

AERON RANGER LR

LR UNCOOLED LWIR THERMAL ZOOM LENS OPTION:
15mm to 75mm

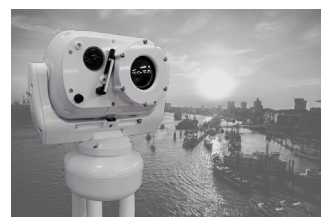


The Aeron Ranger LR is an accurate, rugged, continuous rotation dual sensor PTZ camera utilising an advanced LR uncooled LWIR thermal sensor with a 15-75mm zoom lens and a HD visible sensor with a 4.3-129mm lens. The LR range is designed to bridge the gap between cooled and uncooled thermal sensor performance. With high sensitivity and enhanced contrast levels, the LR range features image stabilisation, autofocus and CLAHE video processing as standard.

These camera sensors are housed within the Aeron's rugged enclosure, which also provides fast and accurate camera positioning. Tested to an IP67 level of environmental protection and hard anodised, the Aeron can be used in the most harsh and challenging applications such as maritime, border security and vehicle mount installations.

KEY FEATURES

- Thermal camera detection* ranges up to 3.92km (human) and 7.49km (vehicle)
- LR advanced uncooled LWIR 12 μ m, 640 x 480 thermal sensor with a 15 to 75mm zoom lens
- 30x zoom HD visible sensor with a wiper as standard
- Image stabilisation and push autofocus as standard
- 360° continuous rotation with pan and tilt speeds up to 160° per second
- High levels of camera positioning accuracy: 0.01°
- Absolute feedback, virtually zero backlash with automatic self position correction
- Compact and ruggedised for extreme and marine environments
- IP67 rating
- Mounting options include inverted, upright or inclined
- Suitable for mobile and vehicle mounted applications



WIPER AS STANDARD

The HD visible sensor features the wiper as standard



12 μ m SENSOR

Longer range performance from an uncooled thermal



360° ROTATION

The Aeron Ranger LR offers continuous 360° rotation

* Ranges are based upon 50% probability on a MODTRAN standard atmosphere. Detailed NVIPM calculation notes available upon request.



AERON RANGER LR

LR UNCOOLED LWIR THERMAL ZOOM LENS CAMERA



THERMAL SENSOR – 640 x 480, 12µm PIXEL PITCH

Part Number	RANGER-LR-75
Focal Length	15 to 75mm
Field of View	28.7° (W) to 5.9° (T)
Optical Zoom	5x, motorised
F Number	F1.2
Sensitivity	<30 mK (NETd) f/1.0 at room temperature**
Detector Type	Uncooled VOx Microbolometer
Resolution	640 x 480, 12µm
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
Image Control	Polarity: White hot / black hot, various user palettes. Orientation: Invert / revert. Shutter and scene based NUC. Spatial / temporal de-noise. Automatic gain control.

HD VISIBLE SENSOR

Focal Length	4.3 to 129mm
Image Sensor	1/2.8" CMOS Exmor (2.13MP), full HD 1080p (1920 x 1080)
F-Number	F1.6 to F4.7
Horizontal FOV	63.7° (W) to 2.32° (T)
Optical Zoom	30x
Digital Zoom	12x
Focus	Automatic, manual
Min. Sensitivity	Colour 0.01 lux, mono 0.0008 lux (high sensitivity mode)
Other Features	De-fog, digital noise reduction

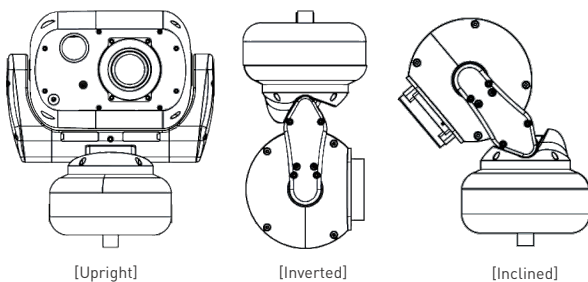
AERON PAN & TILT UNIT

Pan Range / Velocity	360° continuous / 0.01° to 160.0° per second
Tilt Range / Velocity	-30° to +90° / 0.01° to 160.0° per second (upright) -90° to +30° / 0.01° to 160.0° per second (inverted) -68° to +90° / 0.01° to 160.0° per second (inclined)
Accuracy	0.01° / 0.17 mRad
Repeatability	0.05° / 0.87 mRad
Actuation	Custom stepper motors

PART CODES

RC4-511YJ30X-LB15Z75FW	Aeron Ranger LR 75, IP, 640x480, 12µm, 25Hz, LR advanced uncooled thermal camera with a 15mm-75mm, F1.2 thermal zoom lens including image stabilisation and auto focus, and a HD, 4.3-129mm (30x optical zoom lens) video camera, white colour
Options	All optional modules, cable and ancillary part numbers are available upon request

TYPICAL AERON COMPACT PTZ CAMERA*



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

IMAGE PRESENTATION

Video Output	IP, ONVIF, RTSP, composite (PAL / NTSC), HD-SDI (cost option)
Video over IP	Integrated IP encoders provide simultaneous H.264 RSTP (H.265 optional) and ONVIF Profile-S

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	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 AND MECHANICAL

Input Voltage	Nominal 28VDC (24-32VDC)
Power Consumption	Typical: 60W, peak: 100W (with heater)
Housing Material	Anodised aluminium, white powder marine grade paint finish (other colours are available upon request)
Camera Weight	10.6kg / 23.3lb
Camera Turning Diameter	340mm / 13.40" normal - 370mm / 14.57" offset
Height	370mm / 14.57" normal - 340mm / 13.86" offset

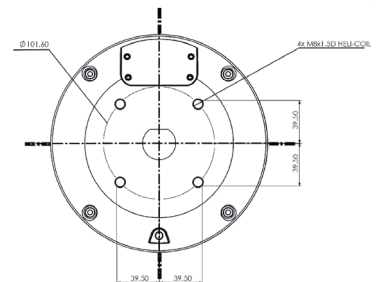
ENVIRONMENTAL

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
GYRO	2-AXIS GYRO stabilisation
4K Visible Camera	4K colour camera, 4.4-88.4mm Lens, 20x optical zoom, 12x digital zoom, colour 0.4 lux; colour 0.06 lux (slow shutter on). Replaces HD visible camera
Storage	Up to 64GB in total via SD/MMC (32GB available per channel if using thermal and video / 2x cameras)

Aeron Fixing Points
(base of the Aeron with an industry standard 4" PCD mount)



Specifications may be subject to change without notice.
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