OSIRIS RANGER LR LR UNCOOLED LWIR THERMAL ZOOM LENS OPTIONS: 25mm to 150mm 25mm to 225mm



Above: Osiris Ranger LR 25-225mm. Other models will vary.

The Osiris Ranger LR is a high performance, multi sensor platform which utilises advanced LR uncooled thermal sensors with zoom lenses up to 25-225mm alongside a HD visible sensor with a 15.2-500mm lens. The LR range is designed to bridge the gap between cooled and uncooled thermal sensor performance. With high sensitivity and enhanced contrast levels, the LR range features image stabilisation, autofocus and CLAHE video processing as standard.

Combining advanced motor drive technology along with harmonic drives gears, all Osiris camera platforms are able to position our long range sensors accurately and quickly. The Osiris is also capable of incorporating specialist technologies such as long range illumination.

With an IP67 level of environmental protection and hard anodised housings, the Osiris is suitable for the most harsh and challenging applications.

UK Manufacturer

KEY FEATURES

- Thermal camera detection* ranges up to 10km (human) and 16.4km (vehicle)
- LR advanced uncooled LWIR 12µm, 640 x 480 thermal sensors with zoom lens options up to 25-225mm
- HD visible sensor with a 15.2 to 500mm (33x) zoom lens
- 360° continuous rotation with pan and tilt speeds between 0.02° and 45° per second
- High level of camera positioning accuracy: 0.002°
- Absolute feedback, virtually zero backlash with automatic self position correction
- Unique cable managed, rapid release mechanism and bore sighting allows cameras to be quickly installed and changed in the field
- Ruggedised for extreme and challenging environments
- IP67 rating
- Ideally suited for single mast deployments such as mobile, border and maritime applications

* Ranges are based upon 50% probability on a MODTRAN standard atmosphere. Detailed NVIPM calculation notes available upon request. Based on the RANGER-LR-300.

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RAPID RELEASE MECHANISM Allows quick changing of payloads



IP67 RATED Ruggedized and well suited to maritime applications



12µm SENSOR Longer range performance from an uncooled thermal

Specifications may be subject to change without notice E&E0 22/07/21 V4.1



OSIRIS RANGER LR LR UNCOOLED LWIR THERMAL ZOOM LENS CAMERAS

THERMAL SENSOR - 640 x 480, 12µm PIXEL PITCH Part Code RANGER-LR-150 RANGER-LR-225 Focal Length 25 to 150mm 25 to 225mm 17.5° (W) to 3.0° (T) 17.5° (W) to 2.0° (T) Field of View Optical Zoom 6x. motorised 9x. motorised F Number F1.4 F1.5 <30 mK (NETd) f/1.0 at room temperature* Sensitivity Detector Type Uncooled VOx microbolometer Resolution 12µm, 640 x 480 Spectral Band 7.5 to 13µm (LWIR) Frequency 25Hz (9Hz option) Focus Push autofocus, manual Digital Zoom 4x Image Stabilisation Yes, electronic Image Processing CLAHE / LAP Alpha blending Polarity: White hot / black hot, various user palettes. Orientation: Invert / revert. Shutter and scene based NUC. Spatial / temporal de-noise. Automatic gain control. Image Control Housing Weight Typically 12Kg / 26.4lb Housing Size (mm) L572 x W258 x H226

HD VISIBLE SENSOR

Focal Length	15.2mm to 500mm
Image Sensor	1/1.9" CMOS Sensor (2.38 MP), full HD 1080p (1920 x 1080)
F-Number	F3.0 to F32
Horizontal FOV	23.42° (W) to 0.78° (T)
Optical Zoom	33x, Motorised
Digital Zoom	-
Focus	Push autofocus, manual
Image Stabilisation	Yes (cost option) (electronic image stabilisation)
Min. Sensitivity	Colour 0.05 lux F1.2 gain of up to 60dB / 0.005 lux F1.2 / AGC @ 42dB (accumulation 25 times) Mono 0.002 lux F1.2 gain of up to 60dB / 0.0002 lux F1.2 / AGC @ 42dB (accumulation 25 times)
Other Features	Defog, digital noise reduction
Housing Weight	Typically 14Kg / 30.9lb
Housing Size (mm)	L572x W258x H231

