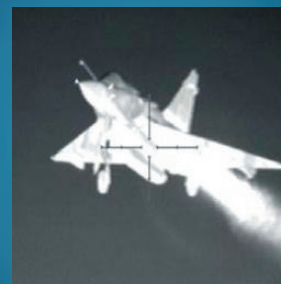


SCORPIO MW

640 x 512 - 15 μm pitch - MCT

→ The standard MWIR VGA
15 μm pitch IDCA.



SCORPIO MW is the standard MWIR VGA
15 μm pitch IDCA.

This IDCA has been developed to replace the
MWIR QVGA format in military systems.

SCORPIO MW is also ruggedized for 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	3.7 μm – 4.8 μm
FPA Operating temperature	Up to 90 K

ROIC (READ-OUT INTEGRATED CIRCUIT)

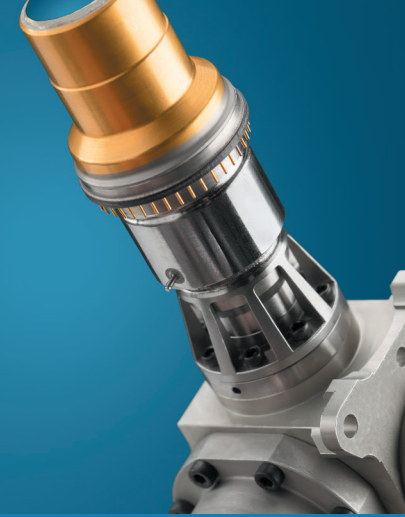
Selection	Serial electrical interface
ROIC architecture	Snapshot operation, direct injection input circuit, selectable read mode (IWR or ITR)
ROIC functionalities	Programmable integration time, anti-blooming
Windowing modes	640 x 512 / 640 x 480 / 512 x 512 or programmable
Charge handling capacity	6.5 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 MW

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TYPICAL^(*) PERFORMANCES



NETD	18 mK (293 K, 50 % well fill, 100 Hz)				
Array operability	99.8%				
Non uniformity	2.5% RMS (σ /mean, 293 K uncorrected performance)				
	SRI401	RM3	K508	RM2	LSF9597
FOV	f/2; f/4	f/2; f/4	f/2; f/4	f/2; f/4	f/2
Regulated input power (**)	< 4.9 W _{DC}	< 4.3 W _{DC}	< 5 W _{DC}	< 3 W _{AC}	< 4.2 W _{AC}
Cooldown input power (**)	< 11.9 W _{DC}	< 12.5 W _{DC}	< 13.5 W _{DC}	< 10 W _{AC}	< 7 W _{AC}
Power supply	24 V	24 V	24 V	32 V	8-12 V
Cooldown time	5 min	4 min 50 s	5 min 30 s	5 min	3 min
Cooler dimensions (mm)	Ø 46 × L 71	Ø 46 × L 71	Ø 46 × L 71	Ø 30.5 × L 82	Ø 46 × L 71
Weight	< 0.57 kg	< 0.57 kg	< 0.65 kg	< 0.45 kg	< 2.6 kg
Operating temperature	-40° C to 71° C	-40° C to 71° C	-40° C to 71° C	-40° C to 71° C	-40° C to 71° C

(*) Typical: Expected production mean value
(**) W_{AC} = at cooler pins AC input; W_{DC} = at cooler C&CE DC input

OPTIONS

- Proximity driving electronics (including ADC)
- Technical training and support
- Cooler driving electronics for LSF

APPLICATIONS



Exclusive Distributor - North America

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



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