

FLIR E8

P/N: 63903-0303

Copyright

© 2014, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

Document identity

Publ. No.: 63903-0303 Release: -Commit: 15419 Language: en-US Modified: 2014-06-19 Formatted: 2014-06-22

Corporate Headquarters

FLIR Systems, Inc. 27700 SW Parkway Ave. Wilsonville, OR 97070 USA

Telephone: +1-503-498-3547 Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions.



General description

The FLIR Ex series cameras are point-and-shoot infrared cameras that give you access to the infrared world. A FLIR Ex series camera is an affordable replacement for an infrared thermometer, providing a thermal image with temperature information in every pixel. The new MSX and visual formats make the cameras incomparably easy to use.

The FLIR Ex series cameras are user-friendly, compact, and rugged, for use in harsh environments. The wide field of view makes them the perfect choice for also building applications.

Benefits:

- Easy to use: The FLIR Ex series cameras are fully automatic and focus-free with an intuitive interface for simple measurement in thermal, visual, or MSX mode.
- Compact and rugged: The FLIR Ex series cameras' low weight of 0.575 kg and accessory belt pouch make them easy to bring along at all times. Their rugged design that can withstand a 2 m drop test ensures reliability, even in harsh environments.
- Ground breaking affordability: The FLIR Ex series cameras are the most affordable infrared cameras on the market.

