



Perimeter Security Systems Detect Them Before They Enter

35 Years Experience in
Outdoor Security Solutions for Any Type of Project

Why RBtec?

Simplicity

Simple to Sell, distribute, integrate, install, and use.

Experience

over 35 years' experience and over 5K customers

03

04

Quality & Reliability
Little to no false alarms

02

Wide Range of Solutions
A broad range of ready-to-use systems in immediate supply

01

A Growing World Presence

RBtec has provided systems for more than 5,000 security installations in more than 54 countries around the world.



Our End Users & Their Solutions

RBtec
 Perimeter Security Systems
 Choose RBtec, Your customer will thank you.



Camper & Boat Storage Facility



PV Solar Parks



Electric Infrastructure



Oil & Gas



Car, Truck, Heavy Equipment Car Parks



VIP Residential / Gated Communities



Logistic / Industrial Parks



Cannabis Grow Operation

Who is our Customer

System Integrators / Security Installers

- Sells other technologies for perimeter security such as Photoelectric beams / IR Sensors, lower end analytic cameras.
- Looking to broaden, diversify or compliment the security solutions already offered, selling today video & access control only.
- Aware of break ins and people climbing/cutting fence but is not aware a product such a fence alarm sensor is sold through a distributor.

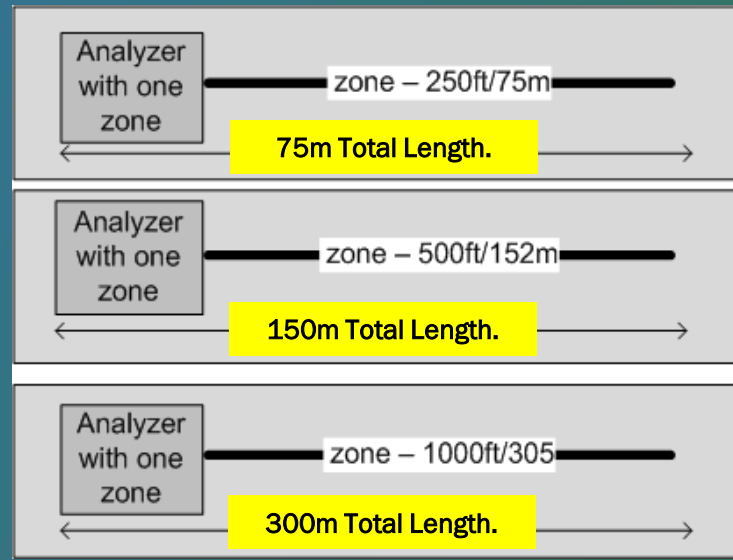
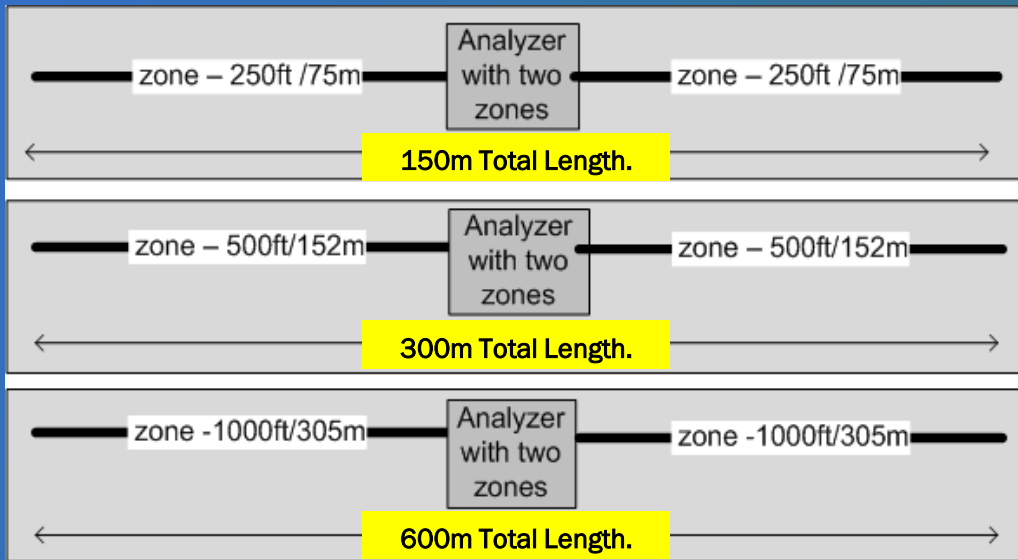
The Opportunity

Sell to untapped market – Low to no competition

- Something “new” to talk about with existing customer database
- Increase sale total by selling 1 system for few thousand Euros with high profit margin.
- Increase sales from current customers and appeal to new customers, not just a different brand of existing product.
- Be able to provide a solution to an urgent problem end users and integrators have and don't know the solution.

