

REDSAN Series

Customizable LiDAR Sensing Solutions For High Security Applications

The REDSCAN Product Series utilizes LiDAR sensing technology to provide highly accurate detection of intruders and moving objects. Equipped with OPTEX's most advanced technologies, it provides excellent detection performance not affected by variable lighting, temperature, or environmental changes, making it the ideal solution for high security sites.

Applications Include:

Power plants, substations, border protection, correctional facilities, data centers, distribution centers, airports, water treatment plants, ports, warehouses, museums & art galleries, financial institutions, hospitals, and schools.

REDSAN mini Series



REDSAN Pro Series



REDSAN mini-Pro Series





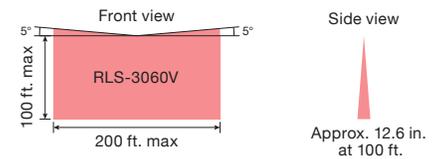
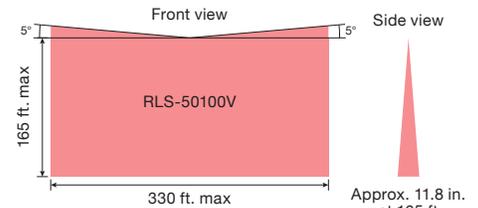
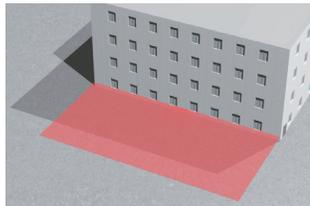
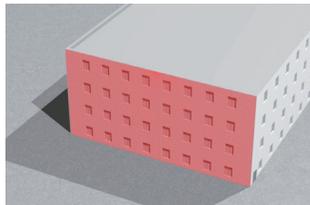
REDSKAN Pro Series



The REDSCAN PRO series can very accurately detect intruders to a range of 165 x 330ft (50 x 100m), without any gaps and keeping the same detection resolution near and far into the detection range. Equipped with OPEX's most advanced technology, the REDSCAN PRO provides excellent detection performance that won't be affected by variable lighting, temperature or environmental changes, making it the best solution for high security sites.

FEATURES

- **RLS-50100V:** 50 x 100 m (approx. 165 x 330 ft.)
- **RLS-3060V:** 30 x 60 m (approx. 100 x 200 ft.)
- Very high detection resolution: 0.125°
- Vertical and horizontal mounting
- Selectable installation method (wall, ceiling, pole mount)
- Rectangular detection area
- 8 independent detection zones with customizable target size, sensitivity, and output
- Embedded video camera for visualizing your detection area
- Event log function — Confirm events with event log & image
- Auto area adjustment
- Small animal tolerant
- Setting by Internet browser
- Environmental resistance function



RLS-3060V

- Indoor / outdoor model
- 8 independent detection zones. Configurable sensitivity, target size & output

RLS-50100V

- Indoor / outdoor model
- Expanded mode: up to 530 ft vertical / 265 ft radius horizontal mount
- 8 independent detection zones. Configurable sensitivity, target size & output

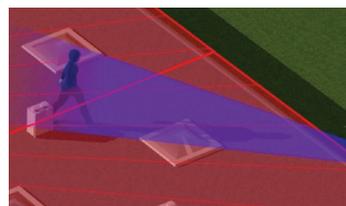


The REDSCAN Pro LiDARs are ONVIF profile S conformant sensors allowing them to send alarm outputs via the ONVIF protocol to any ONVIF conformant networked video system or IP network devices.

