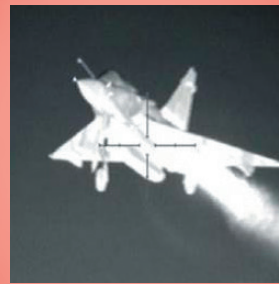


SCORPIO MW

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 Lynred's state of the art technologies.

SCORPIO MW

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 |

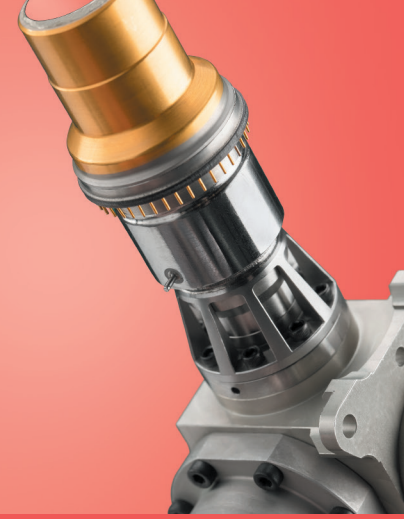


LYNRED USA

SCORPIO MW

640 x 512 - 15 µm pitch - MCT

→ The standard MWIR VGA
15 µm pitch IDCA.



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



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

SCORPIO MW