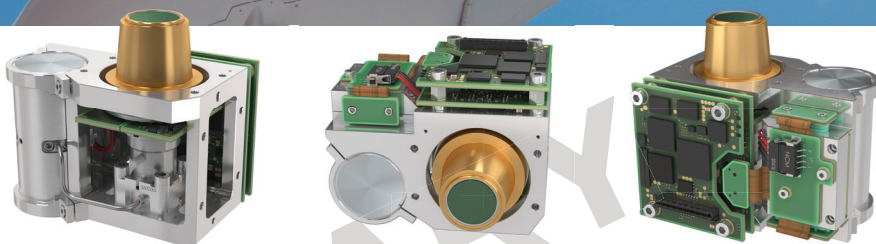


## OPENING THE PLUGUP FAMILY TO STATE-OF-THE-ART IMAGE CORRECTION

The **ATI GALATEA SL™ Advanced Thermal Imager** is a SWaP module that streamlines camera development for diverse applications such as UxS (Unmanned systems) and surveillance.

The **ATI GALATEA SL™** incorporates a proven, high performance LYNRED thermal sensor combined with advanced image algorithms, ensuring the delivery of high-quality thermal images.



HIGH END ALGORITHMS



EMBEDDED WITHIN PLUGUP™



UNIQUE ELECTRICAL INTERFACE FOR C&CE



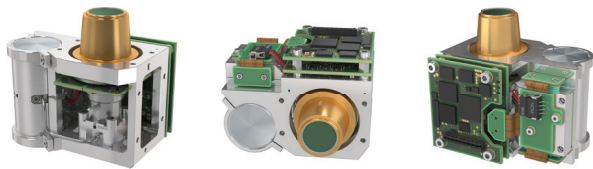
DEFENSE



FIXED SURVEILLANCE



# OPENING THE PLUGUP FAMILY TO STATE-OF-THE-ART IMAGE CORRECTION



HIGH  
PERFORMANCE  
ALGORITHMS



LOW POWER  
CONSUMPTION



COMPACT

## PRODUCT EMBEDDED FEATURES

IDDCA + PROXIMITY BOARD + CRYOCOOLER CONTROLLER + ATI BOARD

## ARRAY FEATURES

|                            |                      |
|----------------------------|----------------------|
| Detector spectral response | ■ 3.6 to 4.2 $\mu$ m |
| FPA operating temperature  | ■ Up to 150 K        |

## ROIC (READ-OUT INTEGRATED CIRCUIT)

|                          |               |
|--------------------------|---------------|
| Selection                | ■ IWR and ITR |
| Windowing modes          | ■ TBD         |
| Charge handling capacity | ■ 2.1 Me-     |
| Signal output rate       | ■ 10 MHz      |
| Frame rate               | ■ up to 60 Hz |

## PERFORMANCES

|                       |                              |
|-----------------------|------------------------------|
| NETD Sensor           | ■ < 28 mK (27°C, 50%WF, f/4) |
| NETD Post Process     | ■ <20 mK                     |
| Array operability     | ■ > 99.5%                    |
| RFPN at 50% well fill | ■ < 0.5 $\times$ RMS noise   |
| Aperture              | ■ f/4; f/5.5                 |
| Lag Time              | ■ 1 Frame                    |

## INTERFACES

|                      |                                  |
|----------------------|----------------------------------|
| Video output         | ■ CameraLink®, USB3              |
| Product Power Supply | ■ 12 Vdc typical                 |
| Connector            | ■ SAMTEC LSHM-140-025-L-DV-A-S-K |

## PHYSICAL CHARACTERISTICS

|                                    |                             |
|------------------------------------|-----------------------------|
| Maximum Outline dimensions (LxWxH) | ■ 58.5 mm x 77 mm x 72.5 mm |
| Weight                             | ■ 375 g                     |

## K588

|                             |             |
|-----------------------------|-------------|
| Regulated Input power @20°C | ■ 4Wdc      |
| Cooldown Input power @20°C  | ■ 12Wdc     |
| Cooldown time @20°C         | ■ 3min 30s  |
| Cooler MTTF                 | ■ 32,000hrs |

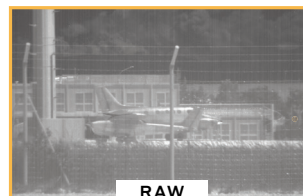
## EMBEDDED ALGORITHMS ONTO FINAL PRODUCT

### ALGORITHMS

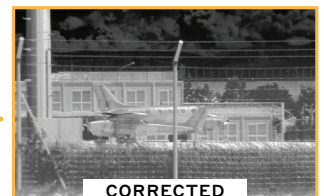
- 2 point Non-Uniformity Correction (up to 4 tables)
- Bad Pixel Replacement
- Denoising (Spatial & Temporal)
- Evolutive Bad Pixel Detection
- Image Flip (H/V)
- Video Test Pattern
- Destripping
- Tone Mapping
- Digital Detail Enhancement
- Graphic Overlay

## AVAILABLE SERVICES

- Technical training and support
- LYNRED Toolbox (LTB)



RAW



CORRECTED

### LYNRED HEADQUARTERS DEVELOPMENT & PRODUCTION CENTER

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