

SPECIFICATIONS












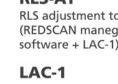
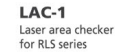

Model	RLS-3060SH	RLS-3060L
Detection method	Infrared Laser Scan	
Laser protection class	Class 1	
Coverage	Vertical area	Max. 60 m (Approx. 200 ft.) at 10% reflectivity
	Horizontal area	Radius:30 m (Approx. 100 ft.), Arc:190° at 10% reflectivity
Detection resolution	0.25"	
Communication port	Ethernet RJ-45 10BASE-T/100BASE-TX	
Protocol	UDP, TCP/IP *Redwall Event Code	
Power input	24 VDC, 24 VAC	
Current draw	400 mA max. (24 VDC) 600 mA max. (24 VAC)	
Heater power input	24 VDC, 24 VAC	
Heater current draw	400 mA max. (24 V DC/AC)	
Mounting height	Vertical area	From 4 m (13 ft.) to 15 m (50 ft.) (recommendation)
	Horizontal area	0.7 m (28 in.) (recommendation)
Target object selector	S / M / L	
Sensitivity selector	H / M / L	
Camera control output	N.O. 28 VDC, 0.2 A x 4 outputs	
Master alarm output	Form C, 28 VDC, 0.2 A max.	
Trouble output	Form C, 28 VDC, 0.2 A max.	
Tamper output	N.C. 28 VDC, 0.1 A max.	
Environmental disqualification circuit	Form C, 28 VDC, 0.2 A max.	
Alarm period	Approx. 2 sec., Off delay timer	
Operating temperature	-20 to 60 °C (-4 to 140° F)	
Operating temperature with heater	-40 to 60 °C (-40 to 140° F)	
IP rating	IP66	
Dimensions (H x W x D)	334 x 144 x 155 mm (13.2 x 5.7 x 6.1 in.)	
Weight	2.5 kg (88 oz)	2.4 kg (85 oz)

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	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 degree / within 75msec to 1 minutes (for indoor mode and outdoor mode) 0.25 degree / within 25msec (for indoor throw-in mode), 0.125 degree / within 100msec to 1 minutes (for indoor high resolution mode)	
Mounting height (Vertical mode)	2 m (6.7 ft.) or higher	Indoor: 2 m (6.7 ft.) or higher Outdoor: 4 m (13 ft.) 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 degrees (-40 to 122 F degrees)	-40 to 60 C degrees (-40 to 140 F degrees)
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	SIP-3020	SIP-4010	SIP-404	SIP-3020/5	SIP-4010/5	SIP-404/5	SIP-5030	SIP-100
Detection method	Passive Infrared							
Coverage (main area)	30 x 20 m (100 x 65 ft.)	40 x 10 m (130 x 33 ft.)	40 x 4 m (130 x 13 ft.)	30 x 20 m (100 x 65 ft.)	40 x 10 m (130 x 33 ft.)	40 x 4 m (130 x 13 ft.)	50 x 30 m (165 x 100 ft.)	100 x 3 m (330 x 10 ft.)
Coverage (creep zone)	-	-	-	3 x 5 m (10 x 16 ft.) installed at 2.3 m (7.6 ft.) height, 6 x 9 m (20 x 30 ft.) installed at 4 m (13 ft.) height, Detection angle adjustable horizontally				
Power input	11-16 VDC 22-26 VAC, 22-26 VAC with optional heating unit							
Current draw	40 mA max. (12 VDC) 75 mA max. (24 VAC), 415 mA max. (24 VAC) with optional heating unit			45 mA max. (12 VDC) 85 mA max. (24 VAC), 425 mA max. (24 VAC) with optional heating unit			45 mA max. (12 VDC) 85 mA max. (24 VAC), 425 mA max. (24 VAC) with optional heating unit	
Mounting height	2.3 to 4 m (7.6 to 13 ft.)							
Sensitivity selector	Far: SH/H/M/L Near: SH/H/M/L				Far: SH/H/M/L Near: SH/H/M/L Creep zone: SH/H/M/L			
Range selector	Far: On / Off							
Detection logic selector	AND / OR							
Alarm output (main area)	N.O., N.C. 28 VDC 0.2A max.						Far area: N.O., N.C. 28 VDC 0.2 A max. Near area: N.O., N.C. 28 VDC 0.2 A max.	
Alarm output (creep zone)	N.O., N.C. 28 VDC 0.2 A max.							
Alarm interval period	Off / 15, 30, 60 sec.							
Trouble output	N.C., 28 VDC 0.2 A max.							
Tamper output	N.C., 28 VDC 0.1 A max.							
Alarm period	Approx. 2 sec.							
Warm-up period	Approx. 60 sec.							
Operating temperature	-25 to +60°C, -40 to +60°C with optional heating unit (-13 to +140 °F, -40 to +140° F with optional heating unit)							
IP rating	Main unit : IP65 Chassis : IP55							
Dimensions (H x W x D)	227 x 102 x 266 mm (9.0 x 4.0 x 10.5 in.)			248 x 102 x 266 mm (9.8 x 4.0 x 10.5 in.)			271 x 102 x 290 mm (10.7 x 4.0 x 11.4 in.)	
Weight	1.2 kg (42 oz)			1.4 kg (48 oz)			1.6 kg (56 oz)	

