



F-Series

# FLIR F-SERIES

Thermal Security Cameras with IP and Analog Functionality

F-Series high-resolution thermal security cameras are fixed-site cameras that give you video and control over both IP and analog networks. F-Series cameras define the new standard of performance with five models that provide full 640 × 480 thermal resolution giving you up to 16 times as many pixels as their lower resolution counterparts for greater image detail, longer detection ranges, and better analytics performance than ever before.

## KEY FEATURES

- Sharper thermal images that provide greater scene detail; improves threat detection and alarm assessment capabilities
- Long-range threat detection; see smaller details from farther away
- Enhanced analytics performance; gives you more reliable feedback with fewer nuisance alarms
- Wider fields of view improve coverage without compromising range performance; optimize coverage efficiency while lowering overall installation cost
- Simultaneous IP and analog video outputs, along with IP and serial control interfaces for easy integration into IP or analog networks; use them in an existing analog environment, and migrate easily to a future IP network
- Sun-safe VOx uncooled thermal sensor technology; looking directly at the sun won't damage FLIR uncooled thermal security cameras
- Exchangeable camera cassettes allow for quick upgrade or repair of sensors and optics
- Open IP standards for plug-and-play integration; ONVIF compliant
- Streaming digital video available in H.264, MPEG-4, or M-JPEG formats



Invisible Intruder with standard daylight CCD camera



Intruder's heat signature can't be hidden from FLIR

## Specifications

Camera Model	F-Series		
Camera Platform Type	Fixed	Fixed	Fixed
<b>Thermal Camera Specs</b>			
Array Format (NTSC)	160 × 120	320 × 240	640 × 480
Detector Type	Long-Life, Uncooled VOx Microbolometer	Long-Life, Uncooled VOx Microbolometer	Long-Life, Uncooled VOx Microbolometer
Effective Resolution	19,200	76,800	307,200
Pixel Pitch	25 µm	25 µm	17 µm
Field Of View	24° × 20° (F-124; 9 mm) 17° × 14° (F-117; 13 mm) 12° × 10° (F-112; 19 mm)	48° × 39° (F-348; 9 mm) 34° × 28° (F-334; 13 mm) 24° × 19° (F-324; 19 mm) 13° × 10° (F-313; 35 mm) 7° × 5° (F-307; 65 mm) 4.6° × 3.7° (F-304; 100 mm)	45° × 37° (F-645; 13 mm) 25° × 20° (F-625; 25 mm) 18° × 14° (F-618; 35 mm) 12° × 10° (F-612; 50 mm) 10° × 8° (F-610; 65 mm) 6.2° × 5° (F-606; 100 mm)
Zoom	2x E-zoom	2x & 4x E-zoom	2x & 4x E-zoom
Spectral Range	7.5 µm to 13.5 µm	7.5 µm to 13.5 µm	7.5 µm to 13.5 µm
Focus Range	athermalized, focus-free	athermalized, focus-free	athermalized, focus-free
<b>Outputs</b>			
Composite Video NTSC or PAL	Standard	Standard	Standard
Video over Ethernet	Two independent channels of streaming MPEG-4, H.264, or M-JPEG	Two independent channels of streaming MPEG-4, H.264, or M-JPEG	Two independent channels of streaming MPEG-4, H.264, or M-JPEG
<b>Control</b>			
Point to point (stand alone)	Yes	Yes	Yes
Ethernet	Yes	Yes	Yes
Serial	RS-232/-422; Pelco D, Bosch	RS-232/-422; Pelco D, Bosch	RS-232/-422; Pelco D, Bosch
Network Enabled	Yes	Yes	Yes
Software Developer's Kit	Optional	Optional	Optional
External Analytics Compatible	Yes	Yes	Yes
<b>General</b>			
Weight	~10.2 lb (configuration dependent)	~10.2 lb (configuration dependent)	~10.2 lb (configuration dependent)
Dimensions (L,W,H)	18.1" × 5.5" × 6.3" (460 × 140 × 160 mm)	18.1" × 5.5" × 6.3" (460 × 140 × 160 mm)	18.1" × 5.5" × 6.3" (460 × 140 × 160 mm)
Input Voltage	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)	24 VAC (21-30 VAC) 24 VDC (21-30 VDC)
Power Consumption (Consult product manuals for details of power requirements)	24 VAC: 15 VA (max w/o heaters) 51 VA (max w/heaters)  24 VDC: 10 W (max w/o heaters) 46 W (max w/heaters)	24 VAC: 15 VA (max w/o heaters) 51 VA (max w/heaters)  24 VDC: 10 W (max w/o heaters) 46 W (max w/heaters)	24 VAC: 15 VA (max w/o heaters) 51 VA (max w/heaters)  24 VDC: 10 W (max w/o heaters) 46 W (max w/heaters)

### SANTA BARBARA

FLIR Systems, Inc.  
70 Castilian Drive  
Goleta, CA 93117  
USA  
PH: +1 805.690.5097

### PORTLAND

Corporate Headquarters  
FLIR Systems, Inc.  
27700 SW Parkway Ave.  
Wilsonville, OR 97070  
USA  
PH: +1 866.477.3687

### BELGIUM

FLIR Systems  
Luxemburgstraat 2  
2321 Meer  
Belgium  
PH: +32 (0) 3665 5100

### CHINA - SHANGHAI

FLIR Systems, Co., Ltd.  
K301-302, No.26 Lane  
168, Daduhe Road,  
Putuo District, Shanghai  
200062, P.R.China  
PH: +86-21-5169 7628

www.flir.com  
NASDAQ: FLIR

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US law is prohibited. Imagery for illustration purposes only. Specifications are subject to change without notice. ©2014 FLIR Systems, Inc. All rights reserved. (Updated 12/03/14)