

## Thermal Imager

**Industrial and Commercial Maintenance Use**

- Temperature measurement range: -20 °C to +400 °C (-4 °F to +752 °F)
- Thermal sensitivity:  $\leq 0.03$  °C at 30 °C target temp (80 mK) (9875/9876)

- 3.5" Touch-Screen with an innovative Sun Visor
- Annotate images with Voice
- Picture-in-Picture
- 20X Continuous Zoom
- Delta T-Differential Temperature
- Area Min/Max with Auto Hot/Cold Spot Marke
- Replaceable Lens
- Video storage mode

Specifications		9875	9876	9888
<b>Imaging and optical data</b>				
Field of View (FOV)	29.8° × 22.6°	*	*	24.6°×18.6°
Minimum focus distance	0.2m (0.66ft.)	*	*	0.5m(1.65 ft.)
Spatial resolution	(IFOV) 3.33 mrad	*	*	1.14 mrad
Thermal sensitivity/NETD	< 0.08°C @ +30°C (+86°F) / 80 mK	*	*	NETD=60mK
Image frequency	50Hz	*	*	*
Focus	Manual	*	*	*
Zoom	1-20x continuous, digital zoom	*	*	*
Rotate	0-360°, continuous change by 1°	*	*	*
<b>Detector data</b>				
Detector type	Focal plane array (FPA), uncooled microbolometer	*	*	*
Spectral range	8–14μm	*	*	*
IR resolution	160x120pixels	*	*	*
IR resolution	384x288pixels			*
<b>Image presentation</b>				
Display	3.5" TFT , capacitive touch screen	*	*	*
Image modes	IR image, visual image, picture in picture	*	*	*
Picture in Picture	IR area on visual image or visual image area on IR	*	*	*
Color palettes	GRAY/GRAYINV IRON/IRONINV/RAINBOW/FEATHER	*	*	*
<b>Measurement</b>				
Object temperature range	Low range: -20°C to +150°C (-4°F to +302°F) High range: 0°C to +400°C (+32°F to +752°F)	*	*	*
Accuracy	±2°C (±3.6°F) or ±2% of reading	*	*	*
<b>Measurement analysis</b>				
Spotmeter	3	*	*	*
Emissivity adjustable	0.01~1.0 Adjustable	*	*	*
Emissivity table	Emissivity table of predefined materials	*	*	*
Line	2 lines(horizontal and vertical)	*	*	*
Area	3 boxes with max. /min. /average	*	*	*
Automatic hot /cold detection	Auto hot or cold spotmeter markers	*	*	*
Isotherm	Detect high/low temperature/interval	*	*	*
Difference temperature	Delta temperature between measurement pointer and reference pointer	*	*	*
Measurement corrections	Emissivity, ambient temperature, distance, relative humidity, offset temperature	*	*	*
<b>Set-up</b>				
Laser / floodlight	< class2 / white LED floodlight	*	*	*
Set-up commands	Local adaptation of units, language, date and time formats, information of camera	*	*	*
Language selection	English, Chinese, French, German, Spanish	*	*	*
<b>Storage of videos</b>				
Storage media	4Gbytes Micro SD card	*	*	*
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card > 60 minutes	*	*	*
Video storage mode	IR/visual images; simultaneous storage of IR and visual images	*	*	*
<b>Storage of images</b>				
Image storage format	Standard JPEG, including measurement data, on memory card > 1000 pictures	*	*	*
Image storage mode	IR/visual images; simultaneous storage of IR and visual images	*	*	*
<b>Digital camera</b>				
Built-in visible light digital camera	640x480 Pixels	*	3.1 Mega pixels	*
<b>Data communication interfaces</b>				
USB interfaces	USB-mini, data transform between camera and PC	*	*	*
Cloud computing service			*	*
Wi-Fi connectivity	Wi-Fi connectivity allows to send images and data to mobile devices		*	*
Video out	Composite(PAL and NTSC)	*	*	*
<b>Power system</b>				
Battery	Lithium polymer battery, 4 hours operating time	*	*	*
Input voltage	DC 9V to 12V	*	*	*
Charging system	In camera (AC adapter)	*	*	*
Power management	Automatic shutdown and sleep mode (user selectable)	*	*	*
<b>Environmental data</b>				
Operating temp range	-20°C to +50°C (-4°F to +122°F)	*	*	*
Storage temp range	-40°C to +70°C (-40°F to +158°F)	*	*	*
Relative humidity (operating and storage)	10%RH-90%RH	*	*	*
Encapsulation	IP65	*	*	*
Drop test	2m	*	*	*
Bump	25g(IEC60068-2-29)	*	*	*
Vibration	2g(IEC60068-2-6)	*	*	*





CF9875/9876 series Thermal Imager is designed to make your work easier, more productive and effective. 160 × 120 resolution at 50 Hz for real-time capture; a big, bright touch screen with toolbar helps you to fine-tune and analyze images quickly. Temperature range from -20°C to 400°C (-4°F to 752°F), 20X continuous zoom, picture-in-picture, voice comment recording and text annotation on images. Hot/Cold spot marker automatically finds the hottest and coldest spots. It includes memory card, lithium polymer battery & power supply, and USB cable. Wi-Fi connectivity allows the CF9876 Infrared Thermal Camera to send images and data to mobile devices.

### Applications

- Plant/General Maintenance
- HVAC/R
- Transportation/Automotive
- Cooling and Reheating
- Serving areas
- Food service Equipment
- Cold storage



EMC  
EN: 61326-1  
EN: 60825-1

#### High Resolution IR Images

19,200 pixels (160x120) Infrared resolution (CF9875/9876)  
110,592 pixels (384x288) Infrared resolution (CF9888)

#### Visible Light Digital Camera

640x480 resolution with flash provides sharp images regardless of lighting conditions

#### Picture in Picture

Displays thermal image super-imposed over a digital image

#### LED Flashlight

Allows the visual camera and fusion to be used in poorly lit environments

#### Wide Temperature Range

From -20°C to +400°C targeting electrical and industrial applications

#### ±2% Accuracy

reliable temperature measurement

#### Thumbnail view

Easy to view and analyze images quickly

#### The image rotation

The ability to automatically rotate the active image



#### Audio recorded with the video image

A speaker to listen to audio recorded with the video image

#### Capacitive touch screen

More easy, productive and effective to operate it

#### Lithium polymer Rechargeable Battery

Lasts >4hrs continuous use; replaceable

#### Copy to USB

Easy uploads images from camera to USB memory card

#### Area (Min/Max) Mode

Shows the Minimum or the Maximum Temperature reading in the selected area

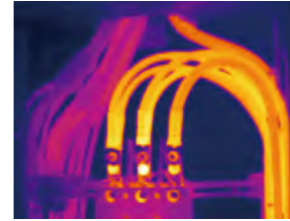
#### Wi-Fi connectivity(Model CF9876)

Sends images and data to mobile devices to share reports and critical information quickly

Full Visible light



Full IR



Model: CF9875/9876/9888



EMC  
EN: 61326-1  
EN: 61010-1

11mm Lens  
RL-1133mm Lens  
RL-3322mm Lens  
RL-22

**Size(HxWxD):** 243mm x 103mm x 160mm

**Weight:** 920g

**Accessories:**

Hard transport case, 7.5mm lens, Sun Visor, Tripod base, AC charger/Power supply, Earphone, Battery, Camera lens cap, software CD-ROM, Handstrap, micro SD card, USB cable & RCA cable, Gift box.

**Optional Accessories:** 33mm Lens/22mm Lens  
11mm Lens