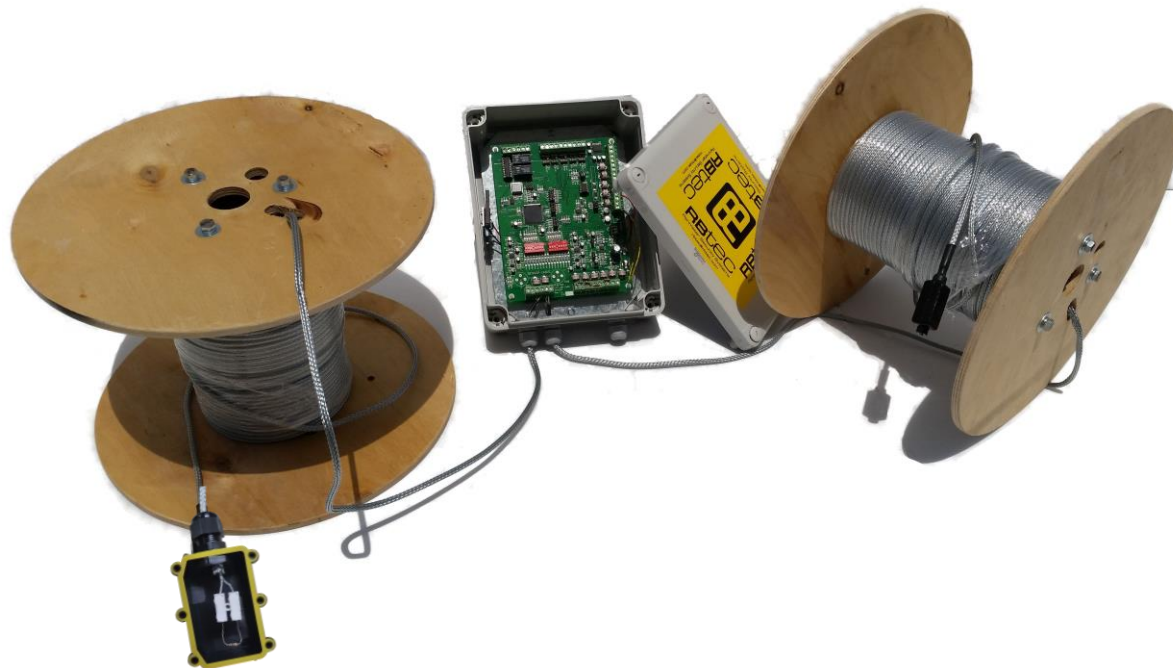
IRONCLAD

Designated For Welded Mesh, Chain-link Fences



The kit includes:

- 1x – LPU Processor board
- 1x – Weatherproof enclosure
- 1x or 2x Spools of sensor cable in the chosen length
- 1x or 2x End of line termination units (MCTR)



