



JAEGAR RANGER EVO2

UNCOOLED LWIR THERMAL ZOOM LENS OPTIONS:

- 20mm to 100mm 30mm to 180mm
- 26mm to 105mm 25mm to 225mm
- 30mm to 150mm 20mm to 300mm



Above: Jaegar Ranger EVO2 25-225mm.
Other models will vary.

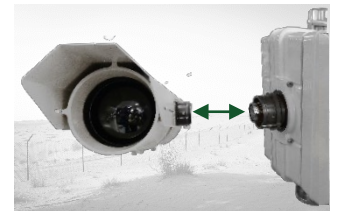
The Jaegar EVO2 is a high performance, multi sensor platform which utilises long range uncooled LWIR thermal sensors with a range of zoom lens options up to 20-300mm, alongside the latest low light HD visible sensors with zoom lens options up to 20-2400mm. The EVO2 range employs the latest 12µm thermal technology which has push autofocus capabilities as standard.

Combining advanced motor drive technology along with harmonic drive gears, all Jaegar camera platforms are able to position our longest-range sensors accurately and quickly. The Jaegar benefits from a fixed through shaft, which can enable payloads such as a RADAR to be mounted directly above the PT director.

The Jaegar’s ruggedised design allows a high level of environment protection which is suitable for the most extreme and challenging environments.

KEY FEATURES

- Thermal camera detection* ranges up to 9.31km (human)
- Uncooled 12µm LWIR thermal sensors with zoom lens options up to 20-300mm
- Push autofocus as standard on the thermal sensors
- HD visible sensors with zoom lens options up to 20-2400mm
- Through shaft enabling fixed payloads to be mounted above the PT director
- 360° continuous rotation with pan and tilt speeds between 0.002° and 100° per second
- High level of camera positioning accuracy: 0.0002°
- 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
- System configuration and sensors can be chosen to suit the specific requirements
- Ideally suited for single mast deployments such as mobile, border and maritime applications



RAPID RELEASE MECHANISM
Allows quick changing of payloads



THROUGH SHAFT
Enables fixed payloads to be mounted above the PT Director



HIGH ACCURACY
Designed for long range surveillance applications

*Johnsons Criteria,
(Human at 1.8m x 0.5m, Detection at 2 pixels, Recognition at 8 pixels and Identification at 13 pixels.
50% probability subject to environmental conditions). Based on the EVO2 300.





JAEGAR RANGER EVO2

UNCOOLED LWIR THERMAL ZOOM LENS CAMERAS



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| THERMAL SENSORS | JPT-EVO2-100-W | JPT-EVO2-105-W | JPT-EVO2-150-W | JPT-EVO2-180-W | JPT-EVO2-225-W | JPT-EVO2-300-W |
|---------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Focal Length | 20mm to 100mm | 26mm to 105mm | 30mm to 150mm | 30mm to 180mm | 25mm to 225mm | 20mm to 300mm |
| Horizontal FOV | 22° (W) to 4.4° (T) | 16.9° (W) to 4.2° (T) | 14.7° (W) to 2.9° (T) | 14.7° (W) to 2.4° (T) | 17.6° (W) to 2.0° (T) | 22.0° (W) to 1.5° (T) |
| F Number | F1.1 | F1.6 | F1.2 | F1.2 | F1.5 | F1.5 |
| Optical Zoom (Continuous) | 5x, Motorised | 4x, Motorised | 5x, Motorised | 6x, Motorised | 9x, Motorised | 15x, Motorised |
| Digital Zoom | 1x to 8x (0.1 steps) | | | | | |
| Focus | Push autofocus, manual | | | | | |
| Detector | Uncooled VOx microbolometer, ≤50mK (at 25°C, F1.0), 50Hz, 12µm, 640 x 512 | | | | | |
| Spectral Band | 7.5 to 14µm (LWIR / 8 to 14µm) | | | | | |
| Image Stabilisation | Yes, electronic image stabilisation (cost option) | | | | | |
| Image Processing | Non-Uniform Correction (NUC), noise filtering, polarity control, Digital Detail Enhancement (DDE), polarity: white hot / black hot, 18x colour palettes | | | | | |
| Housing Weight (Typical) | 12Kg / 26.4lb | | | | | 18.3Kg / 40.4lb |
| Housing Size (Typical) | L572 x W258 x H226mm | | | | | L580 x W282 x H257mm |

