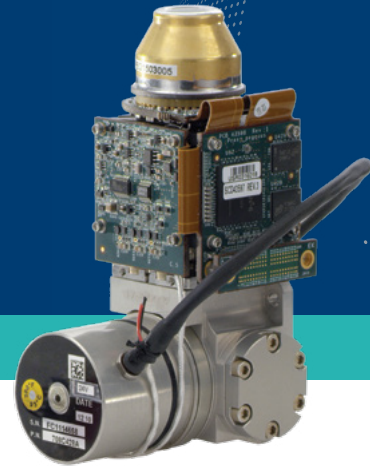




Pelican-D LW

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



General Description

Pelican-D LW, provides a high performance alternative to conventional MCT LWIR detectors.

Pelican-D LW is a LWIR 640 x 512 element, 15 μ m pitch, Type-2 SuperLattice (T₂SL) detector.

Pelican-D LW is available in the same configuration as the standard (MWIR) 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 simplifies integration of the detector to the system.

Applications

- Fire control / MBT sight
- Weapon sight
- Missile Warning System (MWS)
- Infrared Search & Track (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





Typical Performance

Parameter	Value
Format	640 x 512
Pitch	15µm
T2SL cut-off wavelength	9.3µm
Cold Shield F#	F/1.2 standard, F/2.7 optional
Quantum Efficiency	>50%
Operability	>99.5%
Integration modes	ITR, IWR
Pixel capacity	6 Me-
Maximum frame rate at full window	up to 360 F/S @ 13 BIT resolution
Power dissipation	<120mW @ 360 Frame/Sec
Readout Direction	Top-down / Bottom-up
Readout mode	Normal / Dilution
Windowing	Flexible, in 2 row steps- 2-8 rows
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

* By averaging 8 frames at detector proxy level

Specifications are subject to change without notice