AERON RANGER

UNCOOLED LWIR THERMAL ZOOM LENS OPTIONS:

15mm to 100mm 26mm to 105mm 25mm to 150mm



Above: Aeron Ranger 25-150mm. Other models will vary.

The Aeron Ranger is an accurate, rugged, continuous rotation dual sensor PTZ camera utilising an uncooled LWIR thermal sensor with a range of zoom lenses up to 150mm and a HD visible sensor.

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 3.29km (human) and 10.1km (vehicle)
- Uncooled LWIR thermal sensors with zoom lens options up to 150mm
- 30x zoom HD visible sensor with a wiper 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



FLEXIBLE MOUNTING
Options include inverted,
upright, or inclined



WIPER AS STANDARD
The visible HD camera comes
with a wiper as standard



360° ROTATION The Aeron Ranger offers continuous 360° rotation

(Human at 1.8m x 0.5m, vehicle at 2.3m², Detection at 2 pixels, Recognition at 8 pixels and Identification at 13 pixels. 50% probability subject to environmental conditions)







^{*} Johnsons Criteria,

AERON RANGER

UNCOOLED LWIR THERMAL ZOOM LENS CAMERAS



Above: Aeron Ranger 25-150mm. Other models will vary.

THERMAL SENSOR – 640 x 480, 17μM PIXEL PITCH			
Part Number	RANGER-100	RANGER-105	RANGER 25-150
Focal Length	15 to 100mm	26 to 105mm	25 to 150mm
Horizontal FOV	42.2° (W) - 6.2° (T)	25.3° (W) - 5.9° (T)	25.4° (W) - 4.1° (T)
Optical Zoom	6.6x, motorised	4x, motorised	6x, motorised
F Number	F1.4	F1.6	F1.4
Sensitivity	<50 mK (NETd) f/1.0 at room temperature		
Detector Type	Uncooled VOx microbolometer		
Resolution	640 x 480, 17μm		
Spectral Band	8 to 14 μm (LWIR)		
Frequency	25Hz (9Hz, 30Hz options)		
Focus	Manual (push autofocus cost option)		
Digital Zoom	4x digital zoom (8x optional)		
Image Stabilisation	Yes, electronic (cost option)		
Image Processing	Polarity control, tunable contrast enhancement		

HD VISIBLE SENSOR			
Focal Length	4.3mm 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, WDR, image stabilisation, boresight adjustment		

AERON PAN AND TILT UNIT		
Pan Range; Pan Velocity	360° continuous; 0.01° to 160° per second	
Tilt Range; Tilt Velocity	-30° to +90°; 0.01° to 160° per second (upright) -90° to +30°; 0.01° to 160° per second (inverted) -68° to +90°; 0.01° to 160° per second (inclined)	
Accuracy	0.01° / 0.17 mRad	
Repeatability	0.05° / 0.87 mRad	
Actuation	Custom stepper motors	

MAGE PRESENTATION			
Video Output	IP, ONVIF, RTSP {Composite (PAL / NTSC) and HD-SDI are cost options}		
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)	Typical: 60W, peak: 100W (with heater)		
Housing Material	Anodised aluminium, white powder marine grade paint finish (other colours are available upon request)		
Camera Weight (Typical)	10.6kg / 23.3lb		
Camera Turning Diameter (Typical)	340mm / 13.40" normal - 370mm / 14.57" offset		
Height (Typical)	370mm / 14.57" normal - 340mm / 13.86" offset		
ENVIRONMEN	ITAL		
IP Rating	IP67		
Temperature Range	-30°C (-22°F) up to 65°C (149°F) (-40°C with optional heater)		

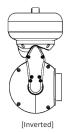
OPTIONS		
Automatic Tracking	Hardware based target acquisition and tracking capability.	
Stabilisation	Electronic image stabilisation (for the thermal)	
GYRO	2-AXIS GYRO stabilisation	
4K Visible Camera	4K colour camera, 4.4-88.4mm Lens, 20x optical zoom, 12x digital zoom, colour 0.4 lux; colour 0.06 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)	

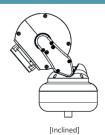
	DES

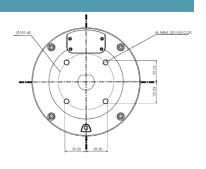
RC4-51IYJ30X-DB15Z100FW
Aeron Ranger 100, IP, 640x480, 17μm, 25Hz thermal camera with a 15mm-100mm, F1.4 thermal zoom lens, and a HD, 4.3-129mm (30x optical zoom lens) video camera
RC4-51IYJ30X-DB25Z150FW
Aeron Ranger 105, IP, 640x480, 17μm, 25Hz thermal camera with a 25mm-150mm, F1.4 thermal zoom lens, and a HD, 4.3-129mm (30x optical zoom lens) video camera
Aeron Ranger 25-150, IP, 640x480, 17μm, 25Hz thermal camera with a 25mm-150mm, F1.4 thermal zoom lens, and a HD, 4.3-129mm (30x optical zoom lens) video camera
Options
All optional features, modules, cable and ancillary part numbers are available upon request

TYPICAL AERON COMPACT PTZ CAMERA

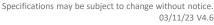














 $[\]ensuremath{^{*}}$ Illustrations are indicative and subject to the final configuration/model.