

SCORPIO LW

640 x 512 - 15 μm pitch - MCT



→ The High performance
VGA format LWIR IDCA.



Scorpio LW is a compact high-resolution LWIR IDCA with low power consumption.

This IDCA offers high speed operation for detecting fast moving targets or improving the sensitivity. Thus, it is well-suited to high-performance and long-range applications.

Sofradir's MCT technology allows operations in LWIR waveband, the preferred solution for ground-based applications.

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

ARRAY FEATURES

Format	640 x 512
Pixel pitch	15 μm x 15 μm
Detector spectral response	7.7 μm - 9.3 μm at 80 K
FPA Operating temperature	Up to 90 K

ROIC (READ-OUT INTEGRATED CIRCUIT)

Selection	Serial electrical interface
ROIC architecture	Snapshot, direct injection, Integrate Then Read (ITR)
ROIC functionalities	Programmable integration time, anti-blooming, image invert / revert / inverse, interlaced mode
Windowing modes	640 x 512 / 640 x 480 / 512 x 512 or programmable
Charge handling capacity	13.6 10^6 e- (standard), 27.2 10^6 e- (binning)
Electrical dynamic range	2.8 V
Pixel output rate	80 Mpix/s (20 Mpix/s per output)
Frame rate	Up to 210 Hz full frame rate

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LYNRED
BY SOFRADIR & ULIS

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TYPICAL^(*) PERFORMANCES

NETD	22mK (f/2, 210 Hz) ; 10 mK (f/2 ; 30 Hz post acc. \ 4 frames)		
Array operability	99.8%		
	K508	RM3	LSF
FOV	f/2; f/2.24; f/1.76	f/2; f/2.24	f/1.76
Regulated input power @ 20°C (**)	6.1 W _{DC}	6.7 W _{DC}	11 W _{AC}
Cooldown input power @ 20°C (**)	15 W _{DC}	13 W _{DC}	40 W _{AC}
Power supply @ 20°C	24 V	24 V	24 V
Cooldown time @ 20°C	6 min	6 min / 7 min	3 min 30 s
IDCA height (optical axis, mm)	143	143	110
Weight	0.55 kg	0.55 kg	1.76 kg
Operating temperature	- 40° C to 71° C	- 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

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

OPTIONS

Proximity driving electronics (including ADC)

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.

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