

P/N: 29420-200

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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.



Detector data	
Detector Type	FLIR Indium Antimonide (InSb)
Spectral Range	1.5 – 5.0 μm
Resolution	640 x 512
Detector Pitch	25 μm
Thermal Sensitivity/NETD	≤ 20 mK
Well Capacity	11.0 M electrons
Operability	$\geq 99.8\%$ ($\geq 99.95\%$ typical)
Sensor Cooling	Closed cycle rotary
Electronics	
Readout Type	Snapshot
Readout Modes	Asynchronous integrate while read Asynchronous integrate then read
Synchronization Modes	Sync-in, Sync-out
Image Time Stamp	Precision timestamp. Syncs to internal clock at bootup.
Integration Time	270 ns to 687 sec
Pixel Clock	355 MHz
Frame Rate (Full Window)	Programmable; 0.0015 Hz to 520 Hz
Subwindow Mode	Flexible windowing down to 32 x 4 (steps of 32 columns, 4 rows)
Dynamic Range	14-bit
On-Camera Image Storage	RAM (volatile): 16 GB, up to 26,000 frames full frame SSD (non-volatile): includes 512 GB compatible with >4 TB
Radiometric Data Streaming	Simultaneous Gigabit Ethernet (GigE Vision), Camera Link
Standard Video	HDMI
Command and Control	GigE, USB, RS-232, Camera Link

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Temperature Measurement	
Standard Temperature Range (with band matched optics)	-20°C to 300°C (-4°F to 572°F)
Optional Temperature Range (with band matched optics)	45°C to 600°C (ND1) 250°C to 2000°C (ND2) 500°C to 3000°C (ND3)
Accuracy	≤ 100°C ±2°C (±1°C typical) > 100°C ±2% of reading (±1% typical)
Ambient Drift Compensation (with factory cal)	Yes
Optics	
Camera f/Number	f/2.5
Available Lenses (Uses FLIR HDC Optics)	25 mm, 50 mm, 100mm
Close-up Lenses/Microscopes	No microscopes available
Lens Interface	FLIR HDC (4-tab bayonet)
Focus	Manual
Filtering	4-position motorized filter wheel, standard 1-inch filters
Image/Video Presentation	
Palettes	Selectable 8-bit
Automatic Gain Control	Manual, Linear, Plateau equalization, ROI, DDE
Overlay	Customizable
Video Modes	HD: 720p/50/59.9 Hz, 1080p/25/29.9 Hz, SD: NTSC, PAL
Digital Zoom	1x, 4x, 4:3
General	
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F)
Shock/Vibration	40 g, 11 msec ½ sine pulse/4.3 g RMS random vibration, all 3 axes
Power	24 VDC (< 50 W steady state)
Weight w/Handle, w/o Lens	6.35 kg (14 lbs)
Size (L x W x H) w/o Lens, Handle	249 x 158 x 147 mm (9.8 x 6.2 x 5.8 in.)
Mounting	<ul style="list-style-type: none"> • 2 x ¼ in. -20 • 1 x 3/8 in. -16 • 4 x #10-24 • Side: 3x ¼ in. -20 (each side)
Declaration of conformity	See: https://support.flir.com/resources/DoC

Supplies & accessories:

- 4218540; Lens 1-5 um 100 mm f/2.5 FPO Manual Bayonet
- 4218538; Lens 1-5 um 25 mm f/2.5 FPO Manual Bayonet
- 4218539; Lens 1-5 um 50 mm f/2.5 FPO Manual Bayonet
- T300385; Lens 3-5 um Macro 50 mm f/2.5 MW FPO Manual Bayonet
- 4227599; FLIR Science Camera Power Supply
- 4233062; Cooled Science A and X Camera Microscope Stand
- 4232535; FLIR Research Studio, Professional Edition - 1 Year Subscription (online activation)
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- 4224157; FLIR Science Camera SDK
- 4216760; FLIR Science File SDK





