

SLX MERLIN HIGH PERFORMANCE MWIR THERMAL IMAGING CAMERA

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

The thermal imaging camera uses the high resolution "Merlin" MCT detector array developed under UK MOD funding on the Albion 3rd Generation development programme. The detector is manufactured using Selex ES's proprietary MOVPE on GaAs process to achieve outstanding performance, image uniformity and pixel operability. This leading edge detector is coupled with Selex ES's latest generation of advanced image processing electronics to achieve superior image quality.

An integrated microscan module is optional, to provide 3Megapixel resolution and enhanced range performance using digital zoom technology. The SLX-Merlin 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
- · High resolution MWIR imaging
- Optional Microscan providing:
 - 3 Megapixel resolution images
 - and/or combined e-zoom and microscan for narrow FoV: reducing lens size, complexity and cost
- Military specification
- 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.



TECHNICAL SPECIFICATIONS

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Operating waveband	3-5μm (MWIR)
Resolution	1024 x 768 pixels
	(2048 x 1536 with optional
	Microscan)
Noise Equivalent Temperature Difference (NETD)	
	17mK Typical
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 inc. full resolution
	HD and HD-Ready display modes
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)



FEATURES

- · Programmable configuration
- Auto or manual gain and offset
- User definable automatic gain and offset region
- 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 electronic zoom and pan
- Four programmable NUC tables
- Auto calibration mode for autonomous ready-to-go operation
- Multiple patch at higher frame rate.



Optional integrated microscan unit