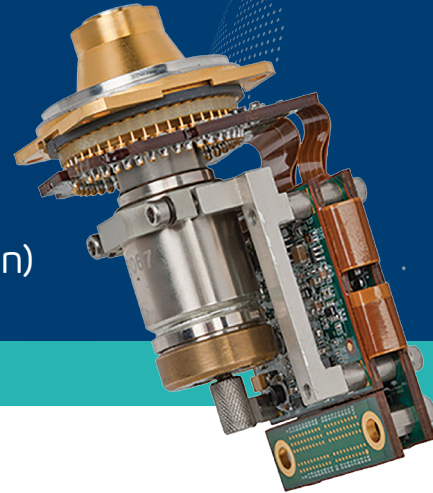




Pelican-D JT

640 x 512 InSb Digital IDCA (15 μ m)(Fast cool down)

Defense Applications



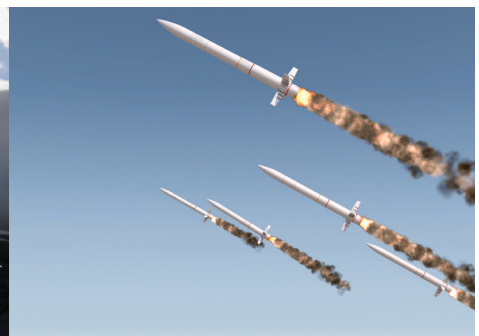
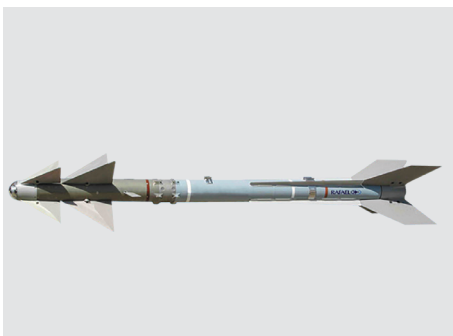
General Description

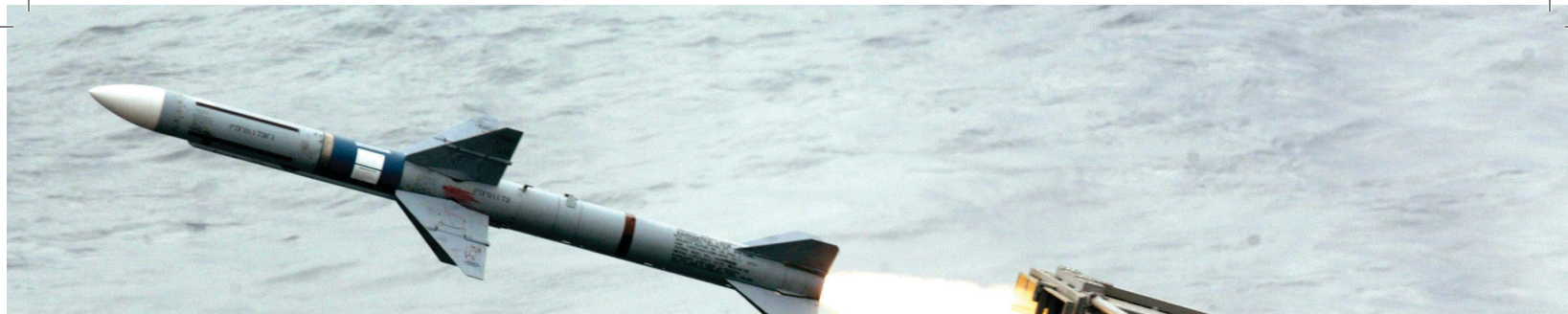
PELICAN-D JT is a MWIR detector for missile applications. The FPA is InSb based, having digital Readout Integrated Circuit (ROIC) in a format of 640 x 512 with 15 μ m pitch. Pelican-D JT has a unique structure of Dewar which enables very fast cool down time and hence quick mission readiness using Joule-Thomson (JT) cooler. Due to the low heat load on the focal plane, the detector achieves long mission duration.

The Detector can be supplied with a proximity board which provides Camera Link interface to the customer system. This highly simplifies the integration of the detector to the system.

Main Features

- High frame rate (300Hz at full format)
- Camera Link interface (optional)
- Typical cool-down time < 10sec
- High Non-Uniformity Correction stability after cool-down
- Support different types of cooling gases
- Compact structure (Dewar length <74 mm)





Typical Performance

Parameter	Typical Value
Format	640x512
Pitch	15µm
Integration modes	ITR IWR
Pixel capacity	5.8Me-, 1.5Me-
Digital resolution	Up to 15bit
Readout mode	Normal / Dilution
Readout Direction	Top-down / Bottom-up
Windowing	Flexible: at 2 rows steps
TYPICAL NETD	20mK @ 70% Well Fill capacity
Typical Residual Non Uniformity	0.05% STD/DR @ 10-90% Well Fill capacity
Cool-down time At a pressure of 7000 PSI and ambient temperature of 23C	<10 sec (Ar cooling gas) <18 sec (N2 cooling gas)

Specifications are subject to changes without further notice