| HD VISIBLE SENSORS | | |
|---------------------------|---|--|
| Focal Length | 4.3mm to 129mm | 15.2mm to 500mm |
| Horizontal FOV | 63.7° (W) to 2.32° (T) | 23.42° (W) to 0.78° (T) |
| F Number | F1.6 to F4.7 | F3.0 to F32 |
| Optical Zoom (Continuous) | 30x, Motorised | 33x, Motorised |
| Digital Zoom | 12x | - |
| Focus | Automatic, manual | Push autofocus, manual |
| Image Sensor | 1/2.8" CMOS Exmor (2.13MP), full HD 1080p (1920 x 1080) | 1/1.9" CMOS Sensor (2.38 MP), full HD 1080p (1920 x 1080) |
| Min. Sensitivity | Colour 0.01 lux Mono 0.0008 lux (high sensitivity mode) | Colour 0.05 lux F1.2 gain of up to 60dB / 0.005 lux F1.2 / AGC @ 42dB Mono 0.002 lux F1.2 gain of up to 60dB / 0.0002 lux F1.2 / AGC @ 42dB (accumulation 25 times) |
| Image Stabilisation | Yes, electronic image stabilisation | Yes, electronic image stabilisation (cost option) |
| Other Features | Defog, digital noise reduction | |
| Housing Weight (Typical) | 4Kg / 8.8lb | 14Kg / 30.9lb |
| Housing Size (Typical) | L460 x W184 x H156mm | L572 x W258 x H231mm |

| JAEGAR PAN AND TILT UNIT (PTU) | |
|--------------------------------|---|
| Pan Range / Velocity | 360° continuous / 0.002° up to 100.0° per second |
| Tilt Range / Velocity | -90° to +90° / 0.002° up to 100.0° per second |
| Accuracy | 0.0002° / 0.0035 mRad |
| Repeatability | 0.0002° / 0.0035 mRad |
| Actuation | Custom stepper motors |
| Speed Control | Zoom dependent speed control |
| Presets | 127x Preset positions, 16x preset tours |
| Protocols | Pelco D, Pelco D Extended, ONVIF Profile S |
| Interface | RS485, ONVIF Profile-S, Serial <-> IP |
| Positioning | Absolute positioning feedback |
| Through Shaft | Yes |
| PTU Weight (Typical) | 28kg / 61.8lb (excluding mounts, through shaft, payloads) (payload capacity 50kg) |
| PTU Size (Typical) | H434 x W343x D343 (excluding mounts, through shaft and payloads) |

| ELECTRICAL AND MECHANICAL | |
|---------------------------|---|
| Video Output | IP, ONVIF, RTSP {Composite (PAL / NTSC) cost option} |
| Video over IP | Integrated IP encoders provide simultaneous H.264 RSTP (H.265 cost option) |
| Ethernet | Command and control of all functions including streaming of H.264 streams |
| RS485 | Command and control of all functions and firmware upgrade |
| Input Voltage | Nominal 48VDC (36-72VDC) |
| System Power Consumption | Typical: 60W Peak: 170W (including thermal and visible sensor payloads) |
| Housing Material | Anodised aluminum, white powder marine grade paint finish (other colours are available upon request) |
| IP Rating | IP67 |
| Temperature Range | -30°C (-22°F) up to 65°C (149°F) (-40°C with optional heaters) |

| OPTIONALLY AVAILABLE | |
|-----------------------------------|--|
| HD Low Light Visible Sensor | 16.7mm to 2000mm (21.2° W to 0.23° T) (with x2 extender on) 1/1.9" CMOS Sensor (2.38MP), full HD (1920 x 1080), colour 0.005 lux at F1.2 / 42dB mono 0.0002 lux at F1.2 / 42dB |
| HD Ultra Low Light Visible Sensor | 15.2mm to 500mm (32.39° W to 1.0° T) or 20mm to 2400mm (24.87° W to 0.23° T) (with x2 extender on) 2/3" CMOS Sensor (2.2MP), full HD (1920 x 1080), colour 0.005 lux at F1.4 / 50IRE, mono 0.00000001 lux at F1.4 / 50IRE |
| 4K Visible Sensor | 4.4mm to 88.4mm (70.2° W to 4.1° T) 1/2.5" CMOS Sensor (8.51MP), 4K/QFHD (3840 x 2160), colour 0.4 lux (colour 0.06 lux with slow shutter on) |
| Technologies | Hardware based target acquisition and tracking capability, long range white light or infra-red illuminators (up to 3.5km), long range acoustic hailer (up to 2km), digital magnetic compass, GPS, SWIR sensors, LRF (laser range finders) up to 20km |
| Storage | Up to 64GB in total via SD/MMC (32GB available per channel when using thermal and visible / 2x cameras) |
| Aux Connectors (4 slots) | Power outputs - 12vDC, 6A / 24VDC, 15A / 48VDC, 10A Network output - Cat5e, 10/100 Base T Antenna connections - cellular, GPS, Wi-Fi, IP radio, GPS compass |
| Top Mount | Top mount extension / plate (for RADAR or top mount payload) |

PLEASE CONTACT US FOR A SPECIFIC CONFIGURATION

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Specifications may be subject to change without notice
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