

FLIR RS6780 InSb MWIR (f/4.0, 3.0-5.0 μm) Continuous Metric Zoom – Fully enclosed

P/N: 29445-280

Copyright

© 2022, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

Document identity

Publ. No.: 29445-280 Commit: 84381 Language: Modified: 2022-04-05 Formatted: 2022-04-05

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.



Specifications	
Model	FLIR RS6780
Detector type	FLIR indium antimonide (InSb)
Spectral range	3.0 – 5.0 μm
Resolution	640 × 512
Detector pitch	15 μm
Thermal sensitivity/NETD	27 mK typical
Operability	≥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, Tri-Level Sync, IRIG, Lock-in
Image time stamp	Internal precision timestamp, IRIG-B AM decoder, TSPI accurate
Trigger modes	Trigger in, header based
Minimum integration time	480 ns
Pixel clock	50 MHz
Frame rate (full window)	Programmable; 0.0015 Hz to 125 Hz
Subwindow mode	Flexible windowing down to 16×4 (steps of 16 columns, 4 rows)
Dynamic range	14-bit
On-camera image storage	None
Radiometric data streaming	Gigabit Ethernet (GigE Vision), CoaXPress Single Link 1.1
Standard video	SDI
Command and control	GigE, CoaXPress (GenICam protocol supported over GigE or CXP), RS-232
Temperature measurement	
Standard temperature range	50 mm - 250 mm lens, only:
	 0°C to 350°C (32°F to 662°F)
Optional temperature range	50 mm - 250 mm lens, only:
	 Up to 3000°C (5432°F) using ND filters
Accuracy	≤100°C/212°F: ±2°C (±1°C typical) >100°C/212°F: ±2% of reading (±1% typical)
Ambient drift compensation	Yes, with factory calibration



FLIR RS6780 InSb MWIR (f/4.0, 3.0-5.0 μm) Continuous Metric Zoom – Fully enclosed

P/N: 29445-280

© 2022, FLIR Systems, Inc. #29445-280; r. 84381;

Optics	
Camera f/Number	f/4.0
Lenses	 50 mm – 250 mm continuous metric zoom – low latency metadata 150 mm – 750 mm, with 3x afocal lens (optional attachment)
Lens cover	Optional, motorized
Focus	Motorized FOV/focus
Filtering	3-position motorized filter wheel (1-inch diameter filters, factory installed)
Image/Video Presentation	
Palettes	Selectable 8-bit
Automatic gain control	Manual, Linear, Plateau equalization, DDE
Overlay	Customizable (ability to toggle off)
Video modes	SDI: 720p @ 50/59.9, 1080p @ 25/29.9, 480i @ 60 Hz, 576i @ 50 Hz
Digital zoom	1×, Auto (best fit), Off
General	
Operating temperature range	-20°C to 50°C (-4°F to 122°F)
IP rating	IP65
Power	24 VDC (< 24 W steady state)
Weight (without motorized lens cover)	 Without 3x afocal lens: 12.7 kg (28 lb) With 3x afocal lens: 16.8 kg (37 lb)
Size (L × W × H)	 Without 3x afocal lens: 544 × 178 × 214 mm (21.4 × 7.00 × 8.42 in) With 3x afocal lens: 726 × 243 × 241 mm (28.6 × 9.58 × 9.48 in)
Mounting	$5 \times \frac{1}{4}$ in20 tapped holes $2 \times \frac{3}{6}$ in16 tapped holes
Export classification	ECCN 6A003.b.4.a
Declaration of conformity	See: https://support.flir.com/resources/DoC

Supplies & accessories:

- 2412-370; FLIR RS6780 3x afocal attachment lens (150-750 mm)
- 2492-300; FLIR RS6780 Motorized lens cover



В