimeter, enabling you to combine electrical measurements to the imaging data.

Offers broad range of operational capabilities.
Locating the cold and hot spots in the image, measuring the temperature of a selected point in the image, displaying the temperature profile of a line in the image, displaying points at the same temperature in the image, and freezing the colors representing the temperatures.

CAmReport software.
Included for downloading stored files from the instrument to a computer for further processing, analysis, and report generation.

This camera is built to last.
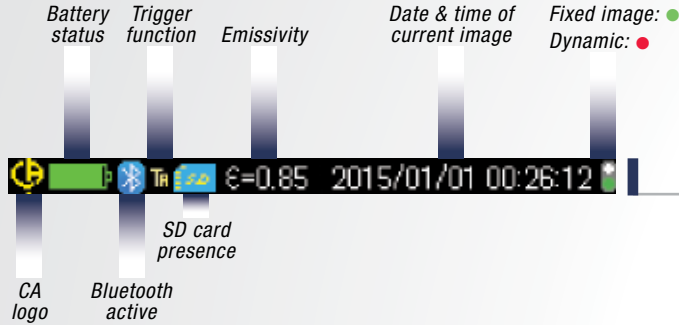Its rugged design survives accidentally dropping on any of its surfaces from as high as 6'.

Exceptionally long 13 hour battery life.
Ensures no loss of test time during a typical work day.

Display & menu contents

Status bar:

Battery status   Trigger function   Emissivity   Date & time of current image   Fixed image: ●   Dynamic: ●

€=0.85 2015/01/01 00:26:12

SD card presence

CA logo   Bluetooth active

Menu: *Selectable using navigation keys*

Contextual help: *This display area updates based on the menu item selected*

Function keys: *Linked to selected menu choice or camera image*

A comprehensive set of easy access menus are available on screen. You can use the function and navigation keys to easily configure the camera for your specific needs. Trigger functions can be programmed, color palettes can be selected, cursor tools can be configured as well as environmental conditions including ambient temperature and humidity, distance and emissivity.

All users programmable screens have context-sensitive help messages to aid the decision-making process.

Wireless interface to a microphone supplied with the camera facilitates easy notetaking and documentation. Additionally, AEMC® clamp-on meters and multimeters can also wirelessly transmit measurement data to the camera.

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Selectable cursor tools

NONE

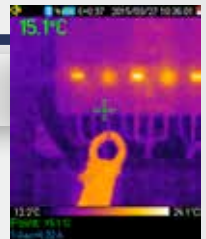No cursor display, temperature evaluation is determined by color palette only.
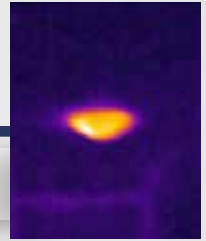
MIN/MAX

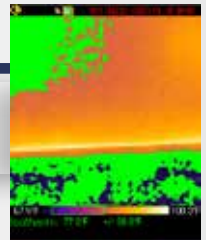Automatically displays the cold and hot spot values at the Min and Max cursor positions.

POINT

Displays the value at the cursor.
Cursor is movable using the navigation keys.

ISOTHERM

Displays points that fall in the same temperature range in the same color. User picks green, red or brown as the display color and defines the range and tolerance.
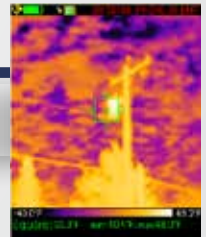
PROFILE

Displays the temperature profile of a horizontal line defined by the cursor. Cursor can be moved along the line to get an individual temperature.
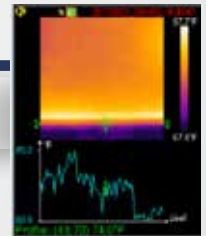
SQUARE

Displays the Min/Max and mean values within the box.
Box size and location is user adjustable.

User programmable cursors provide a comprehensive set of options for evaluating thermal profiles. Identify a single point (user selectable) to automatically detect minimum, maximum and mean temperatures of a selected area or the entire image.

CAmReport software

CAmReport, the software for analyzing thermograms.

This comprehensive software offers all the necessary functions for effective analysis of the measurement results and report generation.