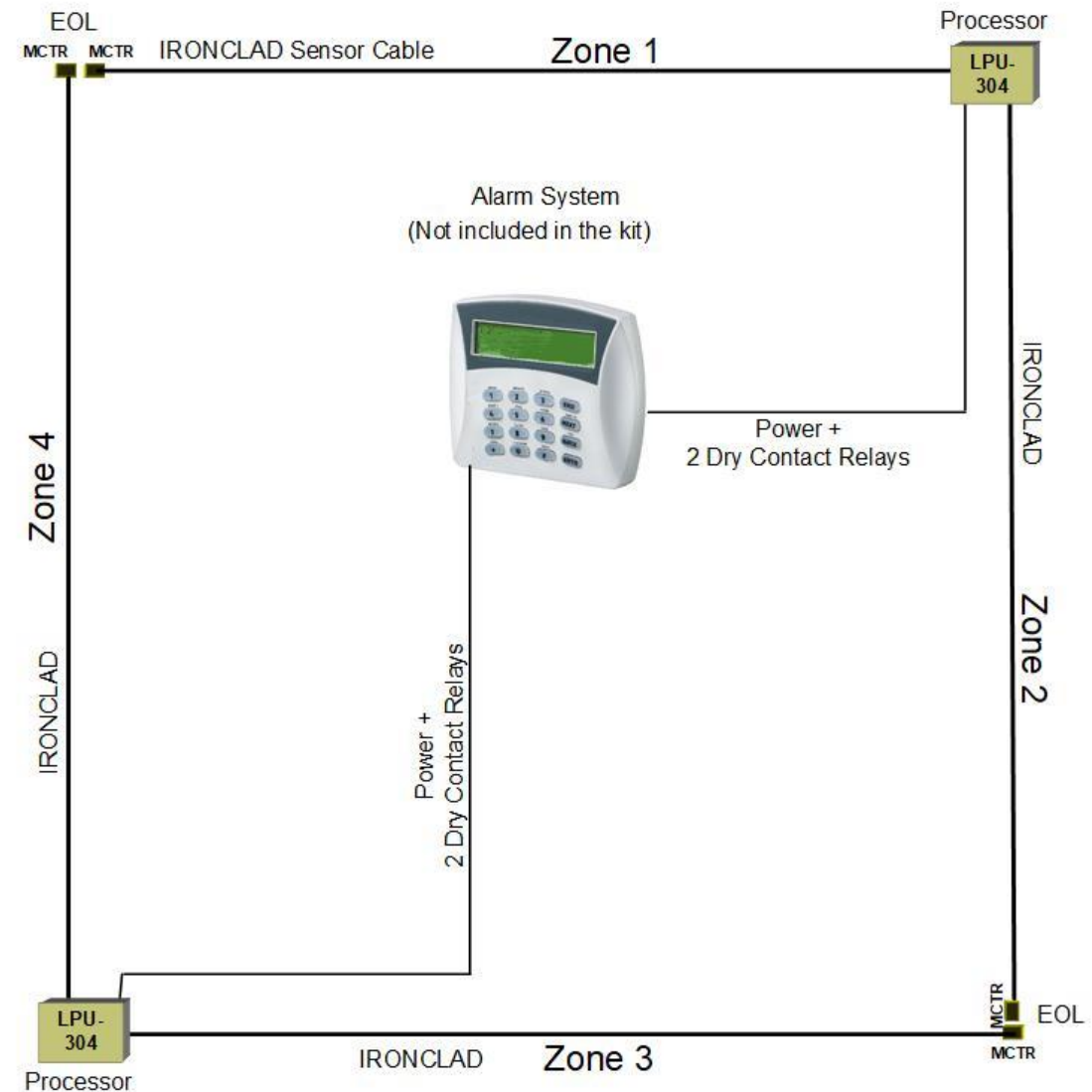


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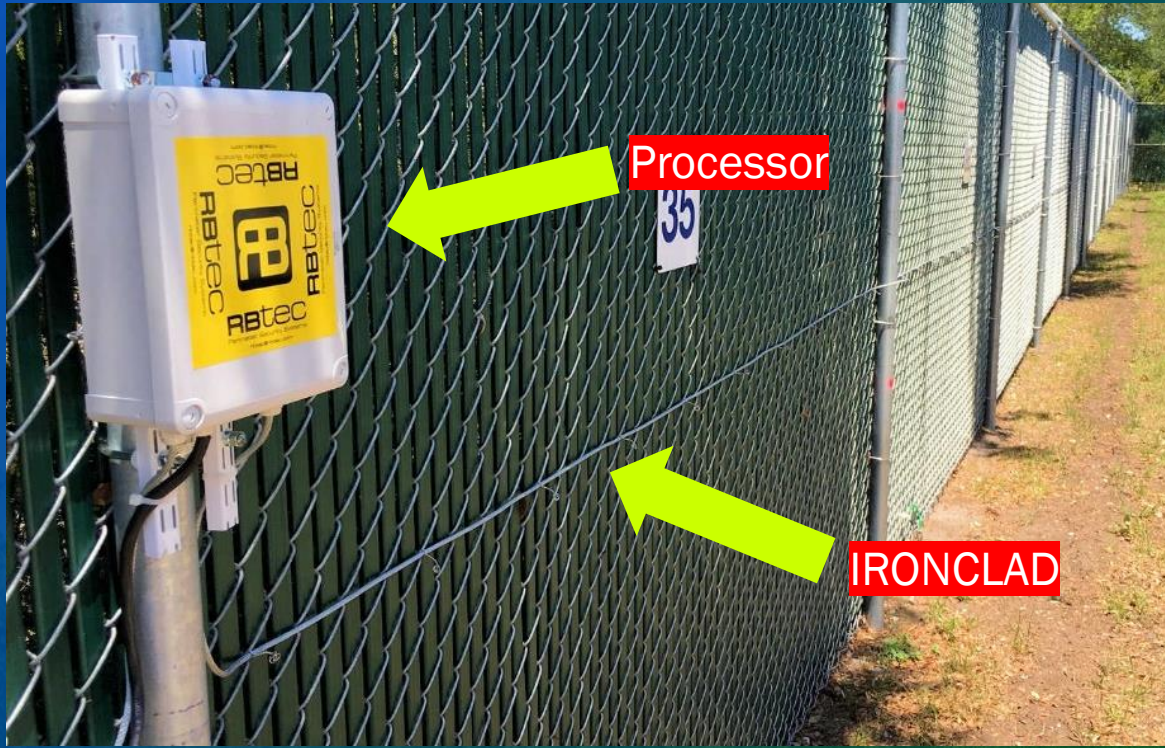
When Using Multiple Kits:

- When using more than one kit each LPU processor needs it's own home run cable.
- The 6 wire cable (recommended 18 gauge) Will carry the 12-24vdc to the LPU and carry the 2 relay outputs back to the alarm system.
- The lead cable can be attached to the fence with the sensor cable, no conduit needed. The layout drawing is an example of how the system can be wired.

IRONCLAD Multiple Standalone Systems Layout



System Installation

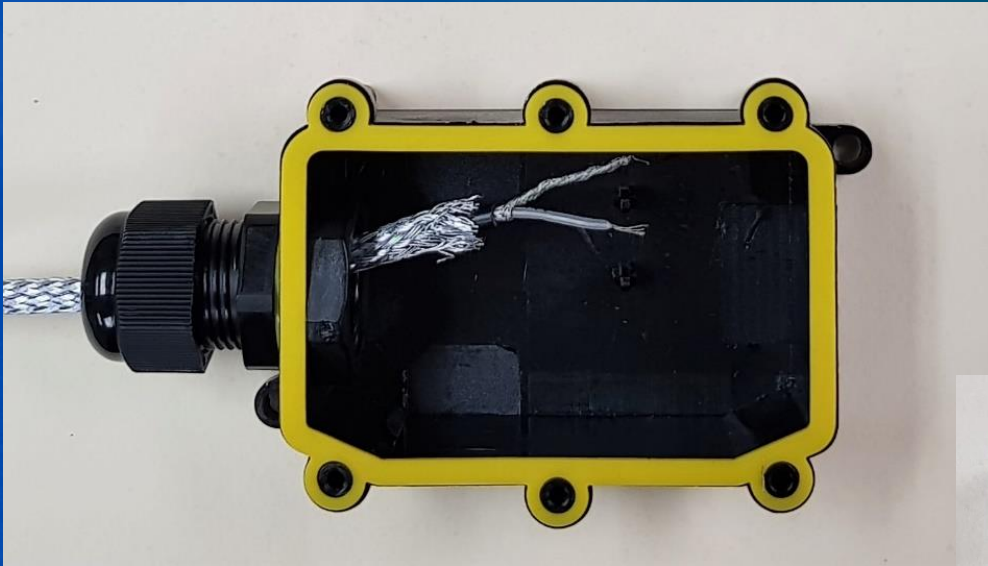


Labor Estimate:
300m/1000ft
8 hours labor for 2 techs



End Of Line Termination Kit - MCTR

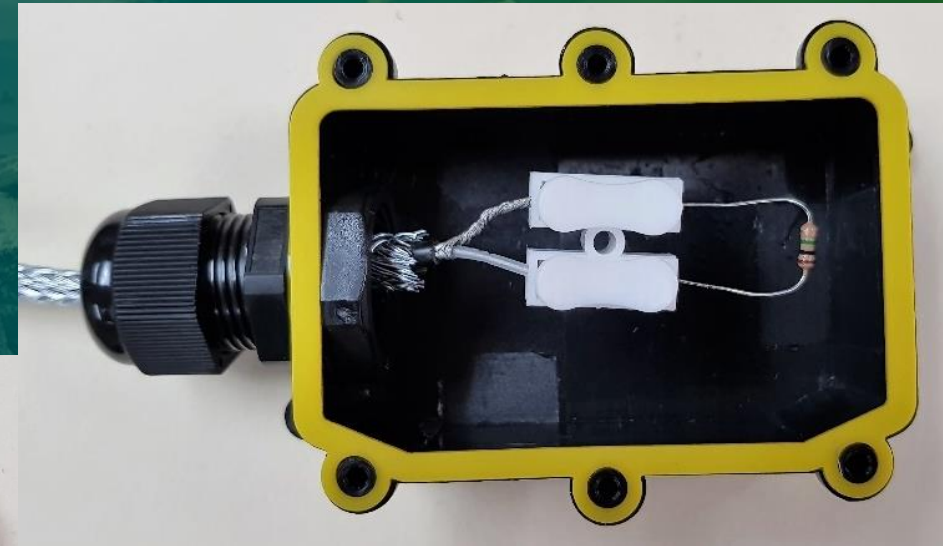
Step 1
Push the cable into the
junction box



Step 2
Connect the resistor
into the push
terminals



Step 3
Connect the sensor cable
into the push terminals



LPU Processor

SPECIFICATIONS:

Operating Power Requirements:

- 12 – 48VDC 200mA @ 12VDC
- 24 – 70VAC

Lightening Protection:

- 2 Layer Surge Protection
- Gas Discharge Devices on all Inputs/Outputs & Communication line.

