FC-Series

FLIR
FC-SERIES R

Thermal imaging Cameras for Critical Equipment Monitoring

Fixed-mounted thermal imaging cameras like the FLIR FC-Series R can be installed almost anywhere to monitor your critical equipment and other valuable assets. It will safeguard your plant and measure temperature differences to assess the criticality of a given situation. The new FLIR FC-Series R features on-board, non-contact temperature measurement capabilities for

fire detection, safety, and thermal monitoring of equipment. FLIR FC-Series R allows you to see problems before they become costly failures, preventing downtime and enhancing worker safety.

EXCELLENT IMAGE QUALITY

All FC-Series R thermal imaging cameras contain an uncooled, maintenance-free Vanadium Oxide (VOx) microbolometer detector. Some models produce crisp thermal images of 640 x 480

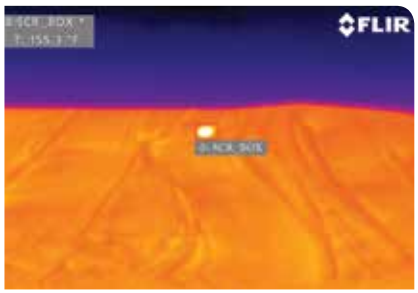
Pixes. Users that do not need this high image quality can choose for 320 x 240 pixels versions. Various lens options are available.

TEMPERATURE MEASUREMENT

FLIR FC-Series R are fully calibrated thermal imaging cameras that allow you to measure temperatures from a safe distance.

BUILT-IN ANALYSIS AND ALARM FUNCTIONS

FC-Series R comes standard with built-in analysis functions like spot, area measurement and difference temperature. Alarms can be set to go off as a function of analysis, internal temperature or digital input. The camera automatically sends analysis results, IR images and more as an e-mail on schedule or at alarm. Autonomous dispatch of files or e-mails, acting as an FTP- or SMTP-client is possible.



With the FC-Series R camera, you can monitor the temperature of a specific area. When the pre-set temperature has been reached or exceeded, you'll receive a notice by email, digital output or VMS alarm.

Specifications

Camera Model	FC-Series R	FC-Series R
Array Format (NTSC)	320 x 240	640 x 480
Detector Type	Long-Life, Uncooled VOx Microbolometer	
Effective Resolution	76,800	307,200
Pixel Pitch	25 µm	17 µm
Field of View	34° x 28° (FC-334R; 13 mm) 24° x 19° (FC-324R; 19 mm)	45° x 37° (FC-645R; 13 mm) 32° x 26° (FC-632R; 19 mm)
Zoom	Continuous E-zoom, up to 4X	
Spectral Range	7.5 µm to 13.5 µm	
Focus Range	Athermalized, focus-free	
Temperature Measurement		
Measurement Range	-10°C to 110°C	
Measurement Accuracy	+/-5°C or 5% of reading	
Outputs		
Composite Video NTSC or PAL	Yes; Hybrid system with IP & Analog video	
Video over Ethernet	Two independent channels of H.264, MPEG-4 & M-JPEG (see website for full details)	
Streaming Resolution	D1: 720x576, 4CIF: 704x576, Native: 640x512, Q-Native: 320x256, CIF: 352x288, QCIF: 176x144	
Control		
Ethernet	Yes	
External Analytics Compatible	Yes	
Network APIs	Nexus SDK for comprehensive system control and integration Nexus CGI for http command interfaces ONVIF 2.0 Profile S	
General		
Weight	4.0 lb (1.8 kg) w/o sun shield 4.8 lb (2.2 kg) w/sun shield	
Dimensions (L, W, H)	9.2" x 4.6" x 4.1" w/o sun shield 10.8" x 5.4" x 4.4" w/ sun shield	
Input Voltage (Consult product manuals for feature/ power requirements)	11-44 VDC (no lens heaters) 16-44 VDC (w/lens heaters) 14-32 VAC (no lens heaters) 16-32 VAC (w/lens heaters) PoE (IEEE 802.3af-2003) PoE+ (IEEE 802.3at-2009)	
Input Voltage	12–38 VAC 11–56 VDC PoE (IEEE 802.3af-2003) PoE+ (IEEE 802.3at-2009)	
Power Consumption (Consult product manuals for detailed power requirements)	24 VDC 5 W nominal 21 W peak (w/heaters) 24 VAC 8 VA nominal 29 VA peak (w/heaters)	
Approvals	FCC Part15, Subpart B, Class B CE: EN 55022 Class B	
Surge Immunity on AC Power Lines	EN 55024: 2010 and 55022: 2010 to 4.0kV on AC aux power lines	
Surge Immunity on Signal Lines	EN 55024: 2010 and 55022: 2010 to 4.0kV	
Environmental		
IP Rating	IP66 & IP67	
Operating Temperature Range	-50°C to 70°C (continuous operation) -40°C to 70°C (cold start)	
Storage Temperature Range	-55°C to 85°C	
Humidity	0-95% relative	
Shock	MIL-STD-810F "Transportation"	
Vibe	IEC 60068-2-27	
Image Optimization Features		
Thermal AGC Modes	Auto AGC, Manual AGC, Plateau Equalization AGC, Linear AGC, Auto Dynamic Detail Enhancement (DDE), Max Gain Setting	
Thermal AGC Region of Interest (ROI)	Default, Presets and User definable to insure optimal image quality on subjects of interest	
Image Uniformity Optimization	Automatic Flat Field Correction (FFC) Thermal and Temporal Triggers	

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