![OPTEX — Sensing Innovation]

REDSCAN Lite

Indoor 2D short-range LiDAR sensor

The REDSCAN Lite delivers advanced intrusion detection for indoor applications such as skylights, walls, windows, and data centers. With a compact design and 10 x 10m (32 x 32ft), 95° coverage, it accurately detects the size, speed, and position of moving objects. Featuring intelligent auto area learning, real-time Dynamic History Analysis, and flexible horizontal or vertical mounting, REDSCAN Lite is built for efficient and precise protection.

Model Name: RLS-1010L

2D LiDAR scanner (Laser Class 1)
Detection area 10 x 10m (33 x 33ft)

TAA, NDAA compliant
Manufactured in Japan

Easy to install
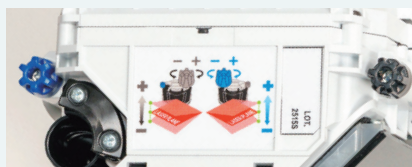
No Power Requried

Laser Scanning Path Visualization
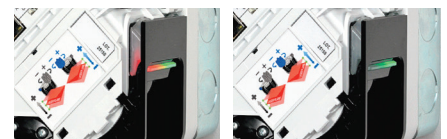Laser alignment tool (RLS-LAT) enables visualization of the detection area.

Tool-less Angle Adjustment
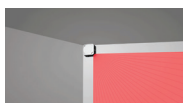The laser area angle is adjustable ±3° using the side knobs.

Auto Area Learning
Automatically sets detection area at power up, and adjusts to avoid overspill through mesh fences.

Mounting Methods

Wall Mount
Mount directly to a wall for stable detection coverage of windows, doors, or corridors.

Ceiling Mount
Ideal for overhead detection from above skylights, entrances, or open indoor zones.

Bracket Mount
Use with optional bracket to achieve angled or custom positioning based on application needs.

Application Examples

Server Rack Protection
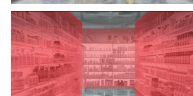Detect unauthorized access around server racks in secure environments.

Glass Wall Protection
Monitor interior glass walls to detect and deter intrusions.

Shelf Protection
Protect warehouse shelving from tampering, removal, or breaching.

Merchandise Cabinet Protection
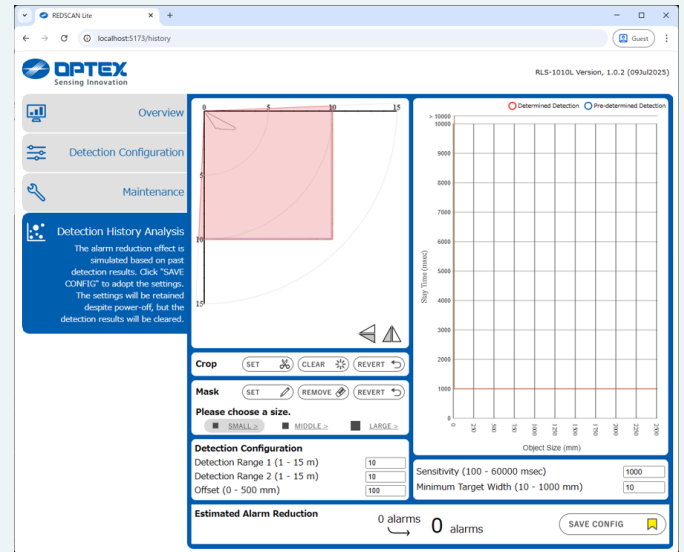Protect high-value items in retail, banking, or healthcare environments.

Features

Highlights

➜ **Easy PC-less Area Setup**
Use the optional tool to align the sensor and set detection zones without power or PC. Full configuration is done via the web interface.

➜ **Automatic Area Correction**
Smart startup adjusts detection zones to prevent overspill near mesh or barriers.

➜ **External LED Status Indicator**
Visible LEDs provide real-time detection and alignment feedback at a glance.

➜ **Simplified REDSCAN User Interface**
Streamlined web interface for easy setup, tuning, and maintenance.

➜ **A-Directional Mounting Plate**
Mount in any direction, perfect for tight spaces and junction box installations.

➜ **Selectable PoE or DC Power Supply**
Flexible power options support both PoE and 12 VDC input through a single interface.

Detection History Analysis

The maintenance screen allows intuitive parameter adjustment based on the alarm history.
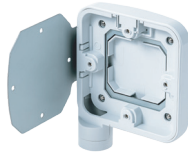

Accessories

➜ **Laser Alignment Tool**
RLS-LAT

*First time purchase recommended. The laser pointer is not included.

➜ **L-mount Bracket**
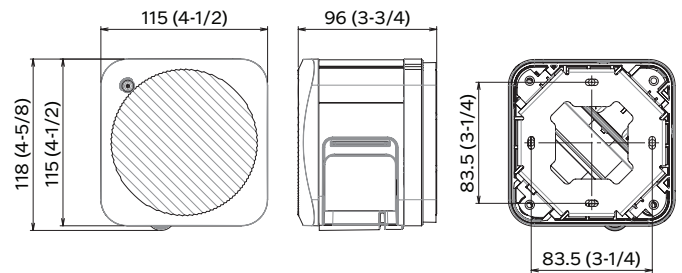RLS-LBL

➜ **Laser Window**
RLS-LWL

➜ **Laser Area Checker**
LAC-1

Specifications

Model	RLS-1010L
Installation location	Indoor
Detection method	ToF
Laser protection class	Class 1
Power input	10.5 - 30 VDC PoE (IEEE 802.3af compliant)
Current draw	500mA max (12 VDC) 250 mA max (24 VDC) 6 W max (PoE)
Mounting method	Wall, Ceiling, Bracket Mounting
Detection area	10 x 10m, 95° (approx 33 x 33ft)
Detection range	Radius 1 to 15m (approx 3.3 to 50ft) at 10% reflectivity
Detection resolution/response time	0.125° / within 100 msec to 1 min
Maintenance port	Ethernet RJ-45 10BASE-T/100BASE-TX (auto negotiation)
Communication port	RS-485
Output	3 outputs, 28 VDC 0.2 A max. N.C.
Input	1 non-voltage contact input
Alarm period	Approx 2 sec delay timer
Operation temp	-20°C to 50°C (-4°F to 122°F)
IP rating	IP55
Dimensions (HxWxD)	118 x 115 x 96 mm max (4-5/8 x 4-1/2 x 3-3/4 in)
Weight	680g (1.5lbs)

Dimensions

115 (4-1/2) 96 (3-3/4)
118 (4-5/8) 115 (4-1/2) 83.5 (3-1/4)
83.5 (3-1/4)

Detection Range

15m max (approx 49ft)
10m max (approx 33ft)

Approx 200mm (8in) at 10m (33ft)

Approx 300mm (12in) at 15m (49ft)

10m max (approx 33ft)

15m max (approx 49ft)