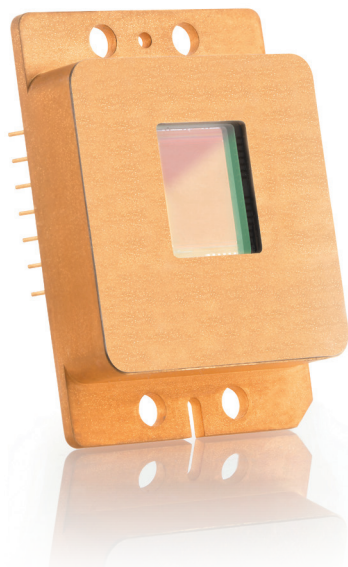


SNAKE SW

640 x 512 - 15 µm pitch - InGaAs

→ The new generation VGA sensor



Snake SW is a very low noise and high speed InGaAs sensor designed for the most demanding SW applications from 0.9 to 1.7 µm.

Snake SW is well-adapted to a large range of applications such as surveillance, airborne gimbals and various industrial and scientific applications.

Sofradir InGaAs technology provides outstanding performances in terms of sensitivity, noise, dark current and operability.

ARRAY FEATURES

Sensor type	InGaAs PIN - Photodiode
Format	640 x 512
Pixel pitch	15 µm x 15 µm
Spectral response	0.9 µm – 1.7 µm ^(*)

ROIC (READ-OUT INTEGRATED CIRCUIT)

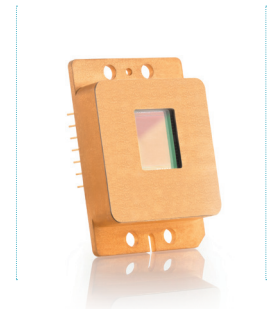
Integration type	Snapshot
Readout modes	IWR, ITR, NDR
Exposure time	1 µs to full frame
Maximum full frame rate @ 9 MHz	100 fps / 180 fps / 300 fps (2, 4 or 8 outputs)
Maximum frame rate @ 9 MHz	30 KHz (windowing mode)
Maximum pixel rate	18 MHz per output
Charge handling capacity	43 10 ³ e ⁻ (Gain 0) / 120 10 ³ e ⁻ (Gain 1) / 1.44 10 ⁶ e ⁻ (Gain 2)
Output signal swing	2.3 V
Input bias	1.8 V to 3.6 V
Windowing	Programmable (≥ 8 x 4 (2 output mode, 30 KFPS); ≥ 16 x 4 (4 output mode, 30 KFPS); ≥ 32 x 4 (8 output mode, 30 KFPS))
Temperature sensor output	Yes

SNAKE SW

SNAKE SW

640 x 512 - 15 μm pitch - InGaAs

→ The new generation VGA sensor for high performance SWIR applications.



SNAKE SW

TYPICAL PERFORMANCES

Quantum efficiency (QE)	> 70% from 1 μm to 1.6 μm (*)
Noise with ROIC	< 30 e- (Gain 0)
Dark current	30 fA @ 0.2 V detector bias
Array operability	99.9% (**)
Non uniformity without correction	4%

PACKAGING

Dimension (W x H x D)	42 mm x 30 mm x 9 mm
Windows	Sapphire
Number of pins	28 Standard 1/10 inch pin pitch
Cooler	Single stage TE Cooler
Packaging characteristics	Hermetically sealed
Operating temperature	- 40° C to 71° C
Storage temperature	- 40° C to 71° C

(*) Optional extended waveband : 0.4 μm to 1.7 μm / QE 40% @ 0.5 μm , 75% @ 0.8 μm , >80% from 0.9 μm to 1.6 μm

(**) The fraction of pixels with responsivity deviation less than +/- 30 % from the mean.

APPLICATIONS



Exclusive Distributor - North America

Technical characteristics described in this data sheet are for information only. They are not contractual and may change without prior notice.



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