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.

**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 3μs 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
MECHANICAL FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W x H x D)</td>
<td>56 x 56 x 60 mm [with packaging]</td>
</tr>
<tr>
<td></td>
<td>45 x 45 x 30 mm [without packaging]</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 300g [with packaging]</td>
</tr>
<tr>
<td></td>
<td>&lt; 100g [without packaging]</td>
</tr>
<tr>
<td>Optical interface *</td>
<td>C-mount</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>From -40°C to 71°C</td>
</tr>
<tr>
<td>EMC</td>
<td>Designed with state-of-the-art EMC</td>
</tr>
<tr>
<td></td>
<td>rules: MIL-STD-461</td>
</tr>
<tr>
<td>Environmental Conditions</td>
<td>MIL-STD- 810G</td>
</tr>
</tbody>
</table>

*) 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 μm)
- With or without exterior housing

APPLICATIONS