DAPHNIS-XGA MW is the answer to your needs for VGA 15 µm systems performance improvements. Offering the same chip size, this product is suitable for all applications: airborne, naval, ground vehicles and portable.

DAPHNIS-XGA MW guarantees:
- COMPACTNESS
- EASY TRANSFER FROM 15 µm TO 10 µm
- HIGH RESOLUTION
- LONGER RANGE
- LARGER FIELD OF VIEW
- IMPROVED RELIABILITY

DAPHNIS-XGA MW takes full advantage of Sofradir latest HgCdTe technologies. It provides simplified interfaces for an easy and quick integration in your systems. The proxy board offers management and correction of the detector as well as digital output.

**ARRAY FEATURES**
- Format 1024 x 768
- Pixel pitch 10 µm x 10 µm
- Detector spectral response 3.4 µm – 4.9 µm
- FPA Operating Temperature 110 K typical

**ROIC (READ-OUT INTEGRATED CIRCUIT)**
- ROIC architecture Direct Injection input circuit
- ROIC functionalities Programmable integration time, anti-blooming, invert/revert; binning, snapshot operation, selectable read mode (IWR or ITR), programmable windowing
- Charge Handling capacity 0.7 Me-, 2.2 Me-, 4.4 Me-

**INPUT / OUTPUT**
- Board Power supply 6V<sub>DC</sub>
- Board Power dissipation 1.5W<sub>DC</sub> @20°C
- Data processing Bad Pixel Replacement (BPR) & Non Uniformity Correction (NUC)
- Video output 14 bits, CAMERALINK®
- Frame rate Up to 100 Hz full frame rate
**TYPICAL PERFORMANCES**

- **Mean NETD**: < 25 mK (293K, 50% well fill, 100 Hz)
- **Array operability**: > 99.8%
- **Non uniformity**: < 2.5% RMS (σ/mean, 293 K uncorrected performance)

<table>
<thead>
<tr>
<th>Option</th>
<th>RM2</th>
<th>RM3</th>
<th>RM4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOV</strong></td>
<td>f/2; f/4</td>
<td>f/2; f/4</td>
<td>f/2; f/4</td>
</tr>
<tr>
<td><strong>Cooler power supply</strong></td>
<td>34 V</td>
<td>24 V</td>
<td>30 V</td>
</tr>
<tr>
<td><strong>Regulated input power (</strong>)**</td>
<td>&lt; 3.5 W&lt;sub&gt;AC&lt;/sub&gt;</td>
<td>&lt; 4.5 W&lt;sub&gt;AC&lt;/sub&gt;</td>
<td>&lt; 5 W&lt;sub&gt;AC&lt;/sub&gt;</td>
</tr>
<tr>
<td><strong>Cool down input power (</strong>)**</td>
<td>&lt; 12 W&lt;sub&gt;AC&lt;/sub&gt;</td>
<td>&lt; 14 W&lt;sub&gt;AC&lt;/sub&gt;</td>
<td>&lt; 15 W&lt;sub&gt;AC&lt;/sub&gt;</td>
</tr>
<tr>
<td><strong>Cool down time</strong></td>
<td>5 min</td>
<td>4 min</td>
<td>3 min</td>
</tr>
<tr>
<td><strong>Cooler dimensions (mm)</strong></td>
<td>0.305 x L 82</td>
<td>Ø 46 x L 71</td>
<td>Ø 43.5 x L 78</td>
</tr>
<tr>
<td><strong>IDCA height (optical axis, mm)</strong></td>
<td>H &lt; 123.5</td>
<td>H &lt; 144</td>
<td>H &lt; 127</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>&lt; 0.45 kg</td>
<td>&lt; 0.57 kg</td>
<td>&lt; 0.57 kg</td>
</tr>
<tr>
<td><strong>Operating temperatures</strong></td>
<td>− 40°C / + 71°C</td>
<td>− 60°C / + 71°C</td>
<td>− 40°C / + 71°C</td>
</tr>
<tr>
<td><strong>Cooler MTTF order of magnitude</strong> (well depend on mission profile)</td>
<td>10 000 h</td>
<td>12 000 h</td>
<td>18 000 h</td>
</tr>
</tbody>
</table>

(\textit{**) \text{WAC} = at cooler pins AC input - \text{WDC} = at cooler C&CE DC input**}

**OPTIONS**

- Technical training and support
- Split cooler upon request

**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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