

JAEGAR RANGER

HIGH PERFORMANCE PAN AND TILT UNIT
 HD LOW LIGHT VISIBLE ZOOM LENS SENSORS
 SD LWIR UNCOOLED THERMAL ZOOM LENS SENSORS



Powered by
NexOS

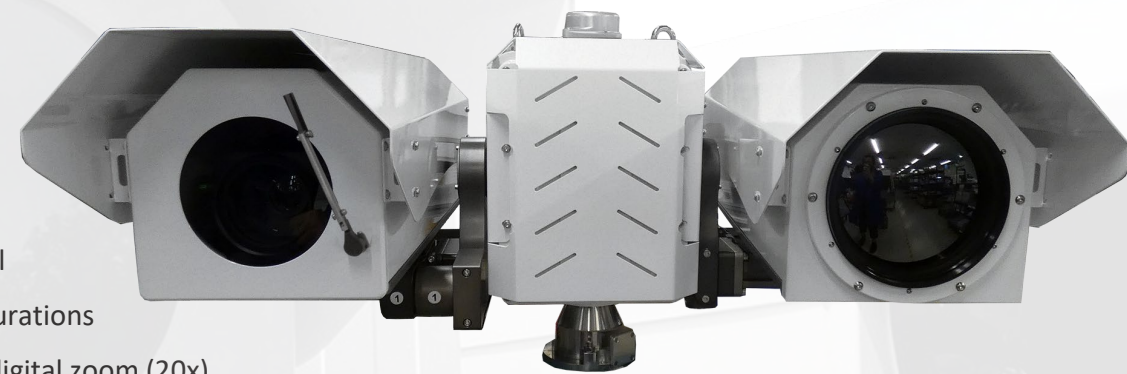
The JAEGAR RANGER EVO2 is a high performance, multi sensor platform which utilises long range uncooled LWIR thermal sensors with a range of zoom lens options up to 20-300mm, alongside the latest low light HD visible sensor with a 15-500mm zoom lens.

The **NexOS** EVO2 range employs the latest 12µm thermal sensor technology and has **NexOS** intelligent capabilities as standard.

Combining advanced motor control technology along with harmonic drive gears, all Jaegar camera platforms are able to position our longest-range sensors accurately and quickly. This is complimented with advanced **NexOS** features* such as electronic image stabilisation, CLAHE, and advanced focusing capabilities.

KEY FEATURES

- 640x512 12µm thermal sensors with zoom lens options up to 300mm
- HD visible sensor with a 15-500mm zoom lens
- **NexOS** intelligence allows advanced image processing and motor control
- **NexOS** Advanced Macros and Pelco Query Builder allow complex configurations
- Push, continuous and ROI autofocus, electronic image stabilisation and digital zoom (20x)
- 360° Continuous rotation with pan and tilt speeds between 0.001° and 200° per second
- High level of camera positioning accuracy: 0.0001° / 0.0017 mRad
- Unique cable managed, rapid release mechanism with precise bore sighting allowing a quicker installation in the field
- Ideally suited for single mast deployments such as mobile, border and maritime applications



Above: Typical Jaegar Ranger, HD visible camera wiper optional (models will vary)

TECHNICAL SPECIFICATION

| THERMAL SENSORS | JPTX-EVO2-225-W | JPTX-EVO2-300-W |
|---------------------------|--|-----------------------|
| Focal Length | 25mm to 225mm | 20mm to 300mm |
| Horizontal FOV | 17.6° (W) to 2.0° (T) | 22.0° (W) to 1.5° (T) |
| F Number | F1.5 | F1.5 |
| Optical Zoom (Continuous) | 9x, Motorised | 15x, Motorised |
| Digital Zoom | 20x | |
| Focus | Push autofocus, continuous autofocus, continuous autofocus with automatic ROI, manual | |
| Detector Type | Uncooled VOx microbolometer, ≤20mK (at 20°C, F1.0), 60Hz, 12µm, 640 x 512 | |
| Spectral Band | 8 to 14µm (LWIR / 8 to 14µm) | |
| Image Processing | Correction (NUC), noise filtering, polarity control, Digital Detail Enhancement (DDE), 10x colour palettes (including white hot /black hot polarity) | |
| Housing Weight (Typical) | 18.3kg / 40.3lb | 25Kg / 55.1lb |
| Housing Size (Typical) | L740 x W298 x H249mm | L1000 x W319x H292mm |

