

# SCORPIO BMW

640 x 512 - 15  $\mu\text{m}$  pitch - MCT



→ The broadband Mid-wave VGA 15  $\mu\text{m}$  pitch detector for scientific and industrial applications.

## APPLICATIONS

GAS DETECTION  
THERMOGRAPHY  
SCIENTIFIC



SCORPIO BMW a versatile broadband Mid-wave VGA 15  $\mu\text{m}$  pitch detector.

Thanks to its high sensitivity, SCORPIO BMW can be used as a broadband detector ranging from 1.5  $\mu\text{m}$  to 5  $\mu\text{m}$ , or with the integration of a customer application dedicated filter, in order to detect specific wavelengths.

SCORPIO BMW is the best choice to address a large range of scientific and industrial applications, such as thermography and gas detection.

SCORPIO BMW benefits from SCORPIO MW product range industrial maturity, guarantying best performances, excellent reliability and robustness in harsh environments

This high performance IDCA takes full advantage of Lynred's state of the art technologies.

## ARRAY FEATURES

Format	640 x 512
Pixel pitch	15 $\mu\text{m}$ x 15 $\mu\text{m}$
Detector spectral response	1.5 $\mu\text{m}$ - 5 $\mu\text{m}$
FPA Operating temperature	Up to 90 K

## ROIC (READ-OUT INTEGRATED CIRCUIT)

Selection	Serial electrical interface
ROIC architecture	Snapshot operation, direct injection input circuit, selectable read mode (IWR or ITR)
ROIC functionalities	Programmable integration time, anti-blooming
Windowing modes	640 x 512 / 640 x 480 / 512 x 512 or programmable
Charge handling capacity	6.5 $10^6$ e- (for 100% well fill and ITR mode) or 5 $10^6$ e- (for 100% well fill and IWR mode)
Electrical dynamic range	1.5 V
Readout noise	< 420 e-
Signal outputs	4
Pixel output rate	Up to 10 MHz per output
Frame rate	Up to 120 Hz full frame rate

SCORPIO BMW

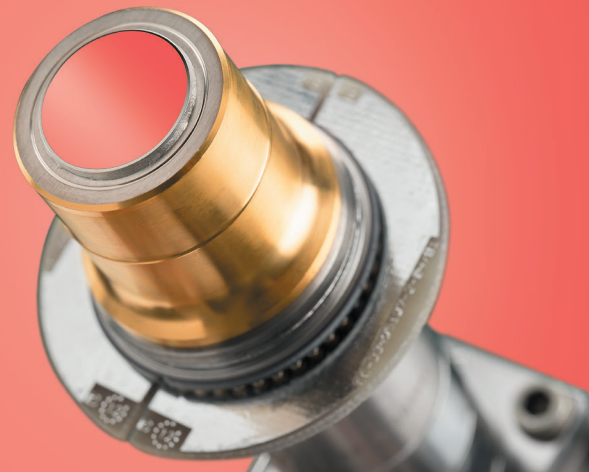


LYNRED USA

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## TYPICAL<sup>(\*)</sup> PERFORMANCES

NETD	< 18 mK (293 K, 50 % well fill, 100 Hz)	
Array operability	99.8%	
Non uniformity (DC level and responsivity)	2.5% RMS ( $\sigma$ /mean, 293 K uncorrected performance)	
	RM3	SRI401
FOV	f/3	f/3
Regulated input power	5 W <sub>DC</sub> <sup>(***)</sup>	5.7 <sup>(**)</sup> W <sub>DC</sub> <sup>(***)</sup>
Cooldown input power	13.2 W <sub>DC</sub> <sup>(***)</sup>	12.6 <sup>(**)</sup> W <sub>DC</sub> <sup>(***)</sup>
Power supply	24 V	24 V
Cooldown time	5 min 30 s	5 min 50 s <sup>(**)</sup>
Cooler dimensions (mm)	Ø 46 × L 71	Ø 46 × L 71
Weight	0.57 kg	0.65 kg
Operating temperature	- 40° C to 71° C	- 40° C to 71° C

(\*) Optional extended waveband : 40% @ 0.5  $\mu\text{m}$ , 75% @ 0.8  $\mu\text{m}$ , >80% from 0.9  $\mu\text{m}$  to 1.6  $\mu\text{m}$

(\*\*) TBC

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

## OPTIONS

Proximity driving electronics (including ADC)

Technical training and support

Other cooler configuration to be evaluated

## APPLICATIONS



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

Exclusive Distributor North America

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