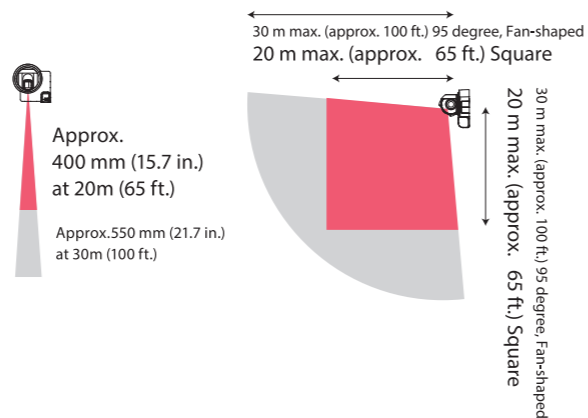


Detection areas

Normal detection range
20 x 20m (Approx. 65 x 65 ft), 95 degree, Square

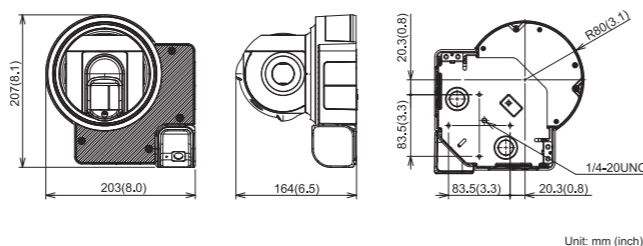
When using "Detection range expansion" radius 30m, (Approx. 100 ft.)
95 degree, Fan-shaped area



Options

LAC-1	RLS-LW	RLS-PB2
Laser Area Checker for all RLS series	Laser window for replacement	Pole mount Bracket

Dimensions



Specifications

Model	RLS-2020V	RLS-2020A
Installation location	Indoor/Outdoor	
Detection method	TOF	
Laser protection class	Class 1	
Power input	19.2-30 VDC, PoE+ (IEEE 802.3at compliant)	19.2-30 VDC, PoE (IEEE 802.3af compliant)
Current draw	580 mA max. (24 VDC), 14 W max. (PoE+)	500 mA max. (24 VDC), 12 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 21 m (approx. 3.3 to 68 ft.) at 10% reflectivity	
Detection resolution/Response time	0.125 degrees / within 50 msec. to 15 min. / 0.25 degrees / within 75 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 interface	2 Ethernet RJ-45 10BASE-T/100BASE-TX (Auto negotiation) RS-485	
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)	
Input	2 Non-voltage contact input (Detection profile switching, Area set, Sensor check) (programmable)	
Alarm period	Approx. 2 second delay timer	
Operating temperature	-40°C to 60°C (-40°F to 140°F)	
IP rating	IP66	
Dimensions (H x W x D)	207 x 203 x 164 mm max. (8.1 x 8.0 x 6.5 inch)	
Weight	1.6 kg (3.5 lbs.)	1.3 kg (2.9 lbs.)
Image sensor	1/2.8" CMOS	—
Image resolution	1080P/720P/360P (RTSP H.264) 720P/360P (RTSP JPEG) (Supports portrait display)	—
Viewing angle	H:130° V:65°	—
Minimum illumination	Approx. 1 lux. Less than the above, IR LEDs turn on.	
Day and night	Automatically removable infrared-cut filter. Auto/Day/Night mode selectable	
Image compression	H.264, JPEG	—
Frame rate	1 to 10 FPS (selectable)	—

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



OUTDOOR/INDOOR 2D LIDAR SENSOR

REDSKAN mini-Pro

Advanced 2D LiDAR sensor for outdoor and indoor intrusion detection. Customizable zones and detection logic fully integrated with various VMS platforms.



Available Models:

RLS-2020V : 20 x 20 m (approx. 65 x 65 ft.) detection with FHD camera
RLS-2020A : 20 x 20 m (approx. 65 x 65 ft.) detection



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FOR OUTDOOR & INDOOR HIGH SECURITY APPLICATIONS

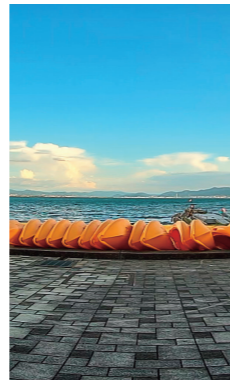
Built-in FHD Camera and IR LED



RLS-2020V

Built-in FHD Camera and IR LED

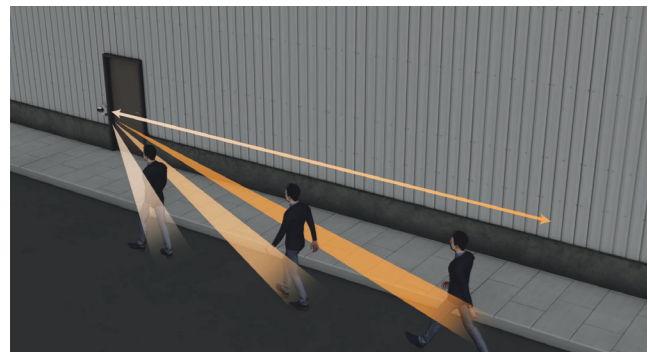
RLS-2020V has a built-in FHD camera with IR LED providing clear image in 1080P resolution. The pre and post alarm camera images are recorded in internal memory of the unit (alarm logs : 500 events) and can be played back for verification.



