

P/N: 29443-203

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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 | |
|------------------------------------|--|
| Detector Type | FLIR Indium Antimonide (InSb) |
| Spectral Range | 3.0 – 5.0 μm |
| Resolution | 1280 x 1024 |
| Pixel Size (square) | 12 μm |
| Thermal Sensitivity/NETD (typical) | ≤ 30 mK (≤ 25 mK typical) |
| NEI (typical) | N/A |
| Noise Floor (typical) | N/A |
| Operability | $\geq 99.5\%$ ($\geq 99.9\%$ typical) |
| Sensor Cooling | Linear Sterling Cooler |

| Electronics | |
|----------------------------|---|
| Readout Type | Snapshot |
| Readout Modes | Asynchronous integrate while read Asynchronous integrate then read |
| Synchronization Modes | Sync In, Sync Out |
| Image Time Stamp | Yes |
| Integration Time | 480 ns to ~Full Frame |
| Pixel Clock | 100 MHz |
| Frame Rate (Full Window) | Programmable; 0.0015 Hz to ~45 Hz (GigE), 60 Hz (CXP) |
| Subwindow Mode | Flexible windowing down to 32 x 4 (steps of 32 columns, 4 rows) |
| Dynamic Range | 14-bit |
| On-Camera Image Storage | None |
| Radiometric Data Streaming | Gigabit Ethernet (GigE Vision), CoaXpress |
| Standard Video | SDI |
| Command and Control | GenICam (GigE, CXP), RS-232 |

| Temperature Measurement | |
|---|--|
| Standard Temperature Range (with band matched optics) | -20°C to 350°C (-4°F to 662°F), -10°C for microscopes |
| Optional Temperature Range (with band matched optics) | 45°C - 600°C (ND1) 250°C – 2000°C (ND2) 500°C – 3000°C (ND3) |



FLIR A8583 (f/4.0, 3.0-5.0 μm)

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| Temperature Measurement | |
|---|--|
| Accuracy | $\leq 100^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($\pm 1^{\circ}\text{C}$ typical), $> 100^{\circ}\text{C} \pm 2\%$ of reading ($\pm 1\%$ typical) |
| Ambient Drift Compensation (with factory cal) | Yes |
| Optics | |
| Camera f/Number | f/4.0 |
| Available Lenses | Manual (3-5 μm): 17 mm, 25 mm, 50 mm, 100 mm, 200 mm Motorized (3-5 μm): 17 mm, 25 mm, 50 mm, 100 mm, 200 mm |
| Close-up Lenses/Microscopes | 1X, 3X |
| Lens Interface | FLIR FPO-M (4-tab bayonet, motorized) |
| Focus | Motorized (compatible w/ manual) |
| Filter Holder (Warm) | 4-position motorized filter wheel (1 inch diameter filters) |
| Standard Video Presentation | |
| Palettes | Selectable 8-bit |
| Automatic Gain Control | Manual, Linear, Plateau equalization, DDE |
| Overlay | Fixed configuration, can be turned off |
| Video Modes | SDI: 720p@50/59.9 Hz, 1080p@25/29.9 Hz |
| Standard Video Zoom | automatic, variable |
| General | |
| Operating Temperature Range | -20°C to 50°C (-4°F to 122°F) |
| Shock/Vibration | 40 g, 11 msec $\frac{1}{2}$ sine pulse/4.3 g RMS random vibration, all 3 axes |
| Power | 24 VDC (< 24 W steady state) |
| Weight w/o Lens | 3.4 kg (8.5 lbs) |
| Size (L x W x H) w/o Lens | 226 x 117 x 135 mm (8.9 x 4.6 x 5.3 in) |
| Mounting | 2 x $\frac{1}{4}$ " -20 tapped holes 1 x $\frac{3}{8}$ " -16 tapped hole 4 x 10-24 tapped holes |
| Export Classification | ECCN 6A003.b.4.a |

Supplies & accessories:

- 4215502; Lens 3-5 μm 100 mm f/2.5 HDC Bayonet
- 4215423; Lens 3-5 μm 17 mm f/2.5 HDC Bayonet
- 4215504; Lens 3-5 μm 200 mm f/2.5 HDC Bayonet
- 4215425; Lens 3-5 μm 25 mm f/2.5 HDC Bayonet
- 4215500; Lens 3-5 μm 50 mm f/2.5 HDC Bayonet
- 4214995; Lens 3-5 μm , 1X microscope, f/2.5 HDC Bayonet
- 4219797; Lens 3-5 μm , 3X microscope, f/2.5 HDC Bayonet
- 4216408; Motorfocus 17 mm lens, 3.0-5.0 μm , f/2.5 (4-Tab Motorized FPO Bayonet)
- 4216410; Motorfocus 25 mm lens, 3.0-5.0 μm , f/2.5 (4-Tab Motorized FPO Bayonet)
- 4216412; Motorfocus 50 mm lens, 3.0-5.0 μm , f/2.5 (4-Tab Motorized FPO Bayonet)
- 4216414; Motorfocus 100 mm lens, 3.0-5.0 μm , f/2.5 (4-Tab Motorized FPO Bayonet)
- 4216416; Motorfocus 200 mm lens, 3.0-5.0 μm , f/2.5 (4-Tab Motorized FPO Bayonet)
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