Model	SIP-3020WF	SIP-4010WF	SIP-404WF
Detection method	Passive Infrared		
Coverage	30 x 20 m (100 x 65 ft.)	40 x 10 m (130 x 33 ft.)	40 x 4 m (130 x 13 ft.)
Power input	3 to 9 VDC Alkaline or lithium battery		
Operating voltage	2.5 to 10 VDC		
Current draw	40 µA(Standby) 5 mA max. (Operating LED ON)		
Mounting height	2.3 to 4 m (7.6 to 13 ft.)		
Sensitivity selector	Far: SH/H/M/L Near: SH/H/M/L		
Range selector	Far: On / Off		
Detection logic selector	AND / OR		
Alarm output	N.C. 10 VDC, 0.01 A max. N.O. 10 VDC, 0.01 A max.		
Alarm interval period	Off / 5, 60, 150 sec.		
Trouble output	N.C., 10 VDC 0.01 A max.		
Tamper output	N.C., 10 VDC 0.01 A max.		
Alarm period	Approx. 2 sec.		
Warm-up period	Approx. 120 sec.		
Operating temperature	-25 to +60°C (-13 to +140°F)		
IP rating	Main unit : IP65 Chassis : IP55		
Dimensions (H x W x D)	227 x 102 x 266 mm (9.0 x 4.0 x 10.5 in.)		
Weight	1.2 kg (42 oz)		

OPTIONS

 AWT-3 Area walk tester for SIP series	 AVF-1 Area view finder for SIP series	 SIP-HU Heating unit for SIP series	 SIP-AT SIP adjustment tools (AWT-3 + AVF-1) for SIP series
 SIP-MINIHOOD Sun/Snow shield for SIP-3020/4010/404	 SIP-MIDIHOOD Sun/Snow shield for SIP-5030/100	 RLS-PB Pole mount bracket	 RLS-SB Adjustable angle mounting bracket for RLS-3060 series
 LAC-1 Laser Area Checker	 RLS-AT RLS Adjustment Tool kit (Including REDSCAN MANAGER Setup software and LAC-1)	 RLS-RB Recess mount bracket	 RLS-AT RLS adjustment tools (REDSCAN manager setup software + LAC-1)
			 LAC-1 Laser area checker for RLS series
			 RLS-LW Laser Window for RLS-2020 series

* Specifications and design are subject to change without prior notice.



OPTEX CO.,LTD. (JAPAN)

URL: <http://www.optex.net/>



REDSAN / REDWALL PRODUCT DIGEST

For efficient Video surveillance



The protection of outdoor assets and the prevention of unauthorized entry is a serious issue for large properties, such as commercial facilities, logistics centers, power plants, and offices or industrial facilities. Effective protection must deter intrusion to the facilities.

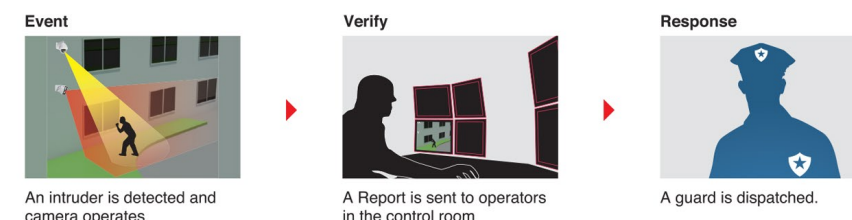
One option for solving security issues is **local video response (LVR)**, in which the security guards use video surveillance system linked with external detectors. If the detector detects an intrusion, a linked camera captures the image, and sends it to guard room, and security guards are dispatched to the site to check the problem. Local video response provides a more efficient use of security resources than the traditional use of guards.

