





 $640 \times 512 - 15 \, \mu m - MCT$ 

Insch



Thanks to its wide spectral band, the Scorpio MW Broadband is designed to meet the requirements of machine vision hyperspectral applications and gas detection applications also.

A DEDICATED VGA MWIR

DETECTOR FOR INDUSTRIAL

APPLICATIONS



**HIGH IMAGE QUALITY** 



LARGE SPECTRAL BAND SENSITIVITY



RELIABILITY



MACHINE VISION

**GAS DETECTION** 





## REF 04/2023/01 - GARDENERS - LYNRED & Getty pictures - Printed in France Technical characteristics described in this data sheet are for information only. They are not contractual and may change without prior notice.





**WIDE SPECTRAL BAND** 



**RELIABILITY** 



## • A DEDICATED VGA MWIR DETECTOR FOR INDUSTRIAL APPLICATIONS ••

ARRAY FEATURES		
Detector spectral response	■ 1.5 μm to 6 μm	
FPA Operating temperature	<ul><li>Up to 110 K</li></ul>	
ROIC (READ-OUT INTEGRATED	CIRCUIT)	
Selection	Serial electrical interface	
ROIC architecture	<ul> <li>Snapshot operation, direct injection input circuit, selectable read mode (IWR or ITR)</li> </ul>	
ROIC functionalities	<ul><li>Programmable integration time</li><li>Anti-blooming</li></ul>	
Windowing modes	■ 640 x 512 / 640 x 480 / 512 x 512 or programmable	
Charge handling capacity	<ul> <li>6.4 10° e- (for 100% well fill and ITR mode)</li> <li>5 10° e- (for well fill and IWR mode)</li> </ul>	
Electrical dynamic range	■ 1.5 V	
Signal outputs	<b>4</b>	
Pixel output rate	<ul><li>Up to 10 MHz per output</li></ul>	
Frame rate	<ul> <li>Up to 120 Hz full frame rate</li> </ul>	
TYPICAL(*) PERFORMANCES		
NETD	■ 22 mK (293 K, 50% well fill, 100 Hz)	
Array operability	<b>9</b> 9.6%	
Non uniformity (DC level and responsivity)	<ul> <li>2.5% RMS (σ/mean, 293 K uncorrected performance)</li> </ul>	
	RM3	K508
FOV	f/2; f/3	f/2
Regulated input power (*)	< 7 W <sub>DC</sub>	< 7 W <sub>DC</sub>
Cooldown input power (*)	< 17 W <sub>DC</sub>	< 17 W <sub>DC</sub>
Power supply	24V	24V
Cooldown time	< 7min30s	< 7min30s
Cooler dimensions (mm)	Ø 46 x L71	Ø 46 x L71
Weight	< 570gr	< 570gr

[- 40°C; +71°C]

>10 000 h

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

Operating temperature

## OPTIONS

MTTF

Technical training and support

Demokit for easy image processing in lab







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[- 40°C; +71°C]

>10 000 h

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