

TREDDIX[®]

3D Data analysis powered by
EVERYWHERE

Detectors for security solutions with
three-dimensional analysis



Intrusion
detection line





Detectors for security solutions with three-dimensional analysis

The new TREDDIX security detectors offer a three-dimensional detection system to analyze with high precision the area to be protected. All the competitors use standard technology, instead EL.MO. designed a product with latest generation 3D technology.

By using a 3D sensor with coded light or TOF (Time of Flight), the new EL.MO. security detectors of the TREDDIX series process in real time three-dimensional images of the scene. In addition the detectors provide people and objects measures instead of pixels.

The 3D data and the sophisticated analysis algorithms ensure the identification and tracking of the people motion even in complex and crowded environments, in order to increase the reliability of each analysis module.

Thanks to the NIR (Near Infrared Spectroscopy) monochrome operation, the system ensures high performance also with dark environment or lighting changing. The advanced tracking algorithms detect people or objects even if motionless for long periods. In addition this detectors are able to identify and follow stationary, overlapping or slight motion objects.

Application fields



Indoor Self
Banking Area



Outdoor
ATM



Gates control
and counting



Museum
protection

Available versions



Indoor Self Banking Area

Specific security detector for Indoor self banking area with the following functions:

- **Man down:** detection and signaling of fall and man down for long period (sudden illness, homeless presence)
- **Abandoned object:** Detection and signaling of objects that remain in the scene further the set time
- **Loitering:** control of people inside defined areas for long time
- **Crowding:** Counting of people inside the self area; overcrowding alarm signaling
- **ATM attack:** Behavior study combined with the signaling by the ATM; alarm for possible criminal attack



Outdoor ATM

Specific security detector for Outdoor ATM with the following functions:

- **Man down:** detection and signaling of fall and man down for long period (sudden illness, homeless presence)
- **Abandoned object:** Detection and signaling of objects that remain in the scene further the set time
- **Loitering:** control of people inside defined areas for long time
- **Crowding:** Counting of people inside the self area; overcrowding alarm signaling
- **ATM attack:** Behavior study combined with the signaling by the ATM; alarm for possible criminal attack



Gates control

Detector for access control destined to the integration with supervision software systems.

- **Precision counting:** Bi-directional advanced counting for entry/exit gates with or without turnstile, able to count people transition even when they are very close, overlapping or joined.
- **Tailgating accurate detection**
- **Transit accumulator and built-in countings**
- It can be used in the **company evacuation plan automation**. It is safer and more efficient thanks to an **accurate counting of people entering or leaving specific areas** (theaters, museums, industrial and commercial buildings)



Museum protection

Security detector for an advanced museum protection.

- **Intrusion detection:** 24/7 intrusion detection based on the target shape (elimination of false alarms).
- **Removed object:** detection and signaling of objects removed from their position also in case of crowd and occlusions.
- **Abandoned object:** Detection and reporting of objects that remain in the scene further the set time.
- **Virtual showcase:** 3D protection of displayed objects through the creation protection shape



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hanks to the SDK used to create new integration scenarios, the EL.MO. 3D security detectors can be installed everywhere. Some example:

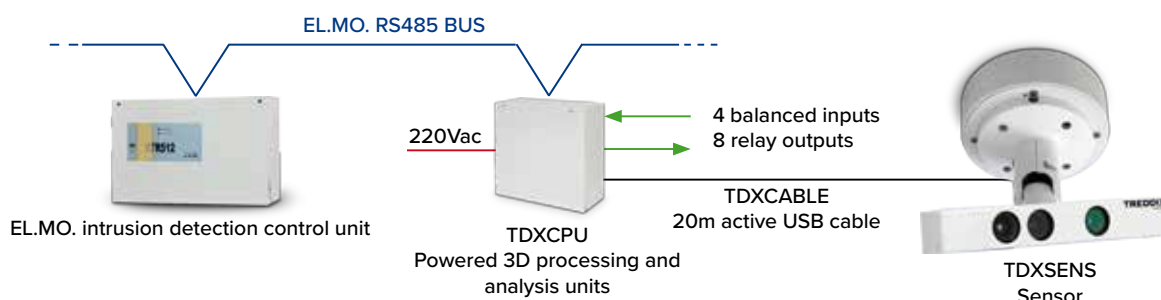
- **Security and counting in public places:** airports, subways, local trade fairs, museums, places of worship, hospitals.
- **Security and counting in private sector:** flats, private buildings,

industrial and commercial structures, stores, discos, pubs.

- **Marketing and Retail:** customers flows monitoring, sensitive areas control, detection and analysis of pathways and behavior.
- **Bank sector:** detection of suspected people near ATMs (loitering), ATM tampering, man down.
- **Home automation:** access control, elderly people monitoring.

TREDDIX available configurations

» **TDX** TDX includes: Sensor, 3D processing unit with power supply, 20m active USB cable, SDK



TDX available configurations

TDXAS	3D security detector for Indoor Self Banking area: Crowding, Man Down, Abandoned object, Loitering, ATM attack
TDXASE	3D security detector for Outdoor ATM: Crowd, Sudden illness, Abandoned object, Loitering, ATM attack
TDXVA*	3D security detector for access control and people counting: Tailgating detection, Precision counting, Transit accumulator, Crowd, Abandoned object
TDXMU*	3D security detector for museum protection: Virtual showcase, Objects abandoned/removed, Crowd

Indoor version



- Indoor version
- Equipped with back box and swiveling ceiling mount bracket

Outdoor version



- Outdoor version, IP55 class
- Metallic housing for wall mount. Top-down view

* Soon available