Remote video response (RVR) is another solution. This system uses linked external detectors, video transmission, and speakers to protect the site remotely. If a linked detector is triggered, the operator checks the image, and makes a voice warning remotely. If necessary, the remote video response center dispatches guards or reports the event to key-holders and to police.

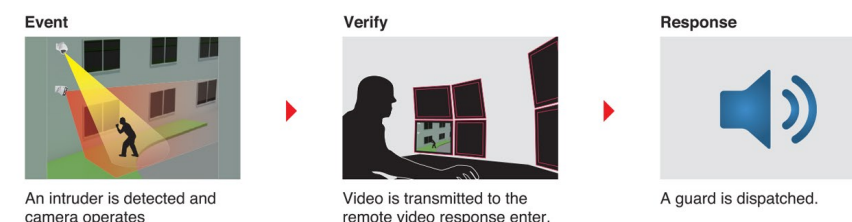
REDSAN and **REDWALL** are indoor/outdoor detectors which are specialized for these video surveillance applications. By providing high reliable detections, they enable operators to obtain the crucial images of crime, vandalism, terrorism or other threats and to take the appropriate actions.

Operation flow chart for LVR and RVR

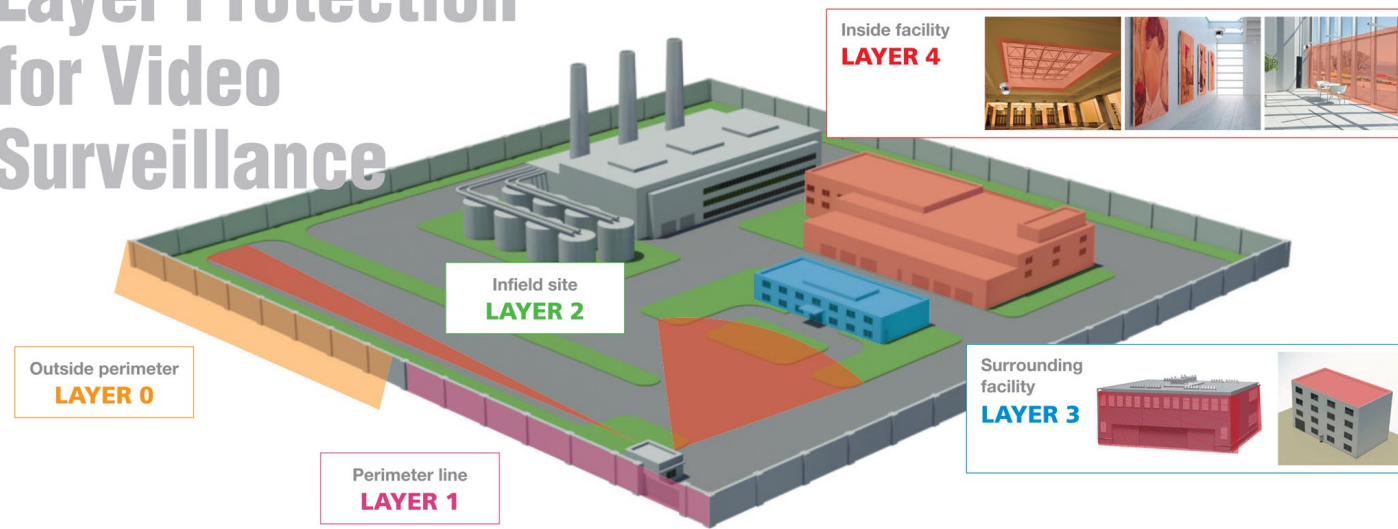
LOCAL VIDEO RESPONSE



REMOTE VIDEO RESPONSE

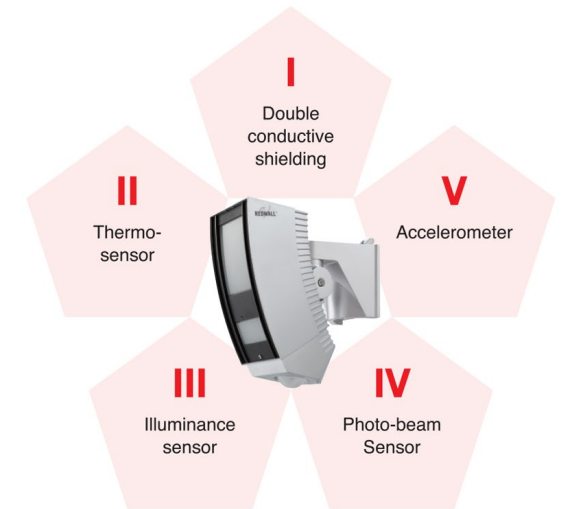


Layer Protection for Video Surveillance



REDWALL-V employs five innovative sensing technologies

- Technology I** PIR sensor with double conductive shielding for visible light and RFI protection.
- Technology II** *Thermo-sensor for automatic sensitivity adjustment
- Technology III** *Illuminance sensor for automatic sensitivity adjustment
- Technology IV** Photo-beam sensor for anti-masking
- Technology V** Accelerometer for anti-rotation



By using these five technologies, The REDWALL-V series provides the following three benefits:

1. Reduction of false alarms
2. Quick and reliable installation
3. Protection from vandalism

*REDWALL-V uses surrounding temperature and luminance information to optimize its sensitivity to reduce false alarms.

Laser Scan Detector RLS-3060 series

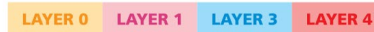