FLIR E8



P/N: 63903-0303

© 2014, FLIR Systems, Inc. #63903-0303; r. -/15419; en-US

Imagination of protein turk Bit resolution 320 × 240 pixels Thermal sensitivity/NETD <0.06°C (0.11°F) / <60 mK Field of view (FOV) 45° × 34° Minimum focus distance 0.5 m (1.6 ft.) Spatial resolution (IFOV) 2.6 mrad F-number 1.5 Image frequency 9 Hz Focus Focus free Detector data Detector data Detector type Focal plane array (FPA), uncooled microbolometer Spectral range 7.5-13 µm Image resentation Joi in .320 × 240 color LCD Display 3.0 in .320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Accuracy -20°C to +250°C (+3°F to .4580°F p or 5°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max/min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature torrection	Imaging and optical data		
International sensitivity/NETDc0.06°C (0.11°F) / c60 mKField of view (FOV)45° x 34°Minimum focus distance0.5 m (1.6 ft.)Spatial resolution (IFOV)2.6 mradF-number1.5Image frequency9 HzFocusFocus freeDetector dataFocus freeDetector typeFocal plane array (FPA), uncooled microbolometerSpectral range7.5-13 µmImage presentationTotal calcustrope (Calcustrope (C		200×240 pixelo	
Field of view (FOV) 45° × 34° Minimum focus distance 0.5 m (1.6 ft.) Spatial resolution (IFOV) 2.6 mrad F-number 1.5 Image frequency 9 Hz Focus Focus free Detector data Eocal plane array (FPA), uncooled microbolometer Spectral range 7.5–13 µm Image presentation January (FPA) Display 3.0 in. 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy 2°C (s3.6°F) or ±2% of reading, for ambient temperature above ±0°C (+32°F) and object temperature above ±0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature correction Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data inc			
Minimum focus distance 0.5 m (1.6 ft.) Spatial resolution (IFOV) 2.6 mrad F-number 1.5 Image frequency 9 Hz Focus Focus free Detector data Edector data Detector type Focal plane array (FPA), uncooled microbolometer Spectral range 7.5–13 µm Image presentation 3.0 in .320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Object temperature range -20°C to ±250°C (-4°F to +482°F) Accuracy -20°C to ±250°C (-4°F to ±482°F) Accuracy -20°C to ±250°C (-4°F to ±482°F) Measurement -20°C to ±250°C (-4°F to ±482°F) Accuracy -20°C to ±250°C (-4°F to ±482°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max/min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected aparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images			
Spatial resolution (IFOV) 2.6 mrad F-number 1.5 Image frequency 9 Hz Focus Focus free Detector data			
Production of each of the second se			
Image frequency 9 Hz Focus Focus free Detector data Focal plane array (FPA), uncooled microbolometer Spectral range 7.5–13 µm Image presentation Image presentation Display 3.0 in: 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement Object temperature range Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (53.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F) and object temperature 10°C to 35°C (+50°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max/min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Cool radaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac dvice Power system<			
Focus Focus free Detector data Focal plane array (FPA), uncooled microbolometer Spectral range 7.5–13 µm Image presentation Jippiagy Display 3.0 in. 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (3.3 6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Eattery type Rechargeable Li Ion battery			
Detector data Focal plane array (FPA), uncooled microbolometer Spectral range 7.5–13 µm Image presentation Image presentation Display 3.0 in. 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy 2°C (53 6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and included Diat communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Eatlery type Rechargeable Li Ion battery			
Detector type Focal plane array (FPA), uncooled microbolometer Spectral range 7.5–13 µm Image presentation 3.0 in. 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (-4°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Emissivity corection to 35°C (-4°F to 95°F) and object temperature above +0°C (+32°F) Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Eocal adaptation of units, language, date and time formats Storage of images Istandard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Eattery type Rechargeable Li Ion battery	Focus	Focus free	
microbolometer Spectral range 7.5–13 μm Image presentation Join 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement Object temperature range Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max/min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Detector data		
Image presentation Display 3.0 in. 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Detector type		
Display 3.0 in. 320 × 240 color LCD Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max/min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Cocal adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included Pata communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Rechargeable Li lon battery	Spectral range	7.5–13 μm	
Image adjustment Automatic adjust/lock image Measurement -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Emperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Local adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Image presentation		
Measurement Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Storage of images Local adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included Poter system USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Display	3.0 in. 320 × 240 color LCD	
Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature above +0°C (+32°F) and object temperature above +0°C (+32°F) Measurement analysis Exercise Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Image adjustment	Automatic adjust/lock image	
Object temperature range -20°C to +250°C (-4°F to +482°F) Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature above +0°C (+32°F) and object temperature above +0°C (+32°F) Measurement analysis Exercise Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Magsurement		
Accuracy ±2°C (±3.6°F) or ±2% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F) and object temperature above +0°C (+32°F) Measurement analysis Spotmeter Spotmeter Center spot Area Box with max./min. Emissivity correction Variable from 0.1 to 1.0 Emissivity table Emissivity table of predefined materials Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Color palettes Storage of images Black and white, iron and rainbow Storage of images Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery		-20°C to +250°C (-4°F to +482°F)	
SpotmeterCenter spotAreaBox with max./min.Emissivity correctionVariable from 0.1 to 1.0Emissivity tableEmissivity table of predefined materialsReflected apparent temperature correctionAutomatic, based on input of reflected temperatureSet-upEmissivity tableColor palettesBlack and white, iron and rainbowSet-up commandsLocal adaptation of units, language, date and time formatsStorage of imagesStandard JPEG, 14-bit measurement data includedFile formatsUSB Micro: Data transfer to and from PC and Mac devicePower systemEattery typeBattery typeRechargeable Li lon battery		$\pm 2^{\circ}$ C ($\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading, for ambient temperature 10°C to 35°C ($\pm 50^{\circ}$ F to 95°F) and	
AreaBox with max./min.Emissivity correctionVariable from 0.1 to 1.0Emissivity tableEmissivity table of predefined materialsReflected apparent temperature correctionAutomatic, based on input of reflected temperatureSet-upEmissivity table of predefined materialsColor palettesBlack and white, iron and rainbowSet-up commandsLocal adaptation of units, language, date and time formatsStorage of imagesStandard JPEG, 14-bit measurement data includedData communication interfacesUSB Micro: Data transfer to and from PC and Mac devicePower systemBattery typeBattery typeRechargeable Li lon battery	Measurement analysis		
Emissivity correctionVariable from 0.1 to 1.0Emissivity tableEmissivity table of predefined materialsReflected apparent temperature correctionAutomatic, based on input of reflected temperatureSet-upEnissivity tableColor palettesBlack and white, iron and rainbowSet-up commandsLocal adaptation of units, language, date and time formatsStorage of imagesStandard JPEG, 14-bit measurement data includedFile formatsStandard JPEG, 14-bit measurement data includedData communication interfacesUSB Micro: Data transfer to and from PC and Mac devicePower systemEachargeable Li lon battery	Spotmeter	Center spot	
Emissivity tableEmissivity table of predefined materialsReflected apparent temperature correctionAutomatic, based on input of reflected temperatureSet-upEmissivity table of predefined materialsColor palettesBlack and white, iron and rainbowSet-up commandsLocal adaptation of units, language, date and time formatsStorage of imagesStandard JPEG, 14-bit measurement data includedFile formatsUSB Micro: Data transfer to and from PC and 	Area	Box with max./min.	
Reflected apparent temperature correction Automatic, based on input of reflected temperature Set-up Evanowski stress Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images Evanowski stress File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Eattery type Battery type Rechargeable Li lon battery	Emissivity correction	Variable from 0.1 to 1.0	
temperature Set-up Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images Interformats File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Eattery type Battery type Rechargeable Li lon battery	Emissivity table	Emissivity table of predefined materials	
Color palettes Black and white, iron and rainbow Set-up commands Local adaptation of units, language, date and time formats Storage of images Interfaces File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Battery type Rechargeable Li lon battery	Reflected apparent temperature correction		
Set-up commands Local adaptation of units, language, date and time formats Storage of images Standard JPEG, 14-bit measurement data included File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Battery type Rechargeable Li lon battery	Set-up		
time formats Storage of images File formats Standard JPEG, 14-bit measurement data included Data communication interfaces Interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Color palettes	Black and white, iron and rainbow	
File formats Standard JPEG, 14-bit measurement data included Data communication interfaces USB Micro: Data transfer to and from PC and Mac device Power system Rechargeable Li lon battery	Set-up commands		
included Data communication interfaces Interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	Storage of images		
Interfaces USB Micro: Data transfer to and from PC and Mac device Power system Battery type Rechargeable Li lon battery	File formats		
Mac device Power system Battery type Rechargeable Li lon battery	Data communication interfaces		
Battery type Rechargeable Li Ion battery	Interfaces		
Battery voltage 3.7 V	Power system		
		Rechargeable Li Ion battery	

