

SNAKE SW MODULE

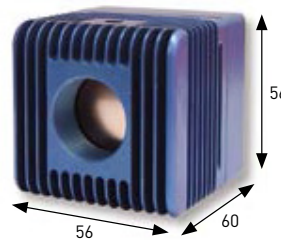
PRELIMINARY

640 x 512 - 15 μm pitch - InGaAs - with electronics

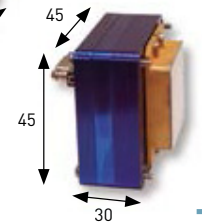
→ THE VERY LOW POWER
& ULTRA COMPACT SWIR
VGA MODULE

Snake SW Module is a very low power and ultra-compact SWIR VGA module. This plug-and-play solution is based on Sofradir's new generation InGaAs FPA assembly. The Snake SW Module provides simplified interfaces for easy integration into SWIR-based systems optimally driving the detector and performing standard image processing. The Snake SW Module is well adapted to a large range of applications such as surveillance, airborne gimbals and various scientific and machine vision applications.

WITH
PACKAGING



WITHOUT
PACKAGING



TYPICAL SPECIFICATIONS

• Format	640 x 512
• Detector Pixel pitch	15 μm x 15 μm
• Spectral response	0.9 μm - 1.7 μm

ELECTRO-OPTICAL TYPICAL PERFORMANCES

• Noise	35 e-
• Dark Current	< 0.15 pA
• Detector operability	> 99.5 %

ELECTRICAL PERFORMANCES & INTERFACES

• Exposure time	from 3 μs to frame period
• Capacity	43 Ke- (Gain 0) / 120 Ke- (Gain 1) / 1.44 Me- (Gain 2)
• Integration type	Snapshot
• Readout mode	ITR, IWR
• Frame rate	Max 100 Hz at full frame (faster with windowing)
• Video output	Camera Link®, Analog (PAL/CCIR)
• Communication port	Camera Link®, USB
• Image resolution	14 bits
• Frame synchronization	Internal or external through Camera Link® Control Signal
• On board data processing	2 point NUC, BPR, TEC management
• Power consumption	< 2 W (TEC OFF)
• Power supply	9 V _{DC} to 24 V _{DC}

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MECHANICAL FEATURES

Dimensions (W x H x D)	56 x 56 x 60 mm (with packaging) 45 x 45 x 30 mm (without packaging)
Weight	< 300g (with packaging) < 100g (without packaging)
Optical interface *	C-mount
Operating temperature	From -40°C to 71°C
EMC	Designed with state-of-the-art EMC rules : MIL STD-461
Environmental Conditions	MIL-STD- 810G

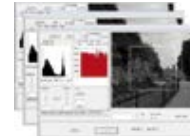
[*] Lens is not included

GUI FUNCTIONALITIES

Snake SW Module is delivered with a User-friendly GUI (Graphical User Interface) enabling its control.

The GUI main functionalities are:

- display image to PC/framegrabber
- optimization of gain and offset
- digital zoom, binning, freeze function, windowing
- manage detector settings, exposure time control
- automatic gain control
- definition of several ROIs (Regions of Interest)
- alphanumeric OSD (On Screen Display)



OPTIONS

- Possibility of extension to visible spectrum (0.4-1.7 μ m)
- With or without exterior housing

APPLICATIONS



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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