The RLS-3060 series is an innovative laser scan detector that identifies a moving object's size, speed and distance from the detector. It processes that information with a unique algorithm, resulting in a highly reliable detection system with minimal false alarms.

FEATURES

- 30m radius for 190 degrees range
- Vertical and horizontal mounting
- Unique detection algorithm
- Automatic area setting function
- 4 independently adjustable detection areas and 4 linked outputs for PTZ camera control (on Analog connection and IP connection)
- Fog cancellation algorithm (Patent listed)

RLS-3060L



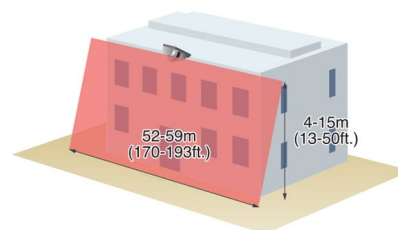
•Scene selection (Indoor / outdoor)

RLS-3060SH

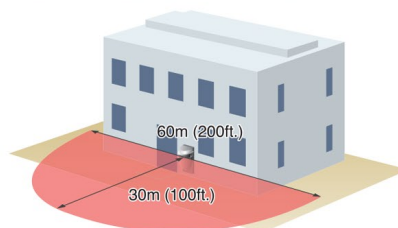


Scene selection(outdoor, indoor, indoor ceiling/Wall protection and vehicle)
 •8 independently adjustable detection area and Redwall event codes for network recorder and video management software (on analog connection and on IP connection)
 •Built-in heater

VERTICAL DETECTION ZONE



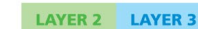
HORIZONTAL DETECTION ZONE



Synthesized Intelligent PIR REDWALL-V series



SIP-3020 SIP-4010 SIP-404



•Standard short range type



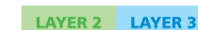
SIP-3020WF SIP-4010WF SIP-404WF



•Battery operated
 •Short range type
 •Compatible with
 •Wireless transmitter

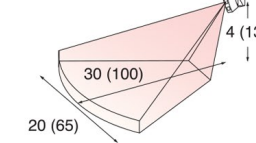


SIP-3020/5 SIP-4010/5 SIP-404/5

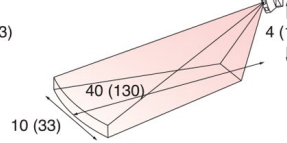


•Short range type
 •With creep zone

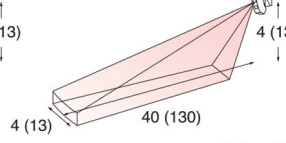
SIP-3020/WF



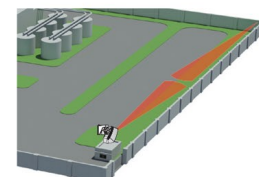
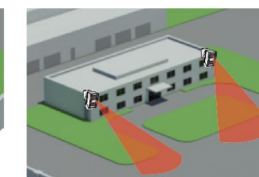
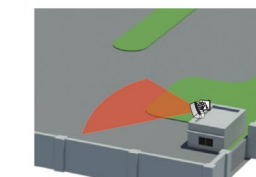
SIP-4010/WF



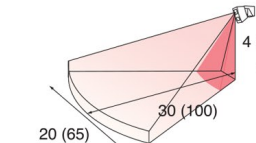
SIP-404/WF



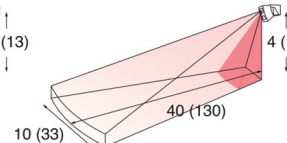
Unit: m (ft.)



