

Securing Data Centers

Against data breaches, unauthorized access and data cable tampering



Advanced security solutions for data centers: from perimeter to core

Data centers are the critical infrastructure of our digital world, housing invaluable information that demands uncompromising protection. From colocation facilities to dedicated server environments, OPTEX security solutions deliver robust, adaptive protection, intelligently guarding assets against sophisticated intrusion attempts and data tampering.

Security from within

Data center security extends beyond external threats, critically requiring constant vigilance against internal vulnerabilities. Insider risks, where authorized personnel might intentionally or inadvertently compromise data integrity, represent a significant security challenge. To address these concerns, OPTEX intelligent technologies offer minimally invasive security solutions that can operate continuously without disrupting operations.

1 Security starts at the perimeter

A data center's first defence is its perimeter. Walls or fences deter but aren't enough. A combination of a fence/wall detection system with an additional layer of virtual wall to cover the top provides a "double-knock" approach that increases the probability of detection and reduces any false alarms.

2 Building and roof intrusion detection

Criminals have on occasion managed to access critical areas or data rooms by drilling holes in walls, while others have broken in through the ventilation system, flat roofs and skylights. OPTEX LiDAR solutions provide wide-area protection with horizontal and vertical installation options.

3 Controlled access within data center

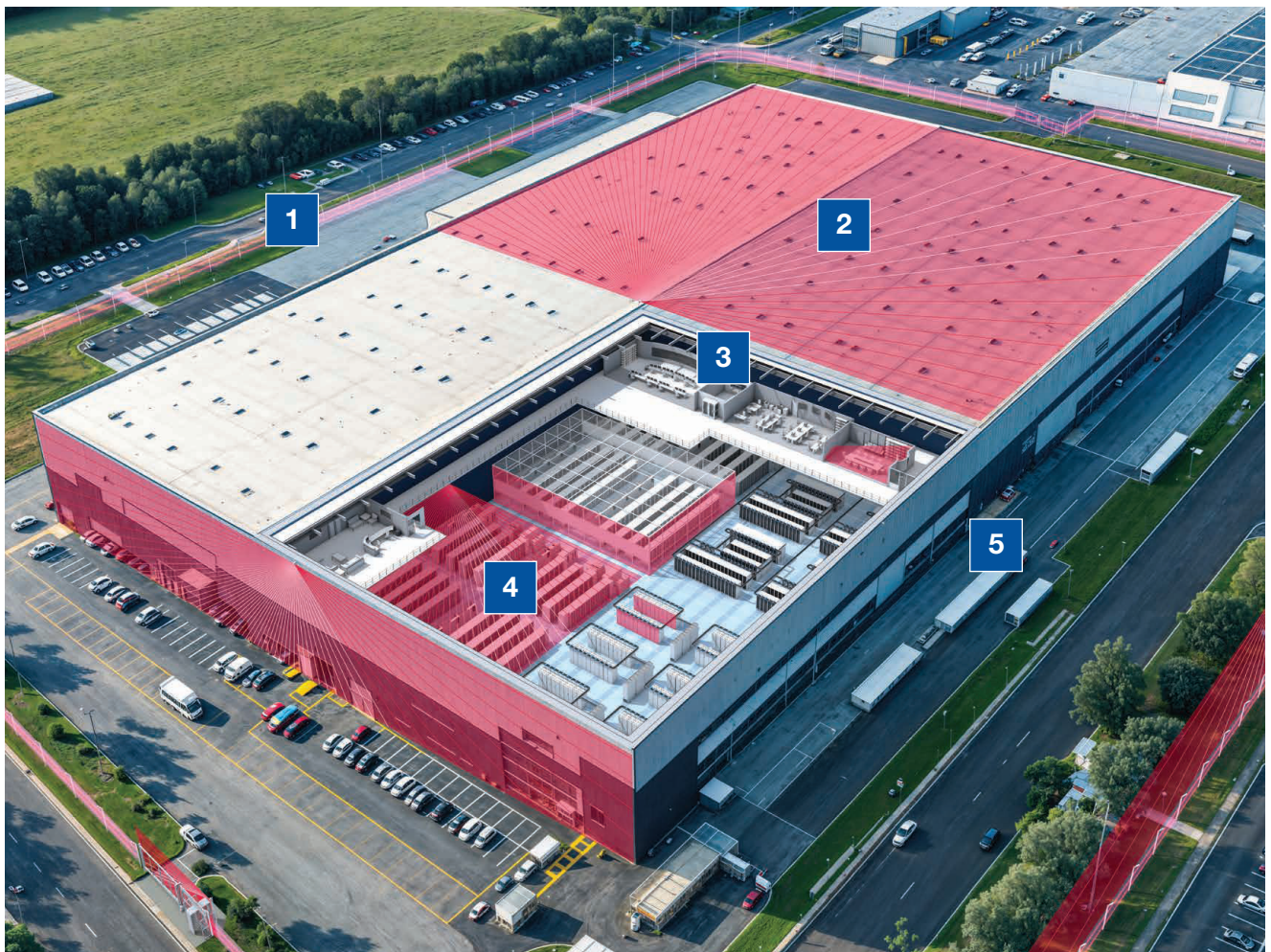
Data centers compartmentalise areas with restricted access. Analytics solutions help monitor authorized entry and prevent tailgating incidents.

