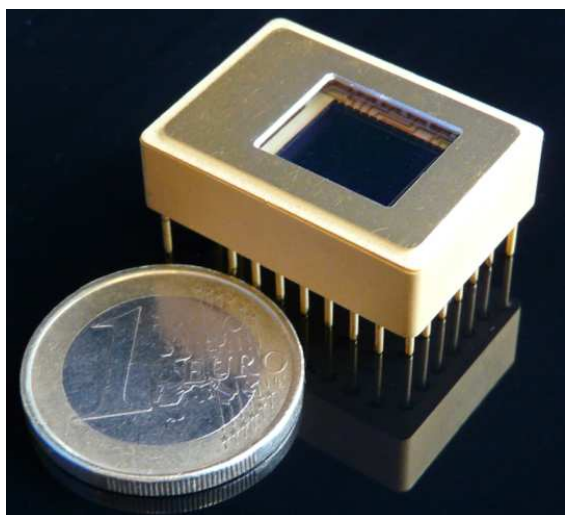


## Cactus SWIR

# High sensitivity InGaAs FPA assembly



### Applications

- Night vision
- Spatial / scientific imagery

### Features

- 320x256 pixel format
- 30µm pitch
- High sensitivity in 0.9 to 1.65µm spectrum
- High uniformity and operability
- Single stage TEC
- High speed capabilities, up to 15kHz
- Compact module

Figures are not contractual. III-V Lab reserves the right to make changes to the products or information contained herein without notice.



## Cactus SWIR



### Array specifications

Sensor type	InGaAs PIN-Photodiode
Waveband	0.9µm to 1.65µm or 0.4µm to 1.65µm
Resolution	320x256
Pitch	30µm
Quantum efficiency	>70% @ 1.5µm
Noise with ROIC	<150e- @high gain
Dark current	<1pA @20°C
Operability	>99.0%
Non-uniformity without correction	<15%

### ROIC features (ISC9809)

Integration time	>500ns
Maximum full frame rate @5MHz	110Hz / 201Hz / 346Hz (1 / 2 / 4 outputs)
Maximum frame rate @5MHz	15kHz (windowing mode)
Maximum Pixel Rate	10MHz
Gain mode	Two gain modes (1 and 20)
Output dynamic range	2.7V (1.6V - 4.3V)
Input bias	4.8V to 5.5V
Windowing, skimming	Yes
Temperature sensor output	Yes
External synchronization	Yes

### Packaging

Dimension (W x H x D)	27.5mm x 20mm x 8.7mm
Windows	Sapphire (11mmx13mm)
Number of pins	26 (18 for the detector)
Cooler	Single stage TE cooler (8.6V-5.7W)
Packaging characteristic	Hermetically sealed
Getter	Optional
Operational temperature	From -10°C to 70°C

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