

LEO MW

640 x 512 - 15 μm pitch - MCT



THE VGA 15 μm PITCH
MWIR DETECTOR WITH
A DIGITAL INTERFACE.

LEO MW is a compact detector specially designed for SWAP (optimised size, weight and power) MWIR (3-5 μm) applications. Thanks to its digital output, this product simplifies your interfaces and speeds up the development of your systems. This high-performance IDCA takes full advantage of Sofradir's state of the art technologies.



ARRAY FEATURES

• Format	640 x 512
• Pixel pitch	15 μm x 15 μm
• Detector spectral response	3.7 μm – 4.8 μm
• FPA Operating Temperature	Up to 120 K, 90 K typical

ROIC (READ-OUT INTEGRATED CIRCUIT)

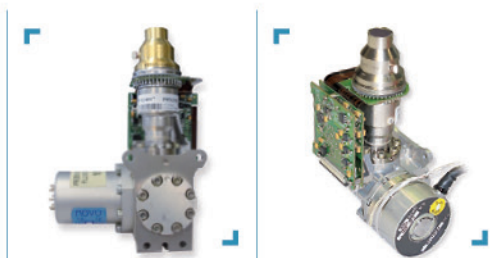
• Selection	Serial electrical interface (driven by the proxy board)
• ROIC architecture	Snapshot operation, direct injection input circuit, selectable read mode (IWR or ITR)
• ROIC functionalities	Programmable integration time, anti-blooming, image invert / revert / inverse
• Window modes	640 x 512 /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

LEO MW

640 x 512 - 15 μm pitch - MCT



THE VGA 15 μm PITCH
MWIR DETECTOR WITH
A DIGITAL INTERFACE.



ELECTRO-OPTICAL TYPICAL PERFORMANCES

Typical NETD	20 mK [293 K, f/5.5, 50 % well fill, 60 Hz]
Array operability	> 99.5 % typical
Non uniformity	< 5 % RMS (σ/mean , 300 K uncorrected performance)

	RM2	K563
FOV	f/4; f/5.5	f/4; f/5.5
Regulated input power (all included)	< 6 W _{DC} (*)	< 6 W _{DC} (*)
Cooldown input power	< 15 W _{DC} (*)	< 15 W _{DC} (*)
Power supply	9 V	12 V
Cooldown time	< 4 min 30 s	< 4 min 30 s
Weight	< 0.42 kg	0.37 kg
Operating Temperatures	- 40° C / + 71° C	- 40° C / + 71° C

(*) W_{DC} = at cooler C&CE DC input

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.

SOFRADIR HEADQUARTERS

43-47, rue Camille Pelletan
92290 Chatenay-Malabry - France
Phone + 33 1 41 13 45 30
Fax + 33 1 46 61 58 84

DEVELOPMENT AND PRODUCTION CENTER

Z.I. - BP 21
38113 Veurey-Voroize - France
Phone + 33 4 76 28 77 00
Fax + 33 4 76 53 85 97