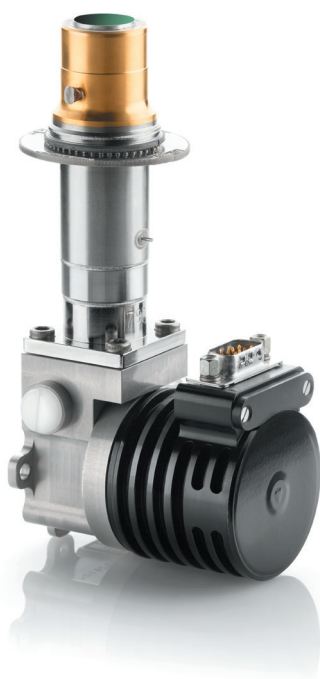


# SCORPIO LW

640 x 512 - 15  $\mu\text{m}$  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 $\mu\text{m}$ x 15 $\mu\text{m}$
Detector spectral response	7.7 $\mu\text{m}$ - 9.3 $\mu\text{m}$ 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

SCORPIO LW

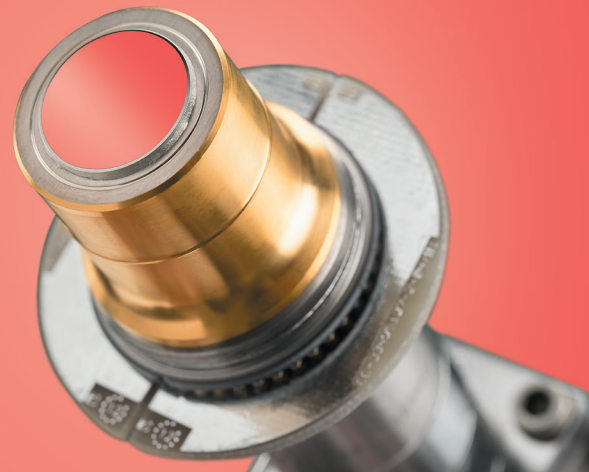


LYNRED USA

# SCORPIO LW

640 x 512 - 15  $\mu$ m pitch - MCT

→ The High performance  
VGA format LWIR IDCA.



SCORPIO LW

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

NETD	22mK (f/2, 210 Hz) ; 10 mK (f/2 ; 30 Hz post acc. \ 4 frames)		
Array operability	99.8%		
Non uniformity (DC level and responsivity)	< 20 mK (293K, 50% well fill, 85 Hz)		
	<b>K508</b>	<b>RM3 / SRI</b>	<b>LSF</b>
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 <sub>DC</sub>	6.7 W <sub>DC</sub>	11 W <sub>AC</sub>
Cooldown input power @ 20°C (**)	15 W <sub>DC</sub>	13 W <sub>DC</sub>	40 W <sub>AC</sub>
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  $\mu$ m, 75% @ 0.8  $\mu$ m, >80% from 0.9  $\mu$ m to 1.6  $\mu$ m

(\*\*) W<sub>DC</sub> = 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.

Exclusive Distributor North America

### LYNRED USA

373 Route 46W  
Fairfield, NJ, 07004 USA  
Phone: 973-882-0211  
Fax: 973-882-0997  
info@lynred-usa.com



LYNRED USA

www.lynred-usa.com