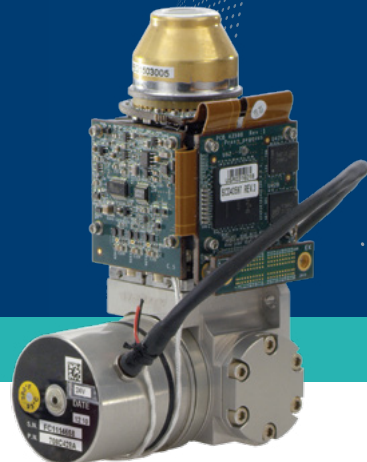




Pelican-D LW

640 x 512, 15 μ m, T2SL based
LWIR Digital IDCA

Defense Applications



General Description

PELICAN-D LW is a 640x512 elements, 15 μ m pitch, Type-2 SuperLattice (T2SL) technology based 2D Long Wave Infrared (LWIR) digital IDCA. The new ROIC outputs digital signal, similarly to SCD's previous digital detectors: Sebastian-320, Sebastian-480, Sebastian-640, Pelican-D, Hercules, and Blackbird.

Pelican-D LW is available in the same configurations as the standard (MW) Pelican-D, with a large variety of cold shield apertures and cooler types. The proximity board provides the FPA timing and sensitive power supplies. Camera-Link interface highly simplifies the integration of the detector to the system.

Applications

- Fire control / MBT sight
- Weapon sight
- MWS/IRST
- Payloads
- Security & Surveillance

Main Features

- High frame rate (360Hz at full window)
- Camera-Link interface
- Bi-directional scan
- Integrate-Then-Read and Integrate-While-Read Integration modes



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Typical Specifications

Parameter	Value
Format	640x512
Pitch	15µm
T2SL cut-off wavelength	9.3µm
Quantum Efficiency	>50%
Operability	>99.5%
Integration modes	ITR, IWR
Pixel capacity	6 Me-
Maximum frame rate at full window	360 F/S @ 13 BIT resolution
Power dissipation	<120mW @ 360 Frame/Sec
Readout Direction	Top-down / Bottom-up
Readout mode	Normal / Dilution
Windowing	Flexible, at 2 rows steps
NETD	15mK* @ 65% Well Fill capacity, 30Hz
Residual Non Uniformity	<0.04% STD/DR @ 10-90% Well Fill capacity
Response uniformity	<2.5% STD/DR

Specifications are subject to changes without further notice

* By averaging 8 frames at detector proxy level