Sample Test Report
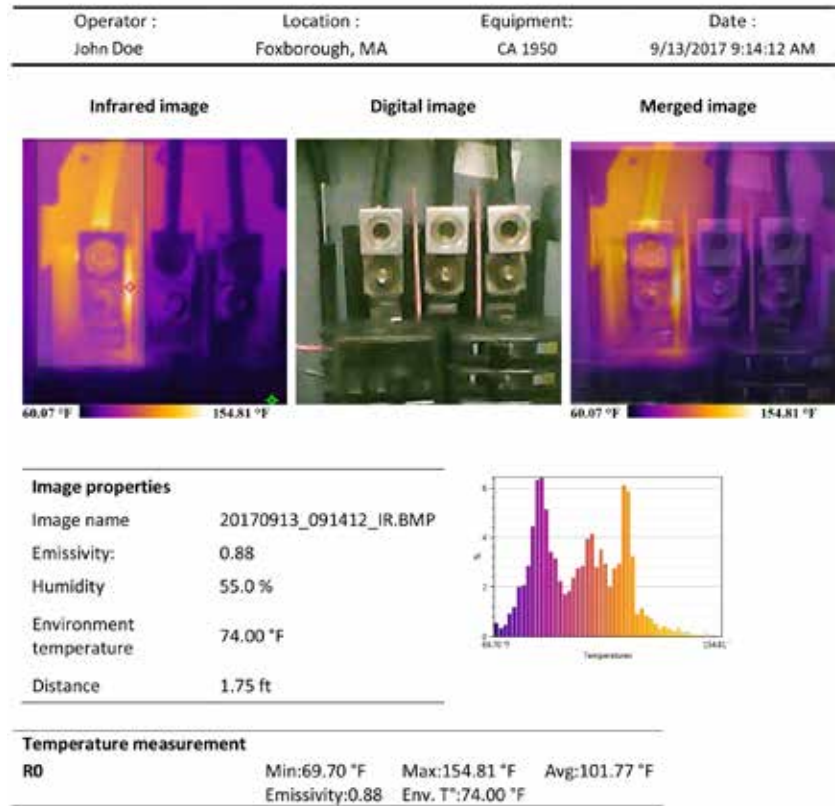
Report creation is automatic, using one of three available templates.
Reports can be exported in Word or PDF format. This makes it simple to print and/or archive them.
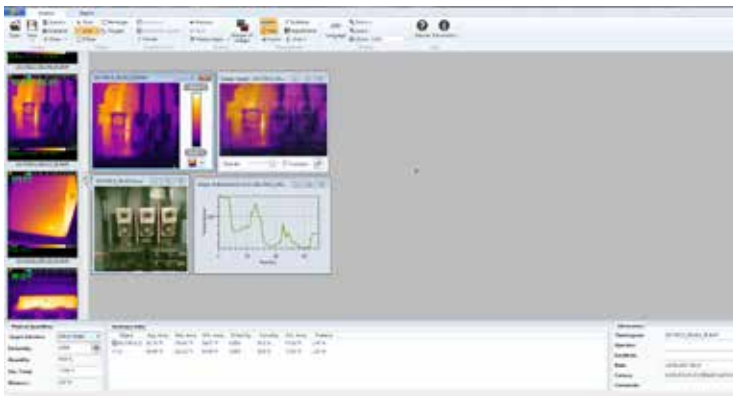
Typical analysis tab screen

Features

- Transfer measurements from your camera to the software by USB cable, wireless *Bluetooth*, or transportable SD card

- Drag-and-drop measurement images from the storage directory to the analysis window in the software

- Includes thermal and real images automatically

- Superimpose thermal images over real images for better visual analytical results

- Locate Min/Max and mean temperatures of the image or an area of the image

- User selectable color palette from seven different types

- Summary table automatically displays environmental parameters and statistical results of the measurement

- Include dictated audio comments into the report

- Includes multiple analytical tools for assessing thermal images

- Manually enter measurement analysis findings, site characteristics and operator information to your report.

- Add graphics such as logos to your reports

- Correct the measurement results using built-in or user configured emissivity tables

- Include multiple measurements in any report

- Save reports as a Word or PDF document

Technical Assistance (800) 343-1391

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Specifications & ordering info

Compatable AEMC® Models are Clamp-On Meters 407 & 607, and Multimeters MTX 3292-BT & 3293-BT

Measurement data can also be stored with each thermogram. The Model 1950 can wirelessly connect via *Bluetooth* to a compatible clamp-on meter or multimeter, enabling you to combine electrical measurements to the imaging data.

IR Detector	
Type	UFPA microbolometer
Spectral Range	8~14µm
Resolution	80 x 80
IR Imaging Performance	
NETD	80mK at 86°F (30°C) [0.1° at 30°C]
Frequency	9Hz
Field View	20° x 20°
IFOV (Spatial Resolution)	4.4mrad
Min Focal Distance	15.6" (0.4m)
Focusing	
Adjustment	Focus free
Visual Image	
Built-in Digital Video	320 x 240 pixels
Min Focal Distance	2" (0.05m)
Presentation of Images	
Images Displayed	Infrared image, real image
LCD Screen	2.8" (7.1cm)
Image Display	Multiple palettes selectable
Functions	
Image Freezing	Moving or frozen image
Storage	Micro SD and SD HC card
Measurement	
Temperature Range	-4 to 482°F (-20 to 250°C)
Accuracy	±3.6°F (±2°C or ±2%)
Analysis Functions	
Analysis Tools	Point cursor, area cursor, temperature profile, minimum/maximum, cursor and isothermal
Adjustment	Automatic or manual adjustment of the minimum/maximum palette
Correction	Emissivity, distance, ambient; temperature, relative humidity
Isotherm Display	Color display of a temperature range adjustable by the user
Voice Recordings	Via *Bluetooth* headset
Software	Analysis & report writing software
Power Source	NiMH, low self-discharge battery; Battery Life: 13h30 typical (11h min)
Safety	EN61326-1, EN61010-1-Ed.02
Environmental Specification	
Operating Temperature	-4 to 122°F (-15 to 50°C)
Storage Temperature	-40 to 158°F (-40 to 70°C)
Humidity	10% to 95%
Drop Resistance	6' (2m) on all sides
Impact Resistance	25G
Vibration Resistance	2G
Protection	IP54
Dimensions/Weight	8.86 x 4.92 x 3.27" (225 x 125 x 83mm)/25 oz. (700 g)

Carrying case, external battery charger, USB cable, four NiMH rechargeable batteries, SD card, Bluetooth headphone, quick start guide, and a USB stick with CAmReport software and user manual. ***2 year warranty***

DESCRIPTION	CATALOG NO.
Thermal Imaging IR Camera Model 1950	**2121.40**

www.aemc.com

United States & Canada

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