# DAPHNIS-HD MW

1280 x 720 - 10 µm pitch - MCT



→ HD 10 µm pitch: the best offer for compact 16:9 format MWIR systems.



### DAPHNIS-HD MW is the suitable product for all your applications requiring 16:9 HD format: airborne, naval, and ground vehicles.

This smallest pixel pitch innovation from Sofradir guarantees:

- HIGH RESOLUTION
- LONGER RANGE
- LARGER FIELD OF VIEW
- COMPACTNESS
- 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 data processing of the detector as well as digital output.

Format	1280 x 720
Pixel pitch	10 μm x 10 μm
Detector spectral response	3.7 μm – 4.8 μm
FPA Operating temperature	Up to 120 K

### **ROIC (READ-OUT INTEGRATED CIRCUIT)**

ROIC architecture	Inctionalities Programmable integration time, anti-blooming, invert/revert; binning, snapshot operation, selectable read mode (IWR or ITR), programmable windowing, high dynamique range		
ROIC functionalities			
Windowing modes			
Charge handling capacity	3 selectable gains: 0.7 Me-, 2.2 Me-, 4.4 Me-		

### **INPUT / OUTPUT**

**ARRAY FEATURES** 

Board Power supply	6V <sub>DC</sub>	
Data processing Bad Pixel Replacement (BPR) & Non Uniformity Correction (NUC)		
Video output 14 bits, CAMERALINK®		
Frame rate	Up to 85 Hz full frame rate	



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### TYPICAL PERFORMANCES

NETD	< 20 mK (293K, 50%	< 20 mK (293K, 50% well fill, 85 Hz)		
Array operability	99.8%	99.8%		
	RM2 / K563	RM3 / K508	RM4	
FOV	f/2; f/3; f/4	f/2; f/3; f/4	f/2; f/3; f/4	
Cooler power supply	12 V	24 V	12 V	
Regulated input power (*)	< 6.5 W <sub>DC</sub>	< 6.5 W <sub>DC</sub>	< 7.5 W <sub>DC</sub>	
Cooldown input power (*)	< 12 W <sub>DC</sub>	< 14 W <sub>DC</sub>	< 17 W <sub>DC</sub>	
Cooldown time @ 20°C	5 min	4 min	4 min	
Cooler dimensions (mm)	Ø 30.5 × L 82	Ø 46 × L 71	Ø 43.5 × L 78	
IDCA height (optical axis, mm)	H < 123.5	H < 144	H < 127	
Weight	< 0.55 kg	< 0.75 kg	< 0.75 kg	
Operating temperature	- 40° C to 71° C	- 40° C to 71° C	- 40° C to 71° C	

(\*) WDC = at cooler C&CE DC input

### OPTIONS

Technical training and support

Cooler driving electronics

### APPLICATIONS



#### **Exclusive Distributor - North America**



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