FLIR FC-Series ITS

Thermal imaging cameras for traffic monitoring

FLIR thermal imaging cameras are commonly integrated in traffic video detection and monitoring solutions. Needing no light at all to produce an image, they can be used for a wide variety of traffic applications.

HIGH IMAGE QUALITY

The FLIR FC-Series ITS cameras are equipped with a maintenance-free uncooled microbolometer detector that produces accurate images on which the smallest detail can be seen.

DIFFERENT LENS OPTIONS

FLIR offers the FC-Series ITS with various lens options. They are available with a 7.5-35 mm lens. Longer lenses offer a narrower field of view so that you can see farther.

EASY TO INSTALL

All FLIR FC-Series ITS thermal imaging cameras can be installed on existing infrastructure.

DESIGNED FOR USE IN HARSH ENVIRONMENTS

The FC-Series ITS cameras are extremely rugged systems. Their vital core is well protected, meeting IP66 requirements, against dust and water ingress. They operate between -50°C and +75°C. Perfect for all climates.

VIDEO ANALYTICS

Just like all thermal imaging cameras, the FLIR FC series ITS works perfectly in combination with video analytics.

Traffic monitoring

Automatic Incident Detection

KEY FEATURES

FC-SERIES ITS CAMERAS:

- NEED NO LIGHT TO OPERATE
- SEE IN TOTAL DARKNESS IN PRACTICALLY ALL WEATHER CONDITIONS
- CAN BE USED IN DAYLIGHT AS WELL
- REDUCE CHALLENGES WHICH VISIBLE CAMERA DETECTION SYSTEMS ARE FACED WITH SUCH AS SATURATION, REFLECTIONS, DYNAMIC SHADOWS AND FOG
- SERVE AS A SIMPLE PLUG AND PLAY REPLACEMENT FOR EXISTING DAYLIGHT CAMERAS
- ARE EXTREMELY AFFORDABLE AND EASY-TO-USE
- HYBRID IP AND ANALOG VIDEO OUT

FC-Series ITS: version specific specifications

Sensor resolution	320 x 240	640 x 480
Name/Focal length/ Field of view	FC-363 ITS: 7.5 mm lens – FOV : 63° (H) x 50° (V) FC-348 ITS: 9 mm lens – FOV : 48° (H) x 39° (V) FC-334 ITS: 13 mm lens – FOV : 34° (H) x 28° (V) FC-324 ITS: 19 mm lens – FOV : 24° (H) x 19° (V) FC-313 ITS: 35 mm lens – FOV : 13° (H) x 10° (V) FC-309 ITS: 35 mm lens – FOV : 9° (H) x 7° (V)	FC-690 ITS: 7.5 mm lens – FOV : 90° (H) x 69° (V) FC-669 ITS: 9 mm lens – FOV : 69° (H) x 56° (V) FC-645 ITS: 13 mm lens – FOV : 45° (H) x 37° (V) FC-632 ITS: 19 mm lens – FOV : 32° (H) x 26° (V) FC-618 ITS: 35 mm lens – FOV : 18° (H) x 14° (V)
Electronic zoom	up to 4x continuous	up to 4x continuous

Imaging Specifications

System Overview	FLIR FC-Series ITS
Imaging performance	24.6 mm (0.97 in.)
Detector type	Focal Plane Array (FPA), uncooled Vanadium Oxide (Vox) microbolometer
Spectral range	7.5 to 13.5µm
Thermal sensitivity	<50 mK f/1.0
Image frequency	NTSC: 30Hz or 7.5Hz PAL: 25Hz or 8.33Hz
Focus	Focus free, athermal lens
Image processing	Automatic Gain Control (AGC), Digital Detail Enhancement (DDE)
System features	
Automatic heater	Clears ice from windows Automatic deicing, tested according to MIL-STD-810F Method 521.1
Image presentation	
Video output	PAL or NTSC, analog
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
Power*	
Requirements	12-38 VAC 11-56 VDC
Consumption	5 W nominal at 24 VDC 8 VA nominal at 24 VAC 21 W peak at 24VDC, with heaters 29VA peak at 24VAC, with heaters
Environmental specifications	
Operating temperature range	-50°C to +70°C (Cold start: -40°C to +70°C)
Storage temperature range	-55°C to +85°C
Encapsulation	IP66 + IP 67 (IEC 60529)
Shock	Mil-Std-810F
Vibration	IEC 60068-2-27
Physical characteristics	
Camera Weight	1.8 kg without sunshield 2.2 kg with sun shield
Camera Size (L x W x H)	259 mm x 114 mm x 106 mm without sunshield 282 mm x 129 mm x 115 mm with sun shield
Shipping weight (camera + packaging)	2.8 kg
Shipping size (camera + packaging) (L x W x H)	366 mm x 188 mm x 178 mm

Approvals
EN55022:2010, Class A
EN 61000-3-3: 2008
EN 61000-3-2: 2006+A1: 2009 & A2 2009
EN55024:2010
EN51030-4: 2011
FCC Part 15, Subpart B, Class A
IP 66 + IP 67 (IEC 60529)
IEC 60068-2-27
Standard package
Thermal imaging camera, sun shield, operator manual, FLIR Sensors Manager single sensor CD

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