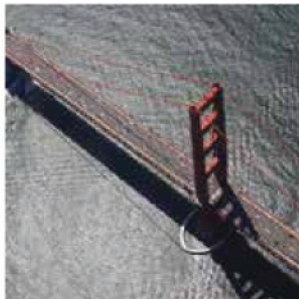
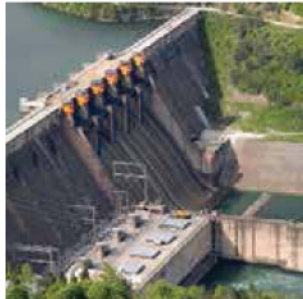
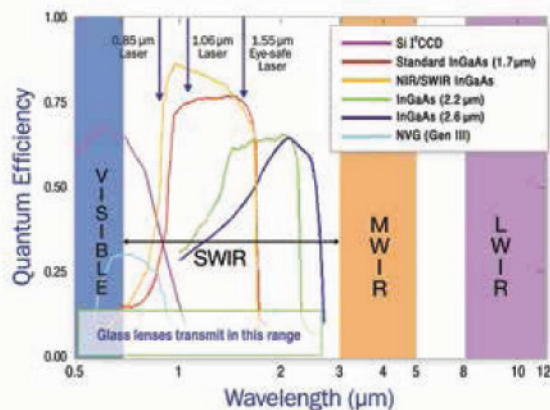


## MILITARY APPLICATIONS

- Airborne, land based and dismounted soldier systems
- National security
- Facility, port, and base surveillance
- Laser detection and tracking
- Night Vision with active illumination
- Vehicle, naval and air enhanced vision systems
- Homeland Security



## InGaAs Night Vision Technology



## COMMERCIAL APPLICATIONS

Our wide camera line offers advanced features including high frame rates and high resolution SVGA, VGA and quarter VGA imagers.

- Spectroscopy
- Food and agricultural sorting
- Hyperspectral imaging spectroscopy
- Multispectral capability filter
- Automotive (Enhanced Vision System)
- Inspection/process control of hot glass, chemical recovery and coatings
- Optical coherence tomography
- Biomedical imaging
- Solar cell and silicon ingot inspection
- Raman chemical ID core for pharma
- First-responders and military
- Plastic recycling
- Public security and safety
- Law enforcement
- Critical infrastructure surveillance

## HIGH VOLUME MANUFACTURING

Sensors Unlimited's state-of-the-art III-V foundry is the heart of our leading-edge indium gallium arsenide technology.

Our 100,000 sq. ft. manufacturing facility includes a Class 100 clean room and is ISO:9001:2008 certified.

We design and manufacture a wide range of near-infrared and short-wave infrared imaging products and III-V devices. Our custom foundry services offer quick turnaround and delivery of innovative, high quality, and cost-effective products.

## ISO:9001:2008 Certified

Distribution in the UK & Ireland



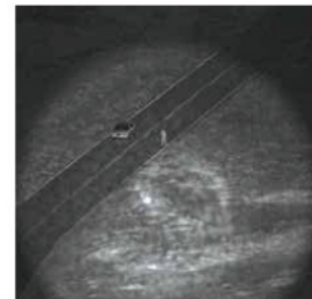
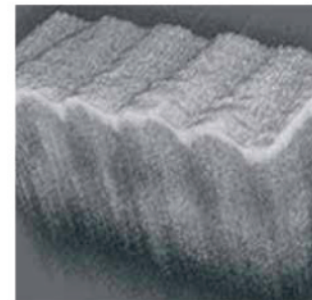
**Characterisation,  
Measurement &  
Analysis**

**Lambda Photometrics Limited**  
Lambda House Batford Mill  
Harpenden Herts AL5 5BZ  
United Kingdom

E: [info@lambdaphoto.co.uk](mailto:info@lambdaphoto.co.uk)  
W: [www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk)  
T: +44 (0)1582 764334  
F: +44 (0)1582 712084