Detect a crawling person



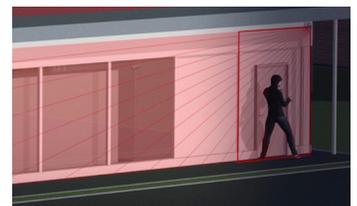
Detect a running person



Thrown object detection

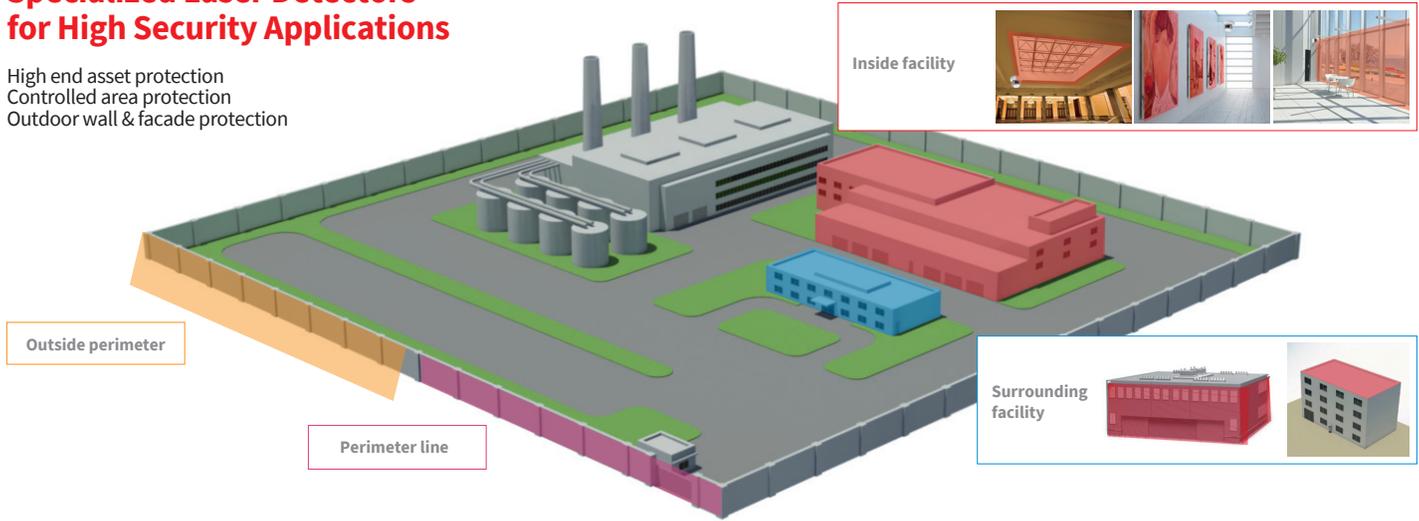


Quick intrusion detection



Specialized Laser Detectors for High Security Applications

High end asset protection
Controlled area protection
Outdoor wall & facade protection



REDFAN mini-Pro Series

REDFAN mini Series



Extremely accurate intrusion detection sensors using time-of-flight technology to identify the size, location, and distance of moving or loitering objects and track them to the exact X and Y coordinates. Now with built-in IR camera for visual verification and recording.

FEATURES

- 20 m x 20 m (65 ft. x 65 ft.), 95° detection area
- Vertical, horizontal, or multi-angled mounting options
- Up to 8 independent detection zones
- 0.125° angular resolution for precise detection
- 100ms response time for instant target visualization
- Built-in IR FHD camera on RLS-2020V model
- Operates in temperatures from -40°F to 140°F (-40°C to 60°C)
- Automatic ground level adjustment
- Real-time event analysis and logic-based filtering for prioritized alerts
- ONVIF Profile S compliant for seamless integration with VMS or IP devices
- Supports multiple network protocols
- Secure network connectivity via IP and analog
- Easy installation and configuration with intuitive user interface and web browser settings

RLS-2020A

- Indoor / outdoor mode

RLS-2020V

- Indoor / outdoor mode
- Built-in FHD camera and IR LED for visual verification of alarm signals



Compact and highly customizable Laser Scan detector that works in an unobstructed way to protect houses, buildings, flat roofs, controlled areas, and assets, by creating an invisible laser wall or plane and detecting any intrusion breaching it.