Alarm Inputs

- 4x Ironclad sensor cable inputs.
- 4x Intrusion and Line monitoring for accessories like magnets, contact, microwaves and motion detectors.
- 1x Tamper switch.

Zone Status & Sensitivity Levels

- 8x Arm/Disarm via Jumper
- 22 levels of sensitivity per zone on board.
- 256 Levels of sensitivity via software
- 1 Power Outage relay.

Alarm Outputs

- 8x Dry contact relays with contacts rated 1A @ 12VDC.
- 1x Tamper switch relay
- 1x Power Outage relay.

Connector:

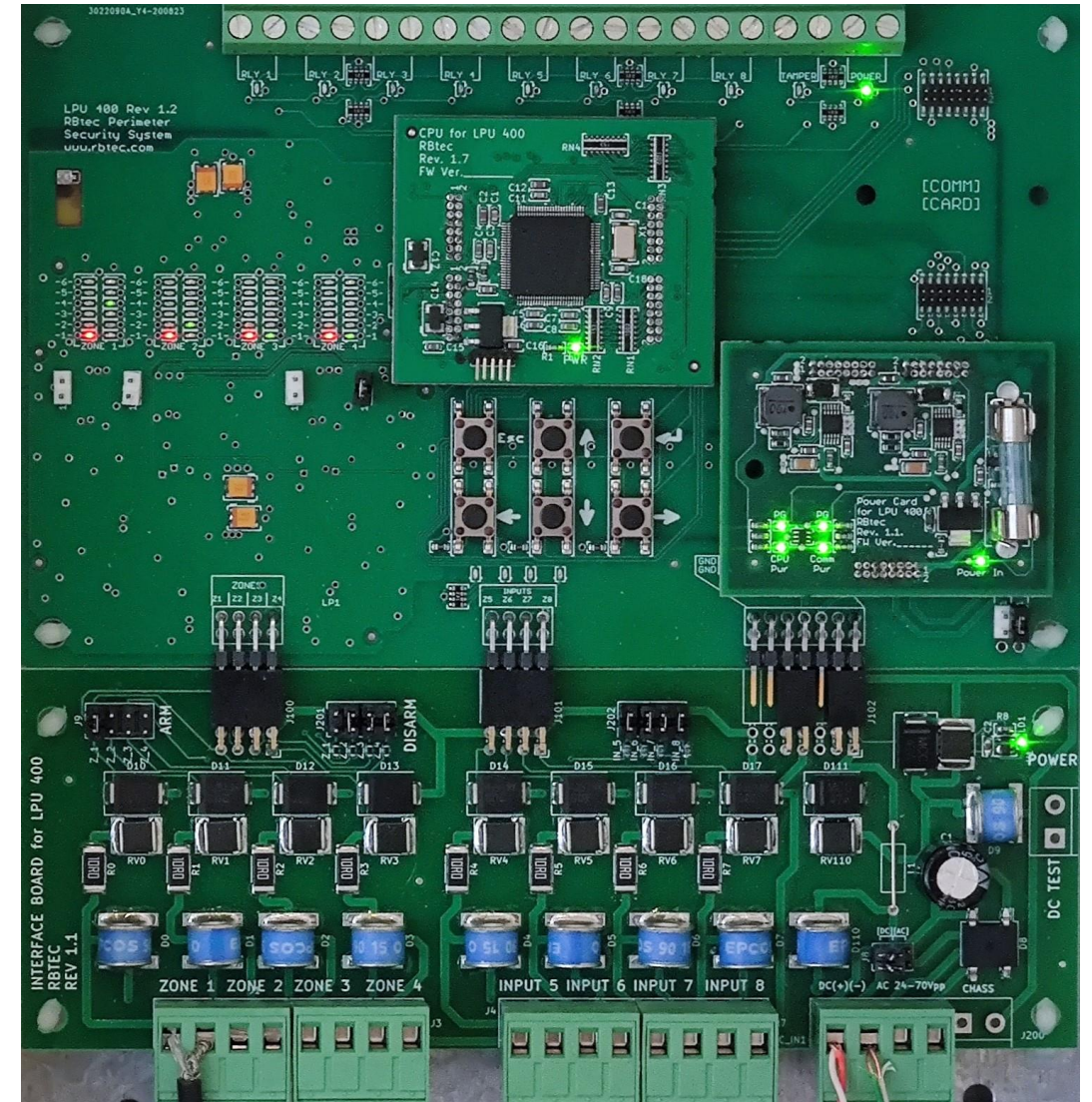
- Sensor Input - 8x Screw terminal – Pair per zone.
- Alarm Output - 8x Screw terminal – Pair per zone

Enclosure:

- NEMA 4X, IP-66
- 9.5 x 7.5 x 2.75" (24 x 19.5 x 7.0cm)
- Weight: 2.2 lbs. (1Kg)

Environment:

- Operating Temperature: - 40° to 221°F (-40° to 105°C)
- Relative Humidity up to 98% non-condensing.



Protecting Different Types of Gates

Sliding gate – For sliding gates we have what we call a sliding gate kit, the kit includes a spring loaded roller that is mounted next to gate and rolls in and out a non-sensitive cable to bridge the gap between the moving gate and the fixed fence.



Swing gate – For swing gates there is no need for special equipment since the sensor cable is flexible. From the fence continue over the gate and do a U turn back to the fence. In order to bypass the gate the cable needs to be spliced with RG6 into a conduit and then spliced back on the other side. Splicing with RB-BMCTXT Box



Emergency gate / No Conduit – For swing gates where there is no conduit or the gate rarely opens there is an option to splice the cable and install a pull out quick connector which allows to open the cable and as a result open the gate the cable is going over.