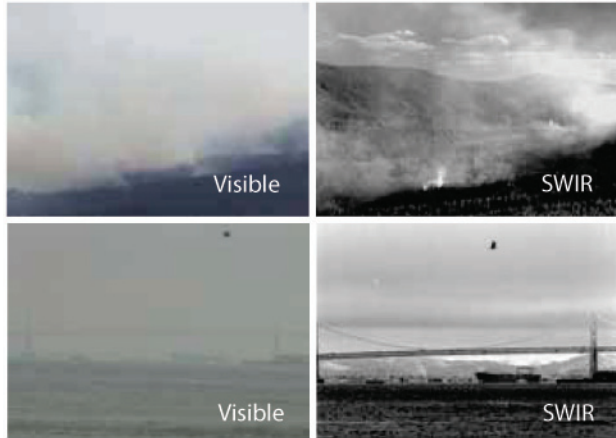
# SENSORS UNLIMITED





## WORLD LEADERS IN HIGH VOLUME InGaAs PRODUCTS

Sensors Unlimited, Inc., part of UTC Aerospace Systems, is the world leader in indium gallium arsenide (InGaAs) near-infrared (NIR) and shortwave infrared (SWIR) imaging and detection cameras, accessories and systems. Our products are available for shipping in high volume quantities.



## SDV (SWIR Digital Video) CAMERAS

Our high end SDV camera line offers high frame rates with VGA high resolution.

640 x 512 imager on 25  $\mu\text{m}$  pitch

109 full frames/s

User selectable functions

On-board NUCs



## UAV Cameras

Sensors Unlimited smallest SWIR cameras are the size of a billiards chalk for use with the smallest UAVs, while Megapixel versions offer more resolution for substantial platforms. Our military lines are tested for shock and vibe to mil-spec standards, and we have live experience with recoil.

Standard camera line with 8 CID volume

Micro cameras with 1.92 CID volume

Nano cameras with 1 CID volume

Unhoused versions for minimal weight and volume

## HD SWIR AREA CAMERAS

The Sensors Unlimited line of High Definition SWIR area cameras are compact, rugged imagers that our customers depend on for both industrial and military SWIR imaging applications; providing 1280x1024 high definition, low noise, full motion SWIR digital video with optional extended response into the near-IR (NIR).

1280 x 1024 imager on 12.5  $\mu\text{m}$  pitch

30 full frames/s

User selectable functions



## MOST SENSITIVE SWIR AREA CAMERAS

Sensors Unlimited has a reputation for providing some of the lowest noise, most light sensitive SWIR imagers on the market. These cameras, available in varying resolutions including VGA (640x512) and High Definition (1280x1024), allow our customers to capture full motion video in light starved environments; minimizing the need for external lighting/illumination.

640 x 512 imager on 25  $\mu\text{m}$  pitch

30 full frames/s

User selectable functions

Useful for low-level light to full daylight surveillance and DVE



## SMALL SWaP SWIR AREA CAMERAS

Sensors Unlimited's revolutionary small SWaP SWIR cameras can be provided as an OEM imaging module, or in a robust, ready-to-use housing.

640 x 512 on 15  $\mu\text{m}$  pitch

30 full frames/s

User selectable functions



## OEM CAPABILITY

OEM versions of our 1280, 640 and 320 pixel width cameras are available for integration into your optical assemblies. These minimize the space needed for the camera. Custom board arrangements can be developed.

## OCT Imaging Technology



## LINESCAN CAMERAS with 1024 or 2048 Pixels

Our compact InGaAs linescan cameras provide low noise, high dynamic range and high image resolution, in high line-rate Camera Link® platforms. These are suitable for industrial or OEM installations machine vision inspection, spectroscopy and for biomedical imaging.

2048 pixels with 10  $\mu\text{m}$  pitch for SD-OCT imaging from 0.1 to 76 kfps or from 10 to 145 kfps

1024 pixels with 25  $\mu\text{m}$  pitch for Machine Vision from 0.1 to 46 kfps, or SD-OCT for 1 to 92 kfps



## LINEAR ARRAYS

We offer the widest variety of linear InGaAs array configurations available for spectroscopic and imaging systems. Tens of thousands of our linear arrays are currently installed in systems throughout the world.

1024, 512, and 256 element lengths

25 or 50  $\mu\text{m}$  pitch with tall pixels for highest sensitivity

Spectral cutoff wavelengths of 1.45, 1.7, 2.2  $\mu\text{m}$  and 2.6  $\mu\text{m}$  are available

Antiblooming control

Integrated temperature control or TECless for uncooled or deep cooled systems

