

P/N: 29443-201

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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 A8581 (f/2.5, 3.0-5.0 μm)

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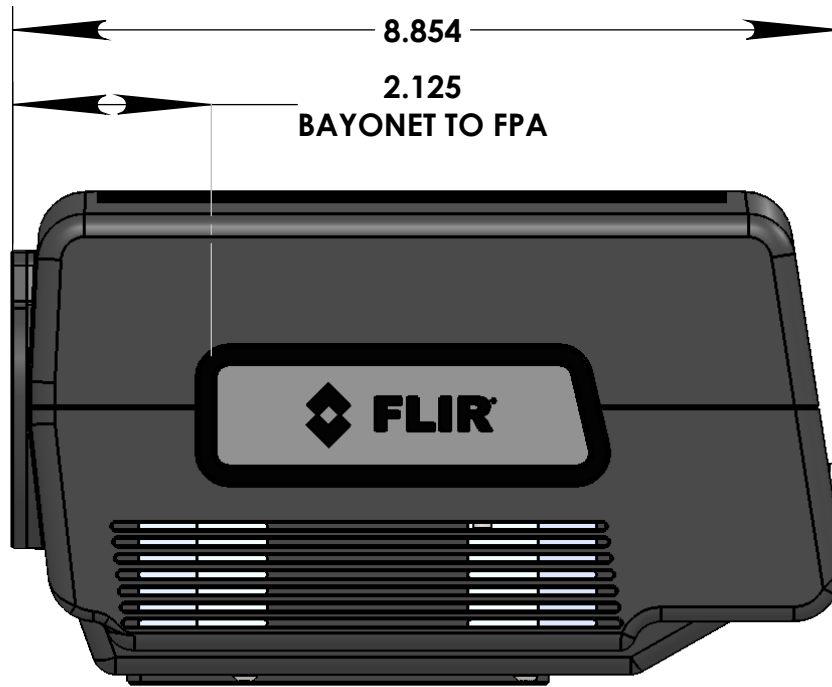
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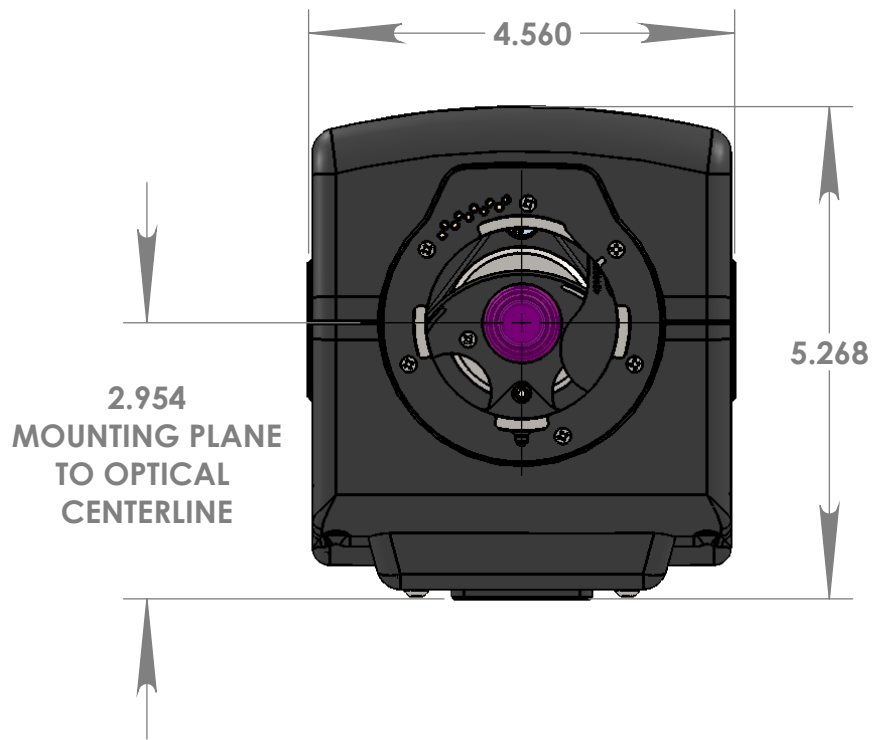
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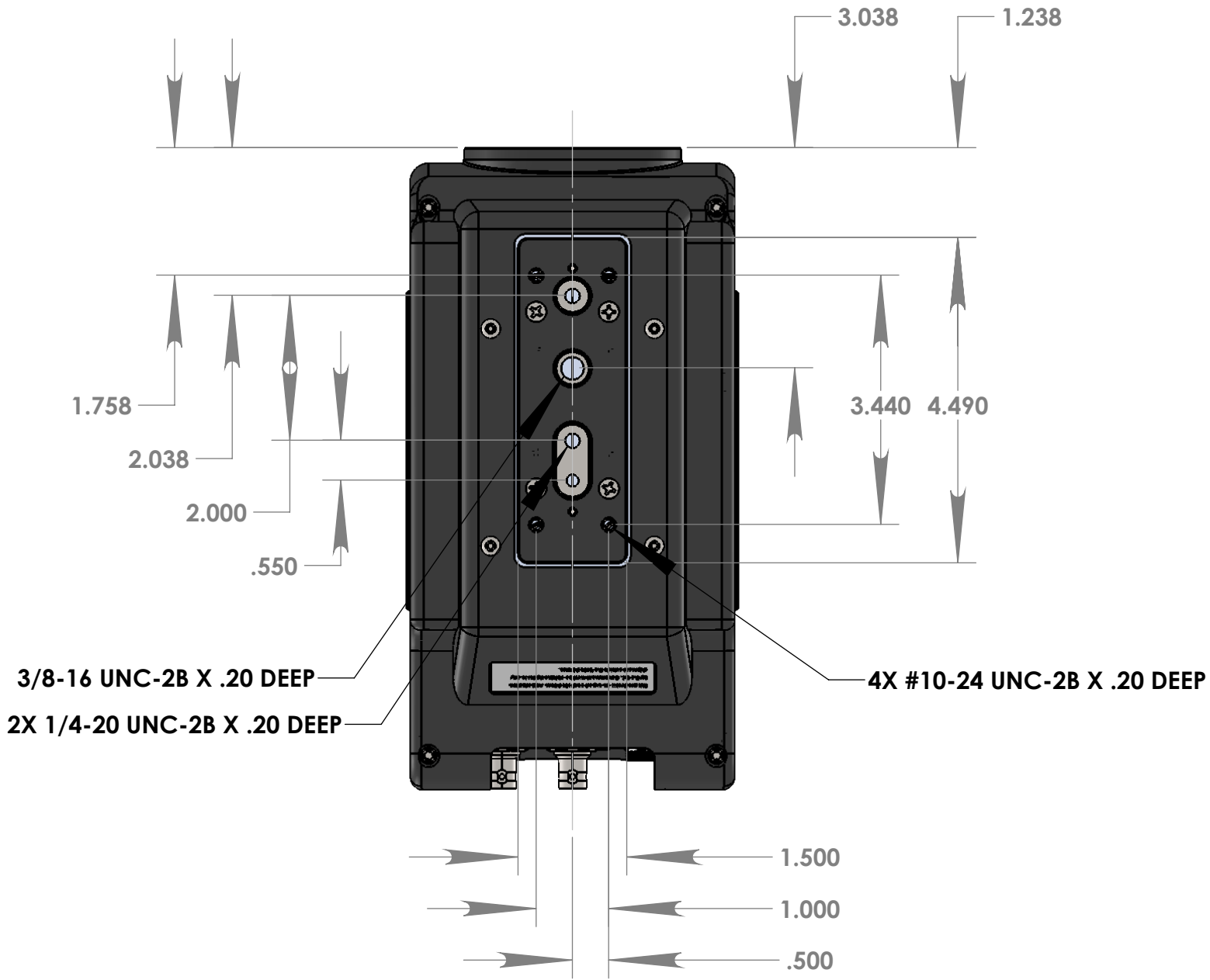
Temperature Measurement	
Accuracy	$\leq 100^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($\pm 1^{\circ}\text{C}$ typical), $> 100^{\circ}\text{C} \pm 2\%$ of reading ($\pm 1\%$ typical)
Ambient Drift Compensation (with factory cal)	Yes
Optics	
Camera f/Number	f/2.5
Available Lenses	Manual (3-5 μm): 17 mm, 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)
- 4220499; FLIR Research Studio - 1 Year Subscription (online activation)
- 4220500; FLIR Research Studio - Perpetual License (online activation)
- 4220646; FLIR Research Studio - Perpetual License (USB dongle)









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May 13, 2020 Niceville, Florida

CE Declaration of Conformity – EU Declaration of Conformity

Product: FLIR A8500-series (Saturn platform)

Name and address of the manufacturer:

FLIR Systems, Inc.
4579 E Hwy 20
Suite 101
Niceville, FL 32578

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The objects of the declaration:

FLIR A8580-series (FLIR part numbers 29443-2xx)
FLIR A8580 SLS-series (FLIR part numbers 29444-2xx)

The objects of the declaration described above is in conformity with the relevant Union harmonization legislation:

Directives:

Directive	2015/863/EU	RoHS
Directive	2014/30/EU	Electromagnetic Compatibility

Standards:

Emission	EN 61000-3-2:2014	EMC Limits for harmonic current emissions
	EN 61000-3-3:2013	EMC Limitation of voltage changes
	EN 55032:2012/AC:2013	EMC of multimedia equipment – Emissions requirements
	EN 55035:2017	EMC of multimedia equipment – Immunity requirements

FLIR Systems, Inc.

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