Swing Gate Protection



MCTXT

IRONCLAD sensor cable

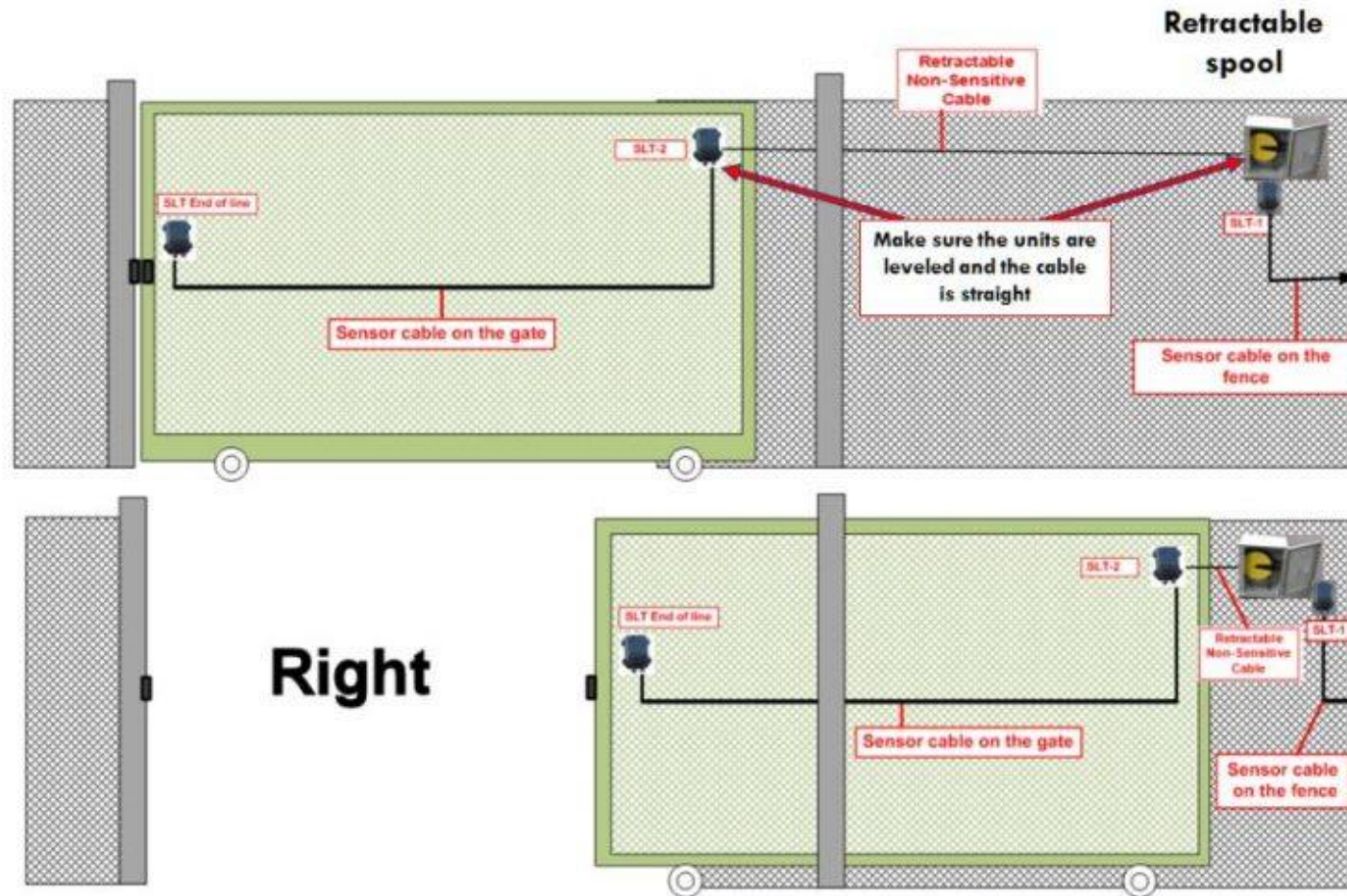


IRONCLAD sensor cable

Non Sensitive cable RG6 Coax Direct Burial laid under the gate in waterproof conduit

Sliding Gate Protection

Protection Sliding Gate at the End of a Zone





<https://youtu.be/llwysuj6yEA>

Our End Users

Examples of Markets and Installations

IRONCLAD

Fence Alarm System

Works on any fence • Plug & Play installation • No training or certification needed • Connects to any alarm system



