

JAEGAR & Radar







One mast total surveillance solution

The Jaegar PT combined with long range radar provides a fully integrated surveillance system with best in class X-Band radar.

The unit gives 360° coverage with radar man detection out to 5000m. Multiple options of thermal and HD or SD video cameras provide video verification of any target detected and the cameras will track the target as it moves. The system can be located on one mast ensuring there are no blind spots.

The SxV lightweight radar is a coherent wide area surveillance radar built upon proven X-Band SharpEye™ solid state transceiver technology. Ultra high reliability, "fit-and-forget" design concept and high detection performance make it an ideal solution for a wide range of applications. With its doppler processing, it can eliminate most land clutter allowing for better surveillance of potential threats.

The CxEyeTM control software is easy to operate and will display targets on a geo-referenced map display. This combined with the cameras and radar enables a Detect, Recognise, Identify and Classify methodology. CxEyeTM will control multiple radars and cameras from one screen, meaning the system is modular and scalable. Integrated E/O sensors can be cued to radar targets.

Silent Sentinel have teamed-up with radar manufacturer Kelvin Hughes, to produce a truly exceptional surveillance system that is easy to deploy and control.

Key features:

- X-Band radar, 360° coverage
- One mast solution
- Long range thermal detection
- Cooled or uncooled thermal
- HD or SD video option including IP or HD-SDI
- Optical zoom lens on thermal camera
- IP67 environmental protection (IP68 option)
- Absolute positioning feedback
- 360° continuous rotation
- Harmonic drive zero backlash gears







The Silent Sentinel Range

Silent Sentinel offer an extensive range of camera and lens configurations to meet your exact surveillance requirements.

Contact customer service for more information on our full range of products and bespoke design and build services.

Tel: (1) 916-632-1301 www.silentsentinel.com









OCULUS

AFRON

OSIRIS

IAFGAR



Radar features SHARE, SXV

- Concurrent long and short range detection
 - Low power consumption: 150W
 - 360° and sector scanning
 - Versatile mast and mount options
 - Graceful degradation
 - Integrated transceiver and GPS
 - Pulsed, coherent waveforms

- Jamming/Interference resilient (RF frequency variation)
- Adaptive clutter suppression dopler proc./pulse compression
- 522mm rotating patch array antenna
- Gigabit ethernet output
- Asterix CAT 240 radar video and CAT 253 control
- Continuous system health monitor and built-in self test
- Environmental resilience: IP67 -25°C to +55°C operating temperature

Jaegar Scout

Video type	SD	HD
Optical zoom	36x	30x
Digital enlargement	12x (432x combined)	12x (360x optical zoom)
Image sensors	1/4" Exview CCD	1/2.8" - Type Exmor CMOS sensor
Resolution	520TVL	Approx 3.27 million
Signal system	NTSC	HD: 1080p/ SD: NTSC/PAL
Lens (wide to tele)	F=3.4mm to 122mm F1.6 to F4.5	f=4.3mm to 129mm F1.6 to F4.7
Angle of view - horizontal	58.° (W) to 1.7° (T)	54.1° (W) to 2.9° (T)
Minimum illumination (50IRE)	1.4 lux Color, 0.01 lux Mono	1.7 lux, 0.01 lux in high sens mode
Video output	Composite	Digital

Video type	Thermal
Sensor type	Uncooled VOx Microbolometer
Pixel size	17 μ
Spectral band	8-14 µm
Thermal sensitivity	<50mK
Array format	320x240
Frame rates	9Hz, 30Hz
Image control	White hot, Black hot, Invert
Focus	Fixed, preset, Athermalised
Zoom	E-zoom 1-4, Region of interest
FOV	9°-35mm f1.2
Video output	Composite

Jaegar Ranger

Video type	SD	HD
Optical zoom	36x	30x
Digital enlargement	12x (432x combined)	12x (360x optical zoom)
Image sensors	1/4" Exview CCD	1/2.8"- Type Exmor CMOS sensor
Resolution	520TVL	Approx 3.27 million
Signal system	NTSC	HD: 1080p/ SD: NTSC/PAL
Lens (wide to tele)	F=3.4mm to 122mm F1.6 to F4.5	f=4.3mm to 129mm F1.6 to F4.7
Angle of view - horizontal	58.° (W) to 1.7° (T)	54.1° (W) to 2.9° (T)
Minimum illumination (50IRE)	1.4 lux Color, 0.01 lux Mono	1.7 lux, 0.01 lux in high sens mode
Video output	Composite	Digital