| HD VISIBLE SENSOR | |
|---------------------------|--|
| Focal Length | 15.2mm to 500mm |
| Horizontal FOV | 23.42° (W) to 0.78° (T) |
| F Number | F3.0 to F32 |
| Optical Zoom (Continuous) | 33x, Motorised |
| Digital Zoom | 20x |
| Focus | Push autofocus, continuous autofocus, continuous autofocus with automatic ROI, manual |
| Image Sensor | 1/1.9" CMOS Sensor (2.38 MP), full HD 1080p (1920 x 1080) |
| Min. Sensitivity | 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 Processing | Digital noise reduction |
| Housing Weight (Typical) | 17.5Kg / 38.6lb |
| Housing Size (Typical) | L740 x W298 x H249mm |

| NexOS* | |
|-----------------------|--|
| NexOS Core (Standard) | NexOS Core includes: Push autofocus, continuous autofocus, continuous autofocus with automatic ROI, digital zoom, image contrast enhancements, CLAHE, de-fog, electronic image stabilisation (2D), static overlays, remote upgrades, remote diagnostics |

| JAEGAR PAN AND TILT UNIT (PTU)* | ELECTRICAL AND MECHANICAL | | |
|---------------------------------|---|--|--|
| Pan Range / Velocity | 360° Continuous; 0.001° - 200° per second** | Video Output | RTSP, ONVIF from PTU (H.264, H.265 and MJPEG) |
| Tilt Range / Velocity | -90° to +90°; 0.001° - 200° per second** | Ethernet | Command and control of all functions including streaming of H.264, H.265 and MJPEG video |
| Accuracy | 0.0001° / 0.0017 mRad | RS485 | Pelco D command and control with custom procedural extensions |
| Repeatability | 0.0001° / 0.0017 mRad | Boresight with Rapid Release Mechanism | Anodised aluminium, quick release bracket with micro adjustment boresight mechanism |
| Actuation | Custom stepper motors | Input Voltage | 48VDC |
| Speed Control | Zoom dependent speed control (subject to payload*) | Housing Material and Finish | Anodised aluminum, thermal and visible sensors (only) are nitrogen purged, hydrophobic coating on visible sensor window, white powder marine grade paint finish (other colours are available upon request) |
| Presets Types | Procedural, Positional | IP Rating | IP67 |
| Number of Presets | 255 | Temperature Range | -32°C (-25°F) up to 65°C (149°F) (-40°C/°F with optional Cold Weather Pack) |
| Protocols | Pelco D, ONVIF Profile-S (custom available on request) | | |
| Interface | RS485, ONVIF Profile-S, Serial <-> IP | | |
| Positioning | Absolute positioning feedback | | |
| Through Shaft | Yes | | |
| PTU Weight (Typical) | 26.4kg / 58.2lb (excluding mounts, brackets, through shaft and payloads) | | |
| PTU Size (Typical) | H434 x W275 x D336mm (excluding mounts, brackets, through shaft and payloads) | | |

| OPTIONALLY AVAILABLE | |
|----------------------|--------------------------|
| Wiper | Wiper for visible sensor |

* Subject to payload types.

** Maximum pan and tilts speeds may be restricted depending on the payload types.



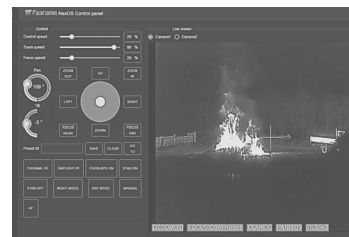
RUGGEDISED
 Suitable for marine and extremely challenging environments



HIGH ACCURACY
 Designed for long range surveillance applications



RAPID RELEASE MECHANISM
 Allows quick changing and bore-sighting of payloads



NEXT GENERATION
 Unrivalled intelligence and hardware control from NexOS

PLEASE CONTACT US FOR A SPECIFIC CONFIGURATION

Specifications may be subject to change without notice 06/12/24 V4.3

