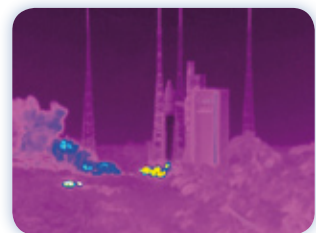
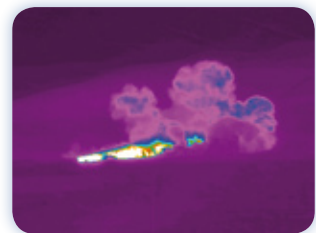
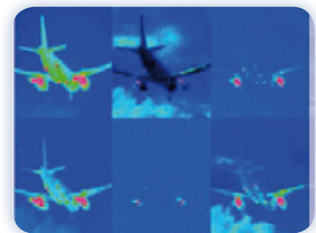




ORION SC7000 Series

MW & LWIR Multispectral Imaging system for R&D and signature analysis



- > Fast multispectral radiometric imagery
- > MW & LW Systems
- > 4 sub-band analysis
- > Customisable filters
- > Variable Exposure time from filter to filter
- > Extremely extended dynamic range
- > Wide range of lenses
- > Gas detection, IR Signature, Flame analysis

Cameras dedicated to multi-spectral analysis application where spectral imaging or speed is a must



The Orion SC7000 Series system is an infrared multispectral imager capable of producing IR sub-band images at video rate within the SW-MWIR or LWIR region.

This high performance system uses the latest state-of-the-art focal plane array (FPA) detector technology along with real-time, large dynamic range electronic modules.

Infrared radiation from the scene under investigation is collected through a front lens, designed to offer minimal aberration across the full IR wavelength range.

A filter wheel is inserted between the lens and the focal plane. The rotation of this filter wheel is driven synchronously with the FPA clocking, such that a single image snap shot is obtained for each particular filter position.

The FPA detector is capable of capturing up to 400 frames per second, each high quality image being captured in snap-shot mode. The integration time is variable by software and can be different for each filter. An image is captured for each given position of the filter wheel, providing true multispectral imaging.

The Orion SC7000 Series can also be used as a normal IR camera at full speed by removing or stopping the filter wheel.

Further to image acquisition, the image data is processed by the ALTAIR software operating under Windows XP/Vista.

Accessories

- Altair radiometric software
- Software development Kit (C++ / Labview)
- Factory temperature calibration
- Spectral filters
- Battery pack for up to 4 hours autonomy
- USB advanced acquisition trigger module
- Attached Video Screen
- Embedded tablet PC
- Industrial grade connectors & cables

Technical specifications

Feature List for ORION SC7000 Series*

Waveband	1.5 - 5 μm or 7.7 - 11 μm
Pixel resolution	640 x 512 @ 15 μm or 320 x 256 @ 30 μm
Windowing	320 x 256 / 160 x 128 / user defined
NETD	< 20 mK @ 30 °C (15 mK typical)
Max Full Frame rate	Up to 380 Hz
Max Frame rate in ORION Mode	400 Hz
Integration time	3-20000 μs
Filter wheel	2x4 slots for 1" filters
Digital output	14 bits CAMLINK / GigE
Optical Interface	M80
Analogue signals	1 x (-5 to 5 V) / 2 x (0 to 10 V)

*Best specifications

Physical specifications

Size (w/o lens) (LxWxH)	268x180x168 mm
Weight (w/o lens)	7 Kgs
Base mounting	1/4 20 UNC
Operational temperature	-20 °C / +60 °C
Power supply	12 or 24 V

Optional lenses

Optional lenses	FOV
12 mm F2	44°x36°
25 mm F2	21° x17°
50 mm F2	11° x 8.8°
100 mm F2	5.5° x 4.4°
200 mm F2	2.75° x 2.2°
Microscope lens G1 F/2	9.6 x 7.7 mm
Microscope lens G3 F/2	3.2 x 2.6 mm

Lens Extenders



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