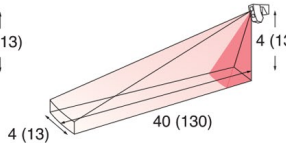
SIP-3020/5



SIP-4010/5



SIP-404/5



Unit: m (ft.)

Laser Scan Detector RLS-2020 series



The RLS-2020 series is a compact and highly customizable Laser Scan detector that helps protect in an unobstructed way, houses, buildings, flat roofs, controlled areas and assets by creating an invisible laser wall or plane and detecting any intrusion breaching it.

FEATURES

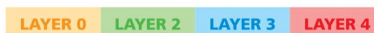
- 20m x 20m (65ft. x 65ft.), 95 degree detection area
- Vertical and Horizontal detection modes
- Multi-angle Adjustment Shell Structure (M.A.S.S.)
- Unique detection algorithm
- Automatic area setting function
- Advanced area setting
- 4 adjustable detection areas on IP connection
- Total 3 outputs can be assigned for analog connection

RLS-2020I

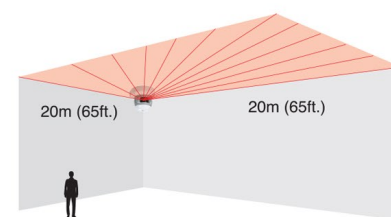
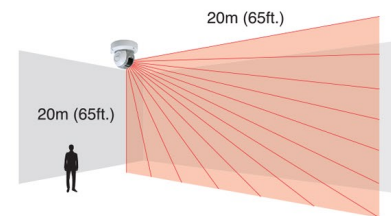


•Indoor use model

RLS-2020S

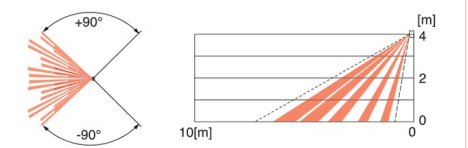


- Indoor / outdoor mode
- Indoor high resolution mode
- Indoor throw-in mode

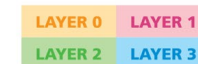


Creep zone

The built-in creep zone detector provides a 3m x 5m (10' x 16') at 2.7m (7.6') height detection area directly below the detector, which eliminates the normal "dead space" that an intruder could enter a protected area. The creep zone detection area can be adjusted between -90 to +90 degree horizontally and -3 to +3 degree vertically.

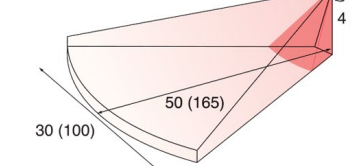


SIP-5030 SIP-100

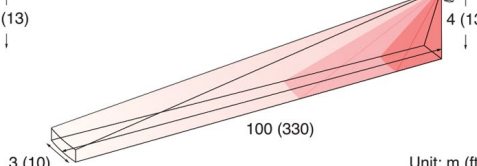


•Long range type
 •With creep zone

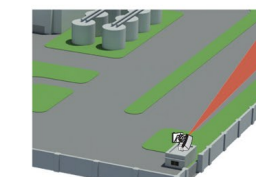
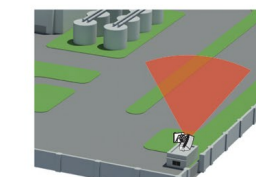
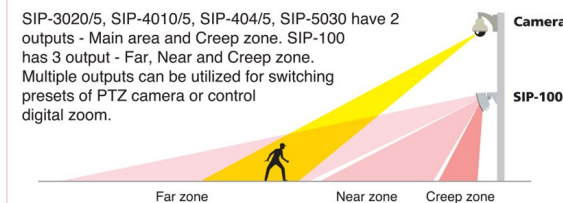
SIP-5030



SIP-100



Unit: m (ft.)



SIP-3020/5, SIP-4010/5, SIP-404/5, SIP-5030 have 2 outputs - Main area and Creep zone. SIP-100 has 3 output - Far, Near and Creep zone. Multiple outputs can be utilized for switching presets of PTZ camera or control digital zoom.

SIP-XXXX-IP model is available. The package includes SIP detector and PIE-1 (PoE IP encoder unit).