



## **SLX HARRIER HIGH PERFORMANCE LWIR THERMAL IMAGING CAMERA**

SELEX Galileo's latest "3rd Generation" thermal imaging camera uses the latest staring focal plane technology to provide high performance, high resolution, passive Long Waveband Infra-Red (LWIR) imaging in day, night and poor visibility for land, sea and airborne operations.

The thermal imaging camera uses the high resolution "Harrier" LWIR MCT detector array developed under UK MOD funding on the Albion 3rd Generation development programme. The detector is manufactured using SELEX Galileo's proprietary MOVPE on GaAs process to achieve outstanding performance, image uniformity and pixel operability with very short stare times. This leading edge detector is coupled with SELEX Galileo's latest generation of advanced image processing electronics to achieve superior image quality with minimum motion smearing, e.g. compared to QWIP-based imagers, even when mounted on highly dynamic platforms or viewing rapidly changing scenes.

An integrated microscan module is optional, to provide 1.3 Megapixel resolution and enhanced range performance using digital zoom technology.

The SLX-Harrier camera has been designed as a compact, high performance unit which can be applied to a wide range of thermal imaging applications by system integrators and OEMs.



### **KEY BENEFITS**

- Affordable, high performance 3rd generation camera
- Full standard TV resolution LWIR imaging
- Optional Microscan providing:
  - 1.3 Megapixel resolution images
  - and/or combined e-zoom and microscan for narrow FoV: reducing lens size, complexity and cost
- Military specification
- High sensitivity together with short stare time for motion-blur free imaging
- Lightweight, compact design
- Flexible architecture enables remote location of processing electronics for small enclosures
- Ease of system integration
- Flexible video output and control interface
- Low through-life cost of ownership
- No ITAR-controlled components.



Thermal imaging in day, night and poor visibility for land, sea and air operations

## TECHNICAL SPECIFICATIONS

Operating waveband	8-9.4µm (LWIR)
Resolution	640 x 512 pixels (1280 x 1024 with optional Microscan)
Noise Equivalent Temperature Difference (NETD)	20mK Typical 14mK (Interlace mode)
Non-uniformity correction	User selectable 1, 2 or 3 point NUC with internal thermal reference
User control	RS422
Video	625 line 50 Hz 525 line 60 Hz RGB VESA
Digital video output	16 bit full dynamic range or 8 bit video. Optional DVI & HDMI
Dimensions (L x W x H)	195 x 115 x 95 mm (exc. lens)
Power supply	28V DC (Max 36V, Min 18V)
Power consumption	<40 watts operating
Weight	<4kg
Operating temperature	-40 °C to +55 °C
Environmental	DEFSTAN 00-35 MIL STD 810E810E
Reliability	> 22,000 hours (GF)



Optional integrated microscan unit

## FEATURES

- Programmable configuration
- Auto or manual gain and offset
- User definable automatic gain and offset region
- User selectable image orientation permits camera to be mounted in any position
- User definable text displays and symbols
- Colour text and graphics in VESA video mode
- Colour image mapping with user definable palette
- Freeze frame
- Up to x16 continuous digital zoom and pan
- Four programmable NUC tables
- Auto calibration mode for autonomous ready-to-go operation
- Multiple patch readout at higher frame rate.