4 Server protection

The server room is a restricted area demanding strict access control. Advanced LiDAR sensors enhance security by precisely monitoring access to individual server racks.

5 Physical Cable Network protection

Cables are vital but vulnerable to tampering. OPTEX photoelectric beams detect intrusions, ensuring secure data transmission inside and beyond the perimeter.





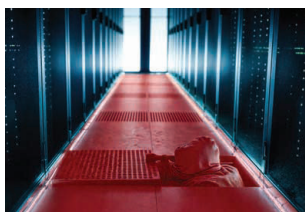
SL Series

Active infrared technology

The OPTEX SmartLine (SL) Series photoelectric beam solutions create a powerful first line of defense for data centers, using long-range active infrared technology to detect potential threats before they reach critical infrastructure. Designed for harsh environments and seamless integration, the SL Series strengthens perimeter protection by enabling early, accurate detection and swift security response.

Key features

- Accurate detection through precise beam alignment
- Operates reliably in rain, fog, and snow
- Integrates easily with cameras and alarm systems



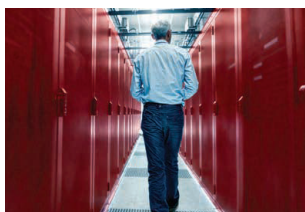
REDSCAN Series

LiDAR technology

OPTEX 2D LiDAR solutions create a high-resolution virtual laser wall ideal to protect perimeters, buildings, roofs, narrow spaces and assets. REDSCAN LiDAR offers ultra-fast detection, stable operation unaffected by light or temperature, and can detect a moving or loitering object's size and location with a unique built-in algorithm, resulting in high-reliability detection with minimal false alarms.

Key features

- Onboard analytics including X / Y coordinates and target size
- Independent detection zones
- Thrown object detection
- EN-Grade 3 and enhanced network security



FlipX Series

Grade-3 Indoor volumetric detection

The Grade 3 FlipX Advanced volumetric detectors provide reliable indoor security for data centers, including server rooms, hallways, corridors and storage areas. With superior detection accuracy and a rotatable lens for wide or narrow-angle detection, they adapt to various

layouts, ensuring protection against unauthorized access or threats. Designed with advanced technology, these detectors also enhance overall site management, making them indispensable for safeguarding critical infrastructure and sensitive environments.

OV-102

Anti-tailgating system

An anti-tailgating system alerts security if an authorized person is followed by another one and can help to deter an attempted intrusion by preventing access to the secured area. OPTEX OV-102 solution is equipped with human tracking technology and direction-determining capability to reliably detect tailgating entry and cross entry.



OVS Series

Vehicle detection

Vehicle detection is mainly used for gate or barrier activation but also for many other applications such as alert for drive through and sign activation. The OVS series is installed above ground, as opposed to ground loop systems that require costly and unsightly civil works, and can detect vehicles of all types.



REDESCAN mini-Pro



REDESCAN Pro

REDESCAN mini

Cameras

VMS

SIP IP series

Network switch

Infrared beams

PIRs

Technology partner integrations

OPTEX's wide range of solutions can be fully-integrated with IP cameras, Network Video Recorders and other security devices, providing users a complete security system where local or remote monitoring stations will be reliably and immediately alerted in the event of an unwanted intrusion. Some deeper integration with VMS platforms delivers unique tracking and point location capabilities.

OPTEX detectors help organizations build a stronger security system

Every security system needs to be triggered by an event and it is usually the fact that a person, object or vehicle is moving or entering into an area.

OPTEX solutions are designed to detect physical intrusion and unauthorized access which still account for a huge proportion of threats. They are a key element of the security system to alert at the right time and prevent damages or theft.

OPTEX is the world leader in sensing solutions. Founded in 1979 in Japan, OPTEX specializes in security sensing solutions utilizing laser, fibre-optic, passive and active infrared detection technology. Its intrusion detection systems are respected globally with applications deployed at some of the world's most critical security sites.