FEATURES

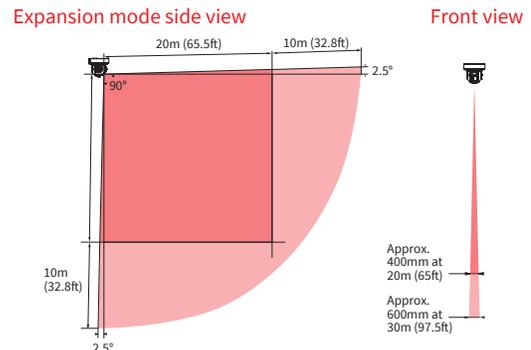
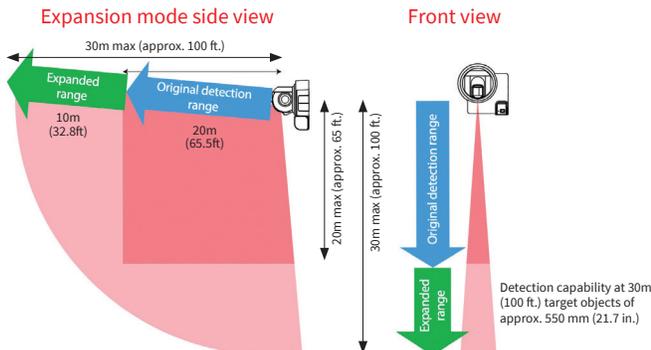
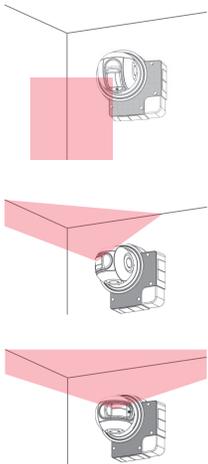
- 20 m x 20 m (65 ft. x 65 ft.), 95° detection area
- Vertical and Horizontal detection modes
- Multi-angle Adjustment Shell Structure (M.A.S.S.)
- Unique detection algorithm
- Automatic area setting function
- Advanced area setting
- 4 adjustable detection areas on IP connection
- 3 outputs can be assigned for analog connection
- Supporting multiple network protocols
- Anti-rotation, anti-masking, soiling, trouble, tamper, DQ outputs (Selectable)
- Paintable housing
- Environmental disqualification circuit (D.Q.)
- Area selection
- Integration to external devices and applications with REDWALL Event Code

RLS-2020I

- Indoor use model

RLS-2020S

- Indoor / outdoor mode
- Indoor high resolution mode
- Indoor throw-in mode
- Detection range expansion mode



SPECIFICATIONS

Model	RLS-50100V	RLS-3060V
Installation location	Indoor / Outdoor	
Detection method	Infrared Laser Scan	
Laser protection class	Class 1	
Power input	19.2-30 VDC, PoE+ (IEEE 802.3at compliant)	
Current draw	500 mA max. (24 VDC), 12 W max. (PoE+) with heater option: 1.25 A max. (24 VDC), 25.5 W max. (PoE+)	
Mounting method	Ceiling mount, Wall mount, Pole mount	
Detection area	50 x 100 m, 190 degree (approx. 165 x 330 ft.)	30 x 60 m, 190 degree (approx. 100 x 200 ft.)
Detection range	Radius 1 to 50 m (approx. 3.3 to 165 ft.) at 10% reflectivity	Radius 1 to 30 m (approx. 3.3 to 100 ft.) at 10% reflectivity
Detection resolution / Response time	0.125 degrees / within 100 msec. to 15 min.	
Mounting height (Vertical mode)	Indoor: 2 m (approx. 6.7 ft.) or higher/Outdoor: 4 m (approx. 13 ft.) or higher (Recommended)	
Communication port	Ethernet RJ-45 10BASE-T/100BASE-TX (Auto negotiation)	
Protocol	UDP/TCP/HTTP/HTTPS/IPV4/DNS/DHCP/SNMPv1-v3/NTP/WS-Discovery/ONVIF	
Output	6 outputs, 28 VDC 0.2A max. N.O./N.C. Selectable	
Input	1 Non-voltage contact input	
Alarm period	Approx. 2 second delay timer	
Operating temperature	-20°C to 60°C (-4°F to 140°F) with RLS-LWVH: -40°C to 60°C (-40°F to 140°F)	
Dimensions (HxWxD), Weight	230 x 160 x 256.6 mm max. (9.1 x 6.3 x 10.1 inch), 2.6 kg (92 oz.)	
IP rating	IP66	