Video type	Thermal
Sensor type	Uncooled VOx Microbolometer
Pixel size	17μ
Spectral band	8-14µm
Thermal sensitivity	<50mK
Array format	640x480
Frame rates	9Hz, 30Hz
Image control	White hot, Black hot, Invert
Focus	Fixed, preset, Athermalised
Zoom	E-zoom 1-4, Region of interest
FOV	6° - 100mm f1.6
Video output	Composite

Jaegar Searcher

Video type	SD	HD
Optical zoom	33x	33x
Image sensors	1/2" CCD	1/3" 2 MP
Resolution	650TVL	900 TVL
Signal system	NTSC	Digital
Lens (wide to tele)	f=16mm - 528mm	f=15mm - 500mm
Angle of view - horizontal	22.° (W) to 0.7° (T)	23.4° (W) to 0.74° (T)
Minimum illumination (50IRE)	0.1 lux (+1.4)	1.6 lux
Video output	Composite	Digital

Video type	Thermal
Sensor type	Uncooled VOx Microbolometer
Pixel size	17μ
Spectral band	8-14µm
Thermal sensitivity	<50mK
Array format	640x480
Frame rates	9Hz, 30Hz
Image control	White hot, Black hot, Invert
Focus	Fixed, preset, Athermalised
Zoom	E-zoom 1-4, Region of interest
FOV	2.8° - 24.5° 25-225mm f/1.5
Video output	Composite

Common features

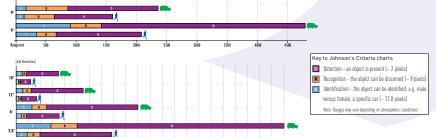
Tilt range	+90° to -90°
Limits	Fixed hard and adjustable limits
Motor type	Stepper motor drive
Position encoders	Optical
Position feedback	0.01°
Repeatability	0.009°
Presets	127
Protocols	Pelco D, Pelco D, SSP
Parameter programming	via RS485 or RS422

Compass heading	Cardinal point and/or degrees
Operating temperature	-30°C to 65°C (-40°C with optional heater)
Ingress protection rating	IP67
Housing material	Cast aluminium
Housing finish	Xylan undercoat with epoxy powder finish
Fixings material	Stainless steel
Operating voltage	24-30VDC 3.5A
Connector	Mil spec multiway

Ordering information

Product code	Product description
JPRL-NSCOUT-FB	Jaegar Scout-RL+ Long Range Radar (5000m Range) Black
JPRL-NSCOUT-FW	Jaegar Scout-RL+ Long Range Radar (5000m Range) White
JPRL-NRANGER-FB	Jaegar Ranger-RL+ Long Range Radar (5000m Range) Black
JPRL-NRANGER-FW	Jaegar Ranger-RL+ Long Range Radar (5000m Range) White
JPRL-NSEARCHER-FB	Jaegar Searcher-RL+ Long Range Radar (5000m Range) Black
JPRL-NSEARCHER-FW	Jaegar Searcher-RL+ Long Range Radar (5000m Range) White
JPRL-HSCOUT-FB	Jaegar HD Scout-RL+ Long Range Radar (5000m Range) Black
JPRL-HSCOUT-FW	Jaegar HD Scout-RL+ Long Range Radar (5000m Range) White
JPRL-HRANGER-FB	Jaegar HD Ranger-RL+ Long Range Radar (5000m Range) Black
JPRL-HRANGER-FW	Jaegar HD Ranger-RL+ Long Range Radar (5000m Range) White
JPRL-HSEARCHER-FB	Jaegar HD Searcher-RL+ Long Range Radar (5000m Range) Black
JPRL-HSEARCHER-FW	Jaegar HD Searcher-RL+ Long Range Radar (5000m Range) White

Detection, recognition and identification range charts



Other thermal options available.

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Specifications may be subject to change without notice \bullet DA060814 - 1.1c \bullet © 2014