DAPHNIS-HD MW is the suitable product for all your applications requiring 16:9 HD format: airborne, naval, and ground vehicles. This new innovation of the smallest pixel pitch from Sofradir guarantees:

- COMPACTNESS
- HIGH RESOLUTION
- LONGER RANGE
- LARGER FIELD OF VIEW
- IMPROVED RELIABILITY

DAPHNIS-HD 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: 1280 x 720
- 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: Digital outputs; 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$_{DC}$
- Board Power dissipation: 1.5W$_{DC}$ @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
**DAPHNIS-HD MW**

1280 x 720 - 10 µm pitch - MCT

**HD 10 µm PITCH: THE BEST OFFER FOR COMPACT 16:9 FORMAT MWIR SYSTEMS**

**TYPICAL PERFORMANCES**

- **Mean NETD**< 20 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></th>
<th>RM2</th>
<th>RM3</th>
<th>RM4</th>
<th>Split cooler</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOV</td>
<td>f/2; f/4</td>
<td>f/2; f/4</td>
<td>f/2; f/4</td>
<td>f/2; f/4</td>
</tr>
<tr>
<td>Cooler power supply</td>
<td>34 V</td>
<td>24 V</td>
<td>30 V</td>
<td>8-12 V</td>
</tr>
<tr>
<td>Regulated input power (*)</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>
<td>&lt; 8 W&lt;sub&gt;AC&lt;/sub&gt;</td>
</tr>
<tr>
<td>Cooldown input power (*)</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>
<td>&lt; 20 W&lt;sub&gt;AC&lt;/sub&gt;</td>
</tr>
<tr>
<td>Cooldown time</td>
<td>5 min</td>
<td>4 min</td>
<td>3 min</td>
<td>5 min</td>
</tr>
<tr>
<td>Cooler dimensions (mm)</td>
<td>Ø 30.5 × L 82</td>
<td>0 46 × L 71</td>
<td>Ø 43.5 × L 78</td>
<td>≤ Ø 45 × L 119</td>
</tr>
<tr>
<td>IDCA height (optical axis, mm)</td>
<td>H &lt; 123.5</td>
<td>H &lt; 144</td>
<td>H &lt; 127</td>
<td>H &lt; 112</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 0.45 kg</td>
<td>&lt; 0.57 kg</td>
<td>&lt; 0.57 kg</td>
<td>&lt; 1.2 kg</td>
</tr>
<tr>
<td>Operating temperatures</td>
<td>- 40°C / + 71°C</td>
<td>- 40°C / + 71°C</td>
<td>- 40°C / + 71°C</td>
<td>- 40°C / + 71°C</td>
</tr>
<tr>
<td>Will depend on mission profile</td>
<td>10 000 h</td>
<td>12 000 h</td>
<td>18 000 h</td>
<td>40 000 h</td>
</tr>
</tbody>
</table>

(*) W<sub>AC</sub> = at cooler pins AC input - W<sub>CE</sub> = at cooler C&CE DC input

**OPTIONS**

- Technical training and support
- Cooler driving electronics

**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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