



# SELEX GALILEO

A Finmeccanica Company



## SLX MERLIN HIGH PERFORMANCE MWIR 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 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 Galileo's proprietary MOVPE on GaAs process to achieve outstanding performance, image uniformity and pixel operability. This leading edge detector is coupled with SELEX Galileo'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.



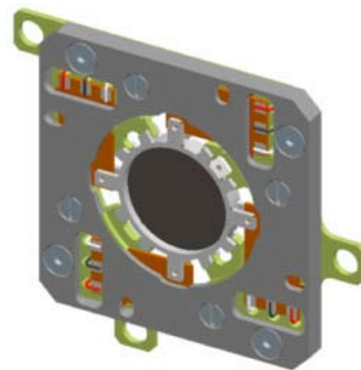
Thermal imaging in day, night and poor visibility for land, sea and air operations

### TECHNICAL SPECIFICATIONS

<b>Operating waveband</b>	3-5µm (MWIR)
<b>Resolution</b>	1024 x 768 pixels (2048 x 1536 with optional Microscan)
<b>Noise Equivalent Temperature Difference (NETD)</b>	17mK Typical
<b>Non-uniformity correction</b>	User selectable 1, 2 or 3 point NUC with internal thermal reference
<b>User control</b>	RS422
<b>Video</b>	625 line 50 Hz 525 line 60 Hz RGB VESA inc. full resolution HD and HD-Ready display modes
<b>Digital video output</b>	16 bit full dynamic range or 8 bit video.
<b>Optional DVI &amp; HDMI</b>	
<b>Dimensions (L x W x H)</b>	195 x 115 x 95 mm (exc. lens)
<b>Power supply</b>	28V DC (Max 36V, Min 18V)
<b>Power consumption</b>	<40 watts operating
<b>Weight</b>	<4kg
<b>Operating temperature</b>	-40°C to +55°C
<b>Environmental</b>	DEFSTAN 00-35 MIL STD 810E810E
<b>Reliability</b>	> 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