SECURE YOUR

BUSINESS

PV Solar Farm / Solar Parks



Camper Storage Sites and Car Lots





Industrial Outdoor Storage



Cannabis Grow Farms



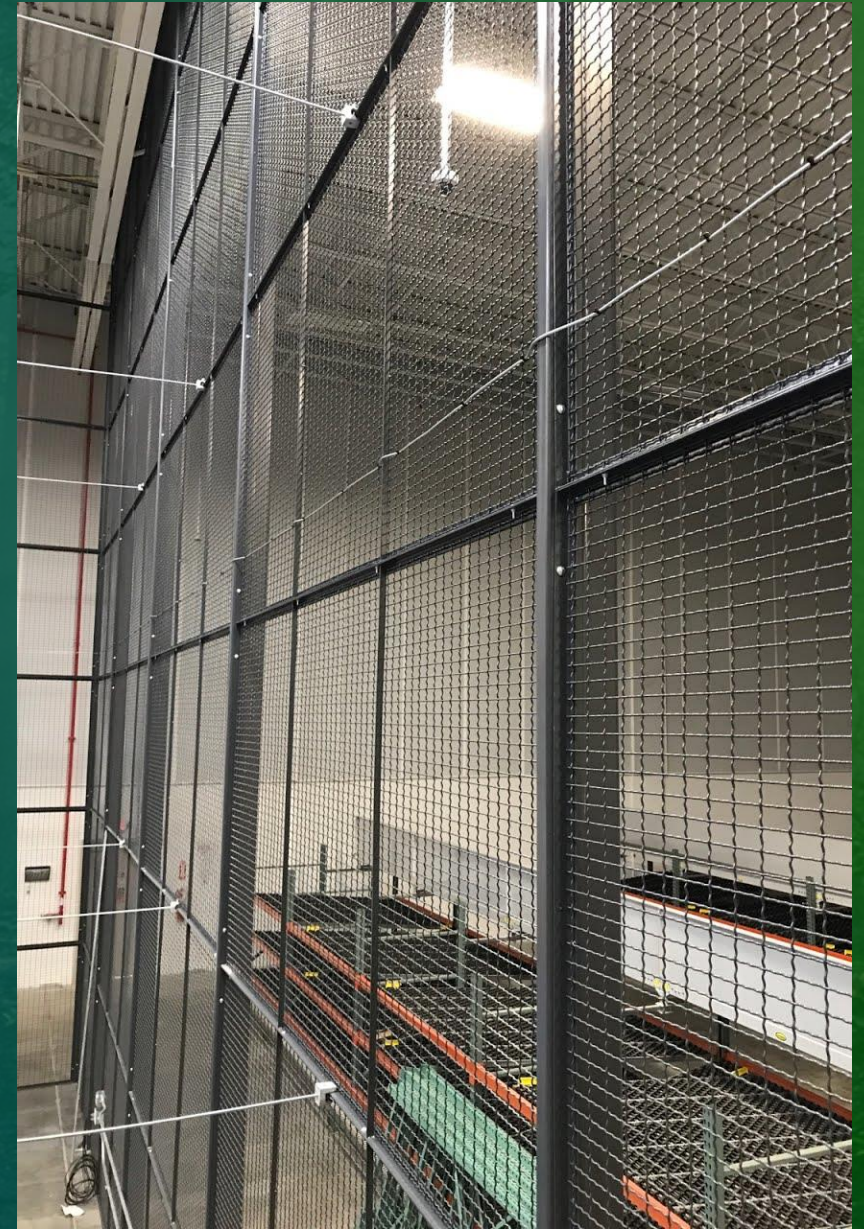
Scrape Yards and Recycling



Transportation



Indoor Fenced Areas / Cages / Warehouse



Electrical Transformation Station, Oil and Gas Substations



Electrical, Oil and Gas Service Yards and Storage



Gated Community, Golf Clubs, Estates



Local Government Sites

Police stations, city service yards

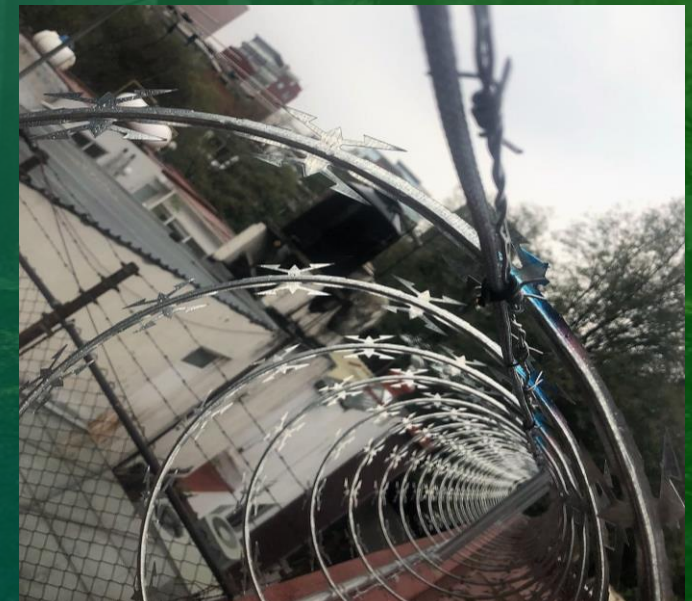


Different applications

Public pool, Nursing home



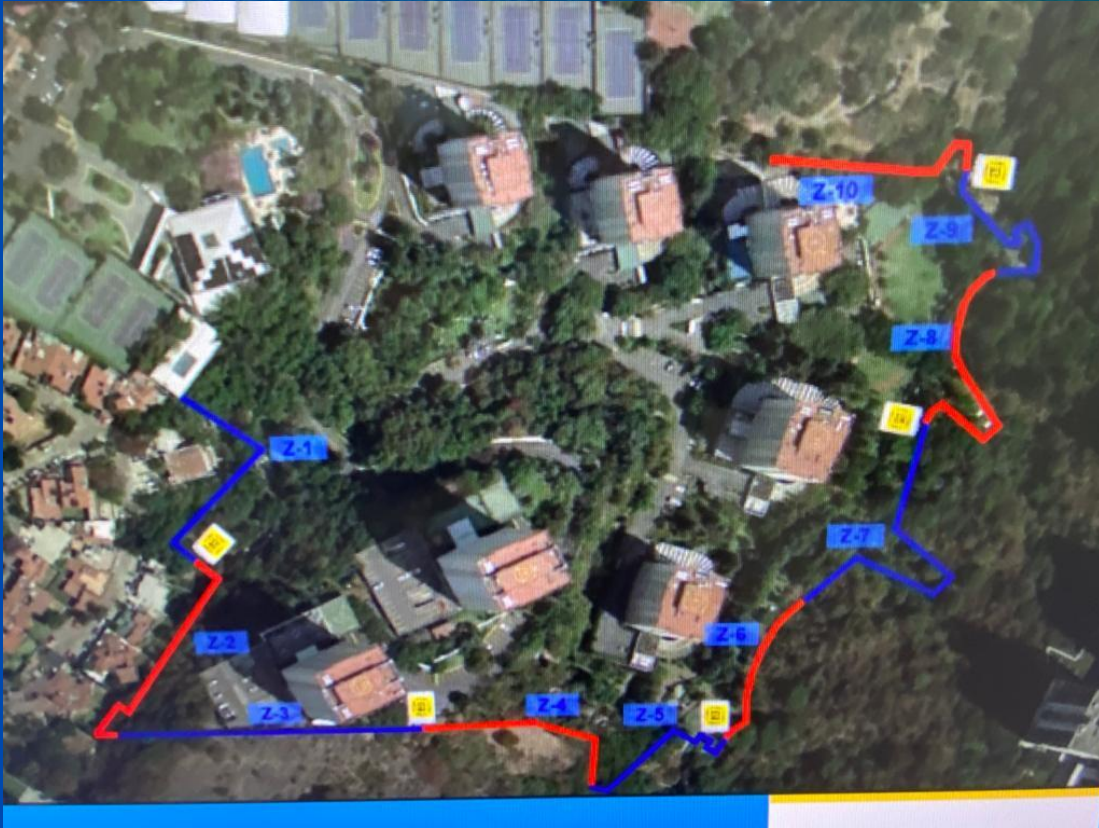
Different Infrastructure



Wireless or Wired – Solar or DC Power



EXAMPLES OF IRONCLAD INTEGRATION



MICALERT

Vibration sensor cable for metal fences

Packaging options per Micalert kit

Zone number / Zone length	1 Zone	2 Zone System
75m / 250ft	75m / 250ft	75m / 250ft Per zone - 150m / 500ft System
150m / 500ft	150m / 500ft	150m / 500ft Per zone - 300m / 1000ft System
300m / 1000ft	300m / 1000ft	300m / 1000ft Per zone - 600m / 2000ft System

Types of MICALERT kits



EXAMPLES OF MICALERT INSTALLATIONS



WallAlert

Vibration sensor cable that protects walls and drywall against impacts caused by intrusions attempts.



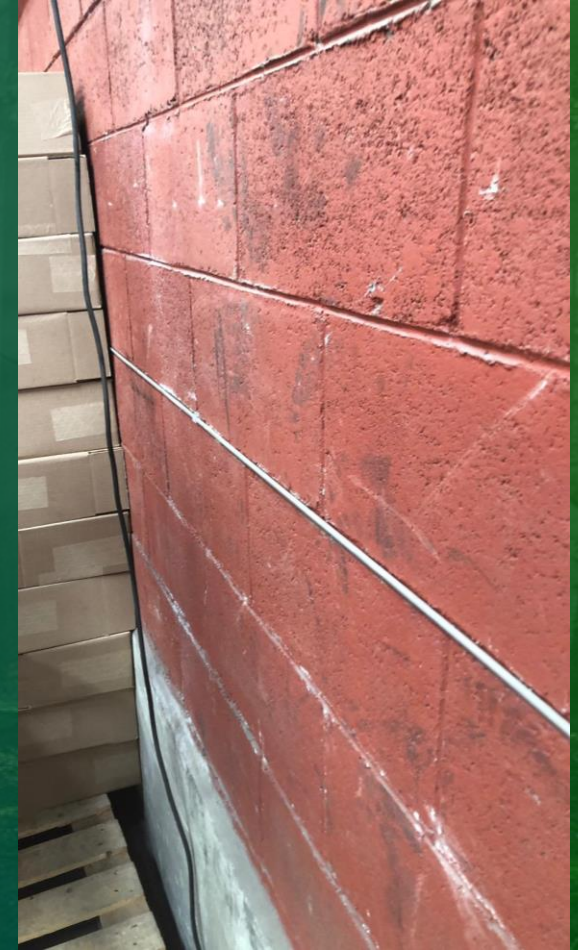
Packaging options per WallAlert kit

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75m / 250ft	75m / 250ft	75m / 250ft Per zone - 150m / 500ft System
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300m / 1000ft	300m / 1000ft	300m / 1000ft Per zone - 600m / 2000ft System

Types of WallAlert kits



EXAMPLES OF WALLALERT INSTALLATIONS



SEISMO

Underground Intrusion Detection
Sensor

- ✓ 4 or 8 Sensors + Analyzer Per System
- ✓ Completely Invisible System
- ✓ Circular Detection pattern Up To 10m Per Sensor
- ✓ Sensitivity Adjustment Per Sensor
