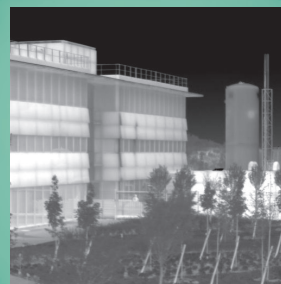


SCORPIO BMW

640 x 512 - 15 μm pitch - MCT



→ The broadband Mid-wave VGA
15 μm pitch detector for scientific
and industrial applications.

APPLICATIONS

GAS DETECTION
THERMOGRAPHY
SCIENTIFIC



SCORPIO BMW a versatile broadband Mid-wave
VGA 15 μm pitch detector.

Thanks to its high sensitivity, SCORPIO BMW
can be used as a broadband detector ranging
from 1.5 μm to 5 μm , 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 applica-
tions, 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 Sofradir's state of the art technologies.

ARRAY FEATURES

Format	640 x 512
Pixel pitch	15 μm x 15 μm
Detector spectral response	1.5 μm - 5 μm
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

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SCORPIO BMW



TYPICAL (*) PERFORMANCES

NETD	< 18 mK (293 K, 50 % well fill, 100 Hz)
Array operability	99.8%
Non uniformity (DC level and responsivity)	2.5% RMS (σ /mean, 293 K uncorrected performance)

	RM3	SRI401
FOV	f/3	f/3
Regulated input power	5 W_{DC} (***)	5.7(**) W_{DC} (***)
Cooldown input power	13.2 W_{DC} (***)	12.6(**) W_{DC} (***)
Power supply	24 V	24 V
Cooldown time	5 min 30 s	5 min 50 s(**)
Cooler dimensions (mm)	\varnothing 46 x L 71	\varnothing 46 x 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 μm , 75% @ 0.8 μm , >80% from 0.9 μm to 1.6 μm

(**) TBC

(***) W_{DC} = 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.

SOFRADIR HEADQUARTERS

Avenue de la Vauve - CS 20018
91127 Palaiseau - France
Phone + 33 1 60 92 18 30
Fax + 33 1 60 92 18 40

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



SOFRADIR-EC

www.sofradir-ec.com



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