

# Hot Pelican-D

XBN DDCE based on 640X512 15μm pitch "Pelican-D" FPA



### **General Description**

HOT Pelican-D has been developed specially to support very high reliability and low maintenance surveillance systems.

HOT Pelican-D provides identical mechanical and electrical ICD's to the standard (77K) Pelican-D, providing a form-fit-function performance option with lower power and higher reliability.

Hot Pelican-D is based on SCD's patented state-of-the-art XBn (InAsSb) technology which provides a very high FPA operating temperature of 150°K without compromising detector performance.

#### **Applications**

- 24/7 operation stations
- Unattended stations

#### Main Features

- High operating temperature FPA (of 150K) using XBN InAsSb
- Low power, Ricor K508N cooler
- MTBF > 20,000







## **Typical Perfromance**

Parameter	Value
Format	640 x 512 (windowing enabled)
Pitch	15µm
Detector Spectral Response	3.6-4.2µm (1.0-4.2 µm - window enabled notch upon request)
Cold Shield F#	F/4 and F/5.5 standard, others available
Typical FPA Temperature	150 K
Pixel Capacity	1Me- & 3Me- (selectable)
Operability	>99.5%
NETD	<23mK (@ 50% well fill, 300K background)
Residual Non-Uniformity	0.05% std/DR @ 20-80% well fill capcity
Response Uniformity	< 2.5% Std/DR
Frame rate @ full window	up to 120Hz
Cooler	Ricor K508N
Cooling Power Consumption	3.5W @ 23°C ambient
Cool down time	6 minutes @ 23°C ambient

<sup>\*</sup> By averaging 8 frames at detector proxy level Specifications are subject to changes without notice