//	Otker/mødeks will vary.
ESEI	NTATION
	IP, ONVIF, RTSP, composite (PAL / NTSC)
	Integrated IP encoders provide simultaneous H.264 RSTP (H.265 and ONVIF Profile-S
₹Y	

TELEMETRY		
Presets	127x Preset positions, 16x preset tours	
Protocols	Pelco D, Pelco D Extended, ONVIF Profile S	
Interface	RS485, ONVIF Profile-S, Serial <> IP	
Positioning	oning Absolute positioning feedback	
INTERFACES		
Ethernet	Command and control of all functions incl. streaming of H.264 Video (ONVIF)	
RS485	Command and control of all functions and firmware upgrade	
ELECTRICAL A	ND MECHANICAL	
Input Voltage	Nominal 30vDC (28-32vDC)	
Power Consumption	Typical: 53W, peak: 100W (including thermal and visible sensor payloads)	
Housing Material	Anodised aluminum (sunshields are iridited aluminum), white powder marine grade paint finish (other colours are available upon request)	
System Weight	44kg / 100lbs incl. payloads	
ENVIRONMEN	TAL	
IP Rating	IP67	
Temperature Range	-30°C (-22°F) up to 65°C (149°F) (-40°C with optional heater)	
OPTIONS		
Automatic Tracking	Hardware based target acquisition and tracking capability	
Ultra Low Light HD Sensor	2/3" CMOS sensor (2.2MP) Colour 0.005 lux at F1.4, mono 0.000000001 lux at F1.4	
4K Visible Sensor	4K colour sensor, 4.4-88.4mm lens Colour 0.4 lux (colour 0.06 lux with slow shutter on)	
Visible Lens	Up to 2400mm lens	
Laser Range Finders	Up to 20km	
Illuminators (White / IR)	Up to 3.5km	
Storage	Up to 64GB in total via SD/MMC (32GB available per channel if using thermal and video / 2x cameras)	

OSIRIS PAN AND TILT UNIT (PTU)

Pan Range / Velocity	360° continuous / 0.02° to 45.0° per second	
Tilt Range / Velocity	-90° to +90° / 0.02° to 45.0° per second	
Accuracy	0.002° / 0.035 mRad	
Repeatability	0.002° / 0.035 mRad	
Actuation	Custom stepper motors	
Speed Control	Zoom dependent speed control (subject to payload)	
PTU Weight	15.2kg / 35.5lb (excluding mounts and payloads, payload capacity 50kg)	
PTU Size (mm)	H361.3 x W225 x D225 (excluding mounts and payloads)	

PART	CODES

Options

OPT-H-RANGER-LR-150-W OPT-H-RANGER-LR-225-W

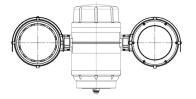
Osiris Ranger LR 150 - High powered PT, with a 640x480, 12µm, 25Hz, 25-150mm, F1.4 thermal camera and a HD, 15.2-500mm (33x optical zoom lens) video camera, white colour Osiris Ranger LR 225 - High powered PT, with a 640x480, 12µm, 25Hz, 25-225mm, F1.5 thermal camera and a HD, 15.2-500mm (33x optical zoom lens) video camera, white colour All cable, ancillary and optional part numbers are available upon request

IMAGE PRI

Video Output

Video Over IP

TYPICAL OSIRIS CAMERA PLATFORM**



*As measured after image post-process techniques were applied ** Illustrations are indicative and subject to the final configuration/model.

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Osiris PT Platform Mounting



E UK Manufacturer

optional)