- ✓ Plug&Play Installation - No Special Tools Needed
- ✓ AI Based Detection Algorithm
- ✓ Standalone or IP Network Versions Play
- ✓ Event Classification – Steps, Vehicle



RBtec Sensor Cable

VS

Video-Analytics

Functionality

- 100% perimeter coverage at all conditions
- Little to no False Alarms in all conditions
- Ability to ignore when the fence is touched or shaken and to alert only when the fence line is being cut or climbed on

- Line of sight- Vehicles, people, planation can create blind spots/trigger false-alarms
- Challenging weather conditions can lead to false alarms or non-detection.
- Can't differ between intruders to unharmlful passerby

Distribution

- One inclusive Plug & Play Kit (one item-code).

- Video Analytics infrastructure consist of many different products: Cameras, Poles, Mounts, POE, NVR/DVR. Etc.

Cost & Maintenance

- Almost Zero maintenance
- One-time expense

- Annual maintenance
- Annual license per camera
- High infrastructure costs and incidental expenses

Integration & Installation

- Installed directly on the fence line on all terrains
- No need for certification, special tools, prior experience, calibration, or software
- Easy connection to alarm panels/NVR

- Complex Site design-choosing & poisoning the cameras.
- Power & communication connection are needed for each camera. NVR/DVR needed.

Profitability

- Relatively low competition
- Margins are typically higher

- Relatively High competition
- Margins are typically Lower

System Specifications and Design



- Detection pattern: Circular (360°) up to 10m/33ft per sensor
- Power supply: 12 to 48VDC
- Outputs: Dry contact Relay, TCP/IP, Optional wireless.
- Operating temperature: -22f/-30°C – +158f/+70°C
- IP rating: IP67
- Seismic Detector Every 20-32' / 6-10m Pre-installed on the cable
- Pre-installed connectors for sensor cable