FLIR E8



P/N: 63903-0303

© 2014, FLIR Systems, Inc. #63903-0303; r. -/15419; en-US

Power system	
Battery operating time	Approx. 4 hours at +25°C (+77°F) ambient temperature and typical use
Charging system	Battery is charged inside the camera or in specific charger.
Charging time	2.5 hours to 90% capacity in camera. 2 hours in charger.
Power management	Automatic shut-down
AC operation	AC adapter, 90–260 VAC input, 5 VDC output to camera
Environmental data	
Operating temperature range	-15°C to +50°C (+5°F to +122°F)
Storage temperature range	-40°C to +70°C (-40°F to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity
EMC	 WEEE 2012/19/EC RoHs 2011/65/EC C-Tick EN 61000-6-3 EN 61000-6-2 FCC 47 CFR Part 15 Class B
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.)
Physical data	
Camera weight, incl. battery	0.575 kg (1.27 lb.)
Camera size (L \times W \times H)	244 × 95 × 140 mm (9.6 × 3.7 × 5.5 in.)
Color	Black and gray
Certifications	
Certification	UL, CSA, CE, PSE and CCC
Shipping information	
Packaging, type	Hard case
 Infrared camera Hard transport case Battery (2x) USB cable Power supply/charger with EU, UK, US and Battery charger User documentation CD-ROM Printed documentation FLIR Tools download card 	Australian plugs
Packaging, weight	2.95 kg (6.50 lb.)
Packaging, size	303 × 206 × 128 mm (11.9 × 8.1 × 5.0 in.)
EAN-13	4743254001015
UPC-12	845188004965
Country of origin	Estonia





P/N: 63903-0303

© 2014, FLIR Systems, Inc. #63903-0303; r. -/15419; en-US

Supplies & accessories:

- T911093; Tool belt
- T198528; Hard transport case FLIR Ex-series
- T198530; Battery
- T198531; Battery charger incl power supply
- T198532; Car charger
- T198534; Power supply USB-micro
- T198529; Pouch FLIR Ex and ix series
- T198533; USB cable Std A <-> Micro B
- T198583; FLIR Tools+ (license only)



