# SWAP-C LEO MW

640 x 512 - 15 µm pitch - improved MCT



SWap-C LEO MW optimizes the  $\underline{S}$ ize,  $\underline{W}$ eight and  $\underline{C}$ ost of your systems.

SWap-C LEO MW digital output detector is part of the LEO family specially designed for SWAP MWIR (3 - 5  $\mu m$ ) applications and take full advantage of Sofradir's state of the art technologies.



#### Compared to other LEO, SWap-C LEO MW will have the following direct benefits for your systems:

–15% on IDCA height	Higher system compactness
–20% on IDCA weight	Lower portable system weight for reduced soldier burden
Increased cost-effective manufacturing	For cost-driven systems

ARRAY FEATURES	
<ul><li>Format</li></ul>	640 x 512
Pixel pitch	15 μm x 15 μm
Detector spectral response	3.7 μm - 4.8 μm
<ul> <li>FPA Operating Temperature</li> </ul>	110 K typical

ROIC (READ-OUT INTEGRATED CIRCUIT)		
<ul> <li>Selection</li> </ul>	Serial electrical interface (driven by the proxy board)	
<ul> <li>ROIC architecture</li> </ul>	Snapshot operation, direct injection input circuit, selectable read mode (IWR or ITR)	
<ul> <li>ROIC functionalities</li> </ul>	Programmable integration time, anti-blooming, image invert / revert / inverse	
<ul> <li>Window modes</li> </ul>	640 x 512 / 640 x 480 / 512 x 512 or programmable	
<ul> <li>Charge handling capacity</li> </ul>	6.5 10 <sup>6</sup> e- (ITR mode), 5 10 <sup>6</sup> e- (IWR mode)	
<ul> <li>Signal outputs</li> </ul>	Digital, 14 bits, Cameralink	
Frame rate	Up to 60 Hz full frame rate	









## TYPICAL PERFORMANCES[\*\*]

	K562S
NETD	20 mK (293 K, f/5.5, 50% well fill, 60 Hz)
Array operability	99.9%
Non uniformity	2.5% RMS (σ/mean, 300 K uncorrected performance)
FOV	f/5.5
Regulated input power (all included)	5.2 WDC (*)
Cooldown input power	10.5 WDC (*)
Power supply	12 V
Cooldown time	4 min 30 s
Cooler dimensions	ø 28.4 x L 69mm (with acoustic pad)
IDCA height (optical) Axis	102.9mm
Weight	0.30 kg
Operating Temperatures	– 40° C / + 71° C

(\*) WDC = at cooler C&CE DC input (\*\*) Typical = Expected production mean value

#### **OPTIONS**

Technical training and support

## **APPLICATIONS**







Technical characteristics described in this data sheet are for information only. They are not contractual and may change without prior notice.