Model	RLS-2020I	RLS-2020S
Installation location	Indoor	Indoor/Outdoor
Detection method	Infrared Laser Scan	
Laser protection class	Class 1	
Power input	10.5 to 30 VDC, PoE (IEEE802.3af/at compliant)	
Current draw	500mA max. (12 VDC), 250mA max. (24 VDC), 6W max. (PoE)	
Mounting method	Ceiling mount, Wall mount, Tripod mount, Pole mount (option), Recess mount (option)	
Detection area	S: 30m (97.5ft) radius arc I: 20 x 20 m, (approx. 65 x 65 ft.) 95 degrees	
Detection range	Radius 1 to 21m (approx. 3.0 to 68 ft.) at 10% reflectivity	
Detection resolution/Response time	0.25° / within 75 ms to 1 min (for indoor & outdoor modes)	0.25° / within 25ms (for indoor throw-in mode) 0.125° / within 100ms to 1 min (for indoor high resolution mode)
Mounting height (Vertical mode)	2m (6.7 ft.) or higher	Indoor: 2m (6.7 ft.) or higher Outdoor: 4m (13ft.) or higher (Recommended)
Communication port	Ethernet RJ-45 10BASE-T/100BASE-TX (Auto negotiation)	
Protocol	UDP, TCP/IP (Redwall Event Code), Http (Web setting), SNMP	
Output	3 outputs, 28 VDC 0.2A max. N.O./N.C. Selectable (3 from Master alarm, Zone outputs, Trouble, Tamper)	3 outputs, 28 VDC 0.2A max. N.O./N.C. Selectable (3 from Master alarm, Zone outputs, Trouble, Tamper, D.Q.)
Input	1 Non-voltage contact input	
Alarm period	Approx. 2 sec delay timer	
Operating temperature	-40 to 50 C° (-40 to 122 F°)	-40 to 60 C° (-40 to 140 F°)
IP rating	IP66	
Dimensions (HxWxD)	146 x 160 x 160 mm (5.8 x 6.3 x 6.3 inch)	
Weight	1.0 kg (2.2 lb)	

Model	RLS-2020V	RLS-2020A
Installation location	Indoor/Outdoor	
Detection method	Infrared Laser Scan	
Laser protection class	Class 1	
Power input	19.2-30 VDC, PoE+ (IEEE 802.3 af/at compliant)	19.2-30 VDC, PoE (IEEE 802.3 at compliant)
Current draw	580 mA max. (24 VDC), 14 W max. (PoE+)	420 mA max. (24 VDC), 10 W max. (PoE)
Mounting method	Ceiling mount, Wall mount, Pole mount	
Detection area	20 x 20m, 95 degree (approx. 65 x 65 ft.)	
Detection range	Radius 1 to 21m (approx. 3.3 to 68ft) at 10% reflectivity	
Detection resolution/Response time	0.125° / within 100 msec. to 15 min. / 0.25° / within 50 msec. to 15 min.	
Mounting height (vertical mode)	Indoor: 2m (6.7 ft.) or higher / Outdoor: 4m (13 ft.) or higher (Recommended)	
Communication port	Ethernet RJ-45 10BASE-T/100BASE-TX (Auto negotiation)	
Protocol	UDP/ TCP/ HTTP/ HTTPS/ IPV4/ IPV6/ DNS/DHCP/ SNMPv1-v3/ NTP/ WS-Discovery/ ONVIF/IEEE802.1X	
Output	6 outputs, 28 VDC 0.2 A max. N.O./N.C. (selectable) (6 from Master alarm, Zone alarm, Trouble, Tamper, Environmental Disqualification, Device Monitoring) (programmable) RS-485	
Input	2 Non-voltage contact input (Detection profile switching, Area set, Sensor check, Turn on LEDs, Create AND/NAND logic, Dynamic event filtering), Programmable	
Alarm period	Approx. 2 second delay timer	
Operating temperature	-40°C to 60°C (-40°F to 140°F)	
Dimensions (HxWxD) Weight	202.6 x 206.7 x 163.5 mm max. (8.0 x 8.1 x 6.4 inch)	

Model	RLS-2020V
Image sensor	Full HD (1980 x 1080)
Image resolution	1080P (Web User Interface) / 1080P/720P/360P (RTSP)
Viewing angle	H: 130° / V: 65°
Minimum illumination	Approx. 1 lux.
IR Range	Removable infrared-cut filter (Auto-adjustable / Night / Day) (selectable)
Image compression	H.264, JPEG
Frame rate	1 to 10 FPS (selectable)

*ONVIF is a trademark of Onvif, Inc. www.onvif.org/profiles/profile-s/

OPTIONS



2020-PDMA
Pendant Mount



RLS-SB
Adjustable angle mounting bracket for RLS-3060 series



2020-MAB
Multi-Angle Adjustment Wall Ceiling Mount



LAC-1
Laser Area Checker



RLS-RB
Recess mount bracket



2020-WMA
12" wall mount arm bracket



2020-WMAD
Adjustable Extension Wall/Roof



RLS-LWV
Replacement Window for RLS-3060V & RLS-50100V



RLS-LWVH
Replacement Window with heater unit for RLS-3060V & RLS-50100V



RLS-LW
Replacement Window for RLS-2020A & RLS-2020V



RLS-PB2
Pole mount bracket for RLS-2020A & RLS-2020V

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