AERON SEARCHER COOLED MWIR THERMAL ZOOM LENS OPTIONS: 19mm to 275mm 15mm to 300mm



The Aeron Searcher is an accurate, rugged, continuous rotation dual sensor PTZ camera utilising a cooled MWIR thermal sensor with a range of zoom lenses up to 300mm 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 10.97km (human) and 20.1km (vehicle)
- Cooled MWIR 15µm, 25mK thermal sensors with zoom lens options up to 300mm
- Image stabilisation and push autofocus as standard on the thermal.
- 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



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



COOLED SENSORS Allows long range performance from a compact PTZ



360° ROTATION The Aeron Searcher offers continuous 360° rotation

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

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Specifications may be subject to change without notice. 29/04/21 V4.0



AERON SEARCHER

COOLED MWIR THERMAL ZOOM LENS CAMERAS

THERMAL SENSOR – 640 x 512, 15µm PIXEL PITCH		
Part Number	SEARCHER-275	SEARCHER-300
Focal Length	19 to 275mm	15 to 300mm
Field of View	28.3° (W) to 2.0° (T)	35.5° (W) to 1.83° (T)
Optical Zoom	14.5x, motorised	20x, motorised
F Number	F5.5	F4.0
Cooler MTBF	10,000 hours	20,000 hours
Detector Type	Cooled InSb FPA, Cooled downtin	me <10 Minutes, 6 minutes typical
Sensitivity	<25 mK (NETd) at	room temperature
Resolution	640 x 51	2, 15µm
Spectral Band	3.4 to 5.1 µ	μm (MWIR)
Frequency	25Hz (30H	Hz option)
Focus	Push auto focus a	and manual focus
Digital Zoom	4x digital zoom	
Image Stabilisation	Yes, electronic	
Image Processing		reduction, sharpen, alpha-blend. white-hot, rainbow etc

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 & TILT UNIT

Pan Range; Pan Velocity	360° continuous; 0.01° to 160.0° per second
Tilt Range; Tilt 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

/////	gyrø ståbiliser. Other models will vary./	
IMAGE PRES	SENTATION	
Video Output	NTSC or PAL composite video, ONVIF RTSP, HD-SDI (optional)	
Connector Types	BNC (2) provides thermal and visible (optional) video simultaneously	
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	5	
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	
ENVIRONME	INTAL	
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)	

PART CODES

Options

RC4-51IYJ30X-IB19Z275FW Aeron Searcher 275, IP, 640x512, 15µm, 25Hz thermal camera with a 19-275mm, F5.5 thermal zoom lens, and a HD, 4.3-129mm (30x optical zoom lens) video camera RC4-51IYJ30X-IB15Z300FW Aeron Searcher 300, IP, 640x512, 15µm, 25Hz thermal camera with a 15-300mm, F4.0 thermal zoom lens, and a HD, 4.3-129mm (30x optical zoom lens) video camera All optional modules, cable and ancillary part numbers are available upon request

TYPICAL AERON COMPACT PTZ CAMERA*



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



* Illustrations are indicative and subject to the final configuration/model.

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Above: Aeron Searcher 15-300mm with