

Pelican-D

The PELICAN-D is a 640 x 512 element, 15 μ m pitch, Mid-Wave Infrared (MWIR) Digital Integrated Detector Cooler Assembly (IDCA). Available in various configurations, the Pelican-D offers sensing materials like InSb, XBn, and T2SL, accompanied by a wide range of cold shield apertures and cooler types. Its proximity board facilitates the FPA timing and sensitive power supplies. Moreover, the Camera Link interface greatly eases the integration of the detector into systems. SCD remains committed to standing by our customers, ensuring they have access to the most suitable solutions for their needs.



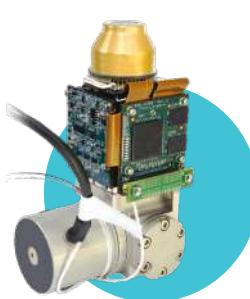
Main Features

- High frame rate (350Hz at full window)
- Camera link interface
- Fully digital Readout Integrated Circuit (ROIC) based on CMOS process
- Integration modes: integrate-then-read and integrate-while-read



Applications

- Long-Range Surveillance
- Armored Fighting Vehicle (AFV)
- Commander/Gunner Sights
- Airborne Intelligence, Surveillance, and Reconnaissance (ISR)
- Remote Weapon Station Sights
- Missile Approach Warning Systems (MAWS)



Integral rotary 

Integral rotary high reliability 

Technology	InSb	XBn		T2SL
DDC	Pelican-D	HOT Pelican D	Kinglet	Pelican-D LW
Detector format	640 x 512, 15µm pixel			
Cooler options				
Spectral band	3.6-5 µm (1-5.4µm optional)	3.6-4.2 µm (1-4.2µm optional)		LWIR cut off 9.3µm
Operating temperature	80K	150K		77K
Mission profile		High reliability	Low SWap	LWIR
Length (optical axis)	140mm	140mm	80mm	140mm
Weight	650g	650g	280g	750g
Cooler power consumption at 23 °C	12W	6W	2.5W	15W
Proximity electronics Power consumption	1.7W	1.7W	0.8W	3W
Maximal frame rate	350 Hz	350 Hz	100 Hz	350 Hz
NETD at 70% well fill	20mK	23mK		15mK (65%, 30Hz)

Advanced ROIC functionality

Widowing