Horizontal and portrait image can be selectable

Automatic IR Adjustment

RLS-2020V can automatically adjust the strength of IR LED to the distance from the target.



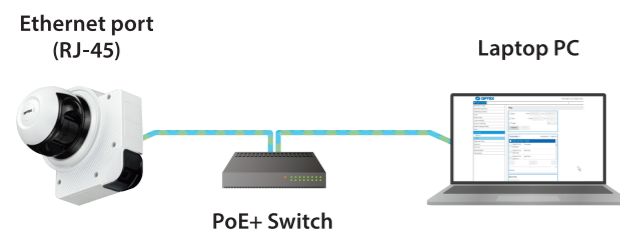
Map Screen Display

Both RLS-2020V and 2020A can stream live images instead of video images from the camera. Any photo or image can be used to overlap the detection area.



Intuitive user interface by a web browser

mini-PRO series can be setup with a web browser. No extra software installation nor internet connection is required.



Event log function

Track of object is recorded when alarm signal is generated.

Up to 500 events, selectable from video or map screen.

<input type="checkbox"/>	Date and time	Trigger
<input type="checkbox"/>	2023/07/12 06:58:27	Area set
<input type="checkbox"/>	2023/07/12 09:01:26	MO/A11
<input type="checkbox"/>	2023/07/12 08:00:12	MO/A11

Connectivity and network security



<https://www.onvif.org/profiles/profile-s/>

Alarm events can be transmitted to VMS with video stream, which provides a smart integration with VMS.

Network Protocols with enhanced network security
UDP/TCP/HTTP/HTTPS/IPV4/DNS/DHCP/SNMPv1-v3/NTP/WS-Discovery/ONVIF/IEEE 802.1X

*ONVIF is a trademark of Onvif.Inc.

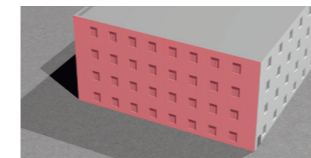
Reliable and flexible detection performance

Flexible detection area design

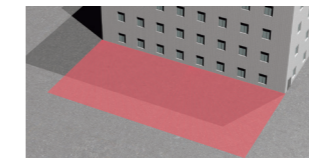
Vertical and horizontal mode can be automatically chosen.

mini-Pro series have 3 installation methods as Wall, Ceiling and Pole. You can select either method to match the installation site.

Vertical detection area



Horizontal detection area



Wall mount



Ceiling mount



Pole mount

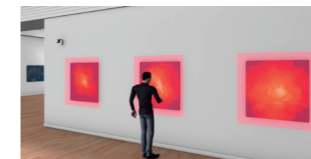


Allocating Detection Areas - Examples [Museum]

Multiple parameters can be set for each zone individually.

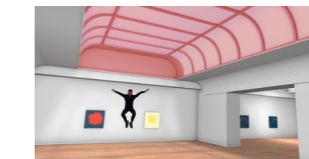
Vertical Detection Areas

Critical area :
immediate alarm output
Sensitivity : High



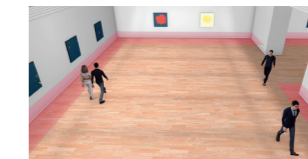
Horizontal Detection Areas

Critical area :
immediate alarm output



Switching profile 1 and 2 - Horizontal use case -

Profile 1 :
Daytime hours of opening



Switching profile 1 and 2 - Horizontal use case -

Profile 2 :
Nighttime hours of opening



Reduction of false/missed alarms

Auto area adjustment

In snowy conditions, the detection area floor can change, this could cause false alarms. By using this function, the REDSCAN mini-Pro automatically offsets the area floor to accommodate the snow built-up.



Small Animal Tolerance

This function is used to reduce false alarms due to small animals in the vertical detection area. mini-Pro can assign up to 8 detection zones with individual detection parameters. Minimum target size, Sensitivity (object presence time) and "Ignoring Area from Ground" setting allow multiple ways to reduce nuisance alarm caused by small animals.

Environmental Resistance function

When harsh outdoor environment is expected such as a presence of dense fog, heavy snow storm and apparent presence of gaseous matters, limiting the sight range of the LiDAR technology, this function provides extra filtration of nuisance factors. mini-Pro is also equipped with environmental disqualification output notification allowing bypass of signals in aforementioned harsh conditions. (These two features are disabled when in Indoor mode)

Applications

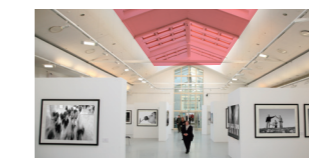
Glass wall protection

Office, school, shop



Skylight protection

Museum



Shelf protection

Warehouse, distribution center



Passport throwing protection

Airport

