

The Griffin HD8 is a high-definition format (1280x720), cryocooled camera core featuring Attollo Engineering Strained Layer Superlattice (SLS) wideband detector material (1-5.2 μm). The Griffin HD8 captures snapshot MWIR imagery using Attollo Engineering's high-performance Strained SLS detector material and an 8 μm pixel enables more pixels on target with a short focal length optic. The Griffin sensor is designed specifically to support broadband imaging along with day and night laser see-spot capabilities. The Griffin HD8 MWIR Core is built for low SWaP applications and offers a significant opportunity for cost-savings at the system level compared to competing MWIR cameras. This new miniature camera is ideal for small gimbal integration as well as use in SWaP-constrained handheld and soldier-carried systems.



1280x720 with a 8 μm pixel Camera Core

Highlights

- High Operating Temperature SLS Detector Technology
- Small, 8 μm Pixel Pitch
- High Sensitivity Imaging and Laser See-Spot Capabilities
- In-Camera Imaging Processing
- Weighs less than 250 grams and displaces 166 cm³

Applications

- Small gimbals and SUAS
- MWIR 3 μm to 5.2 μm
- MWIR w/SWIR see-spot 1.0 μm to 5.2 μm
- Machine vision
- Precision agriculture
- Gas leak detection
- Microscopy
- Medical – Tissue analysis
- Structural Non-destructive Fatigue assessment
- Hyperspectral Imaging
- Security/Surveillance
- Range-gated imaging
- Covert illuminated imaging
- Laser designator imaging and decode*
*with separate Attollo laser event detector module



Griffin-HD8 MWIR Camera

The Griffin is designed and manufactured in Attollo's 34,000 ft² facility in Camarillo, California. Attollo specializes in sensors that combine infrared and laser imaging as well as standard and custom IDCA designs for your applications – 5" and 7" gimbals, man portable, pan and tilt.

Specifications

Parameter	Value	Comments
Format	1280 x 720	
Pixel Pitch	8 μ m	
Well capacity	Low gain: 3.3 Me- High gain: 300 ke-	
Wavelength band	3.6 – 5.2 μ m	1 – 5.2 μ m available
NEDT	< 35 mK	T=300K, F/3, 70% well fill
Operability	\geq 99.5%	
Max Frame Rate	240 Hz	Option: 16 outputs: 500 fps (not supported by std LCC)
F/#	F/2.5, F/3, F/4	
Cold Shield Height	25 mm 19.4 mm	
Electronics	Parallel Camera Link USB/C MIPI	
Image Processing	Non-Uniformity Correction Auto Gain and Contrast Bad Pixel Replacement	
Volume	166 cm ³	
Weight	240 grams	
Power	< 5W steady state < 8 W peak	Peak power during cooldown
Cool Down Time	< 4 min from 23C	

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