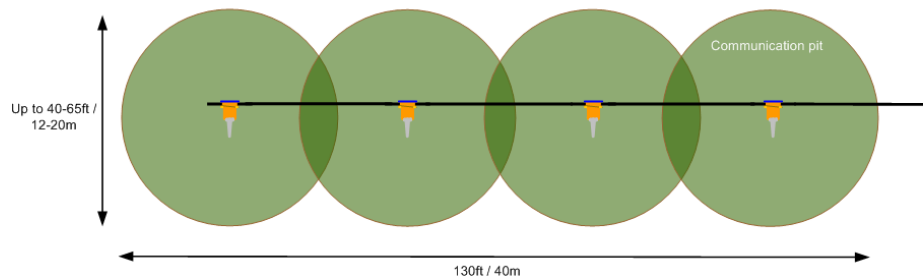
Burglar alarm or CCTV system



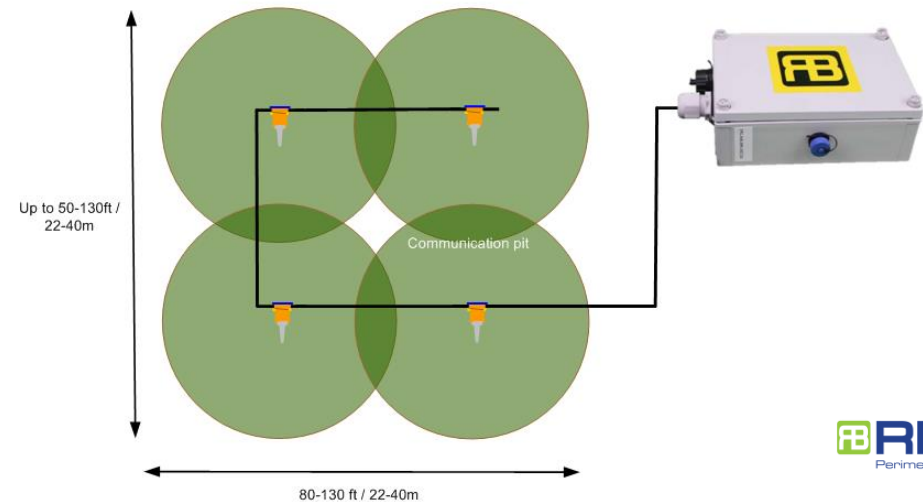
Relay



Line Installation



Square Installation





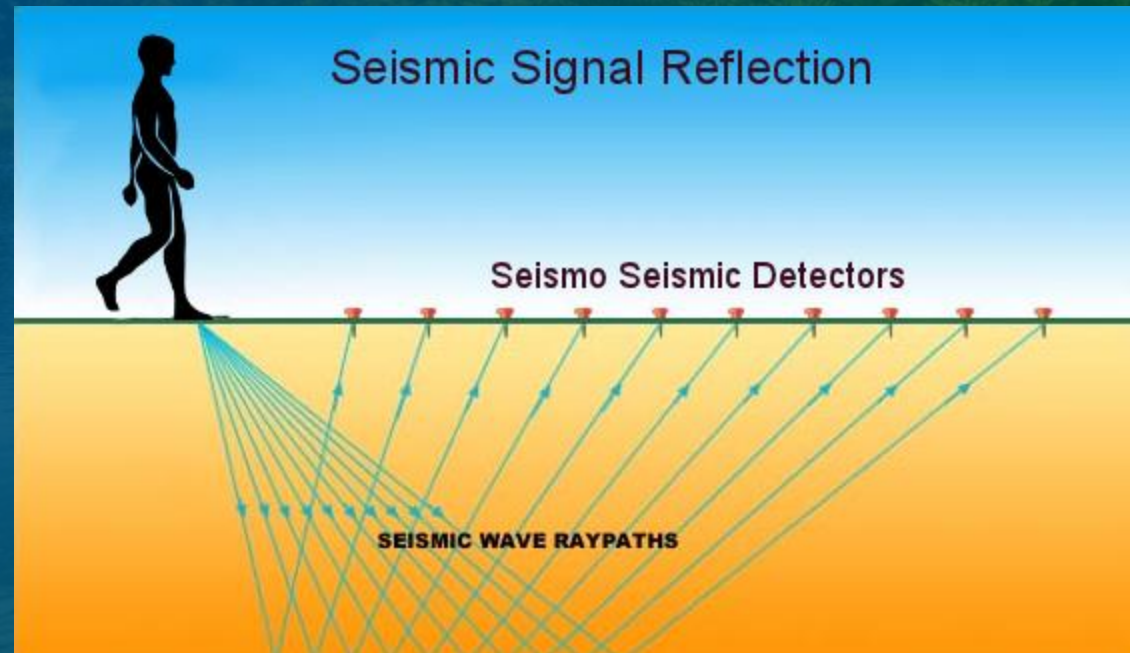
<https://youtu.be/IH0SXwhdxJ4>

SEISMO Principle of Operation

The basic principle of seismic security sensing is the monitoring of waves by a seismic source reflected of the subsurface.

The Seismo sensor is a geophone that is sensitive to up-down motions of the Earth, like a weight hanging from a spring, suspended from a frame that moves along with any motion detected. The relative motion between the weight (called the mass) and the frame, provides a measurement of the vertical ground motion.

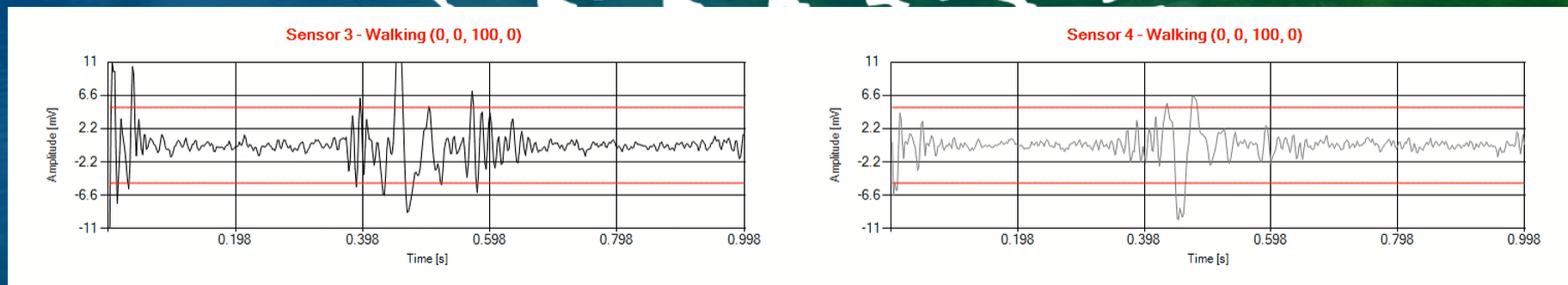
The Seismo sensor does NOT sense earthquakes



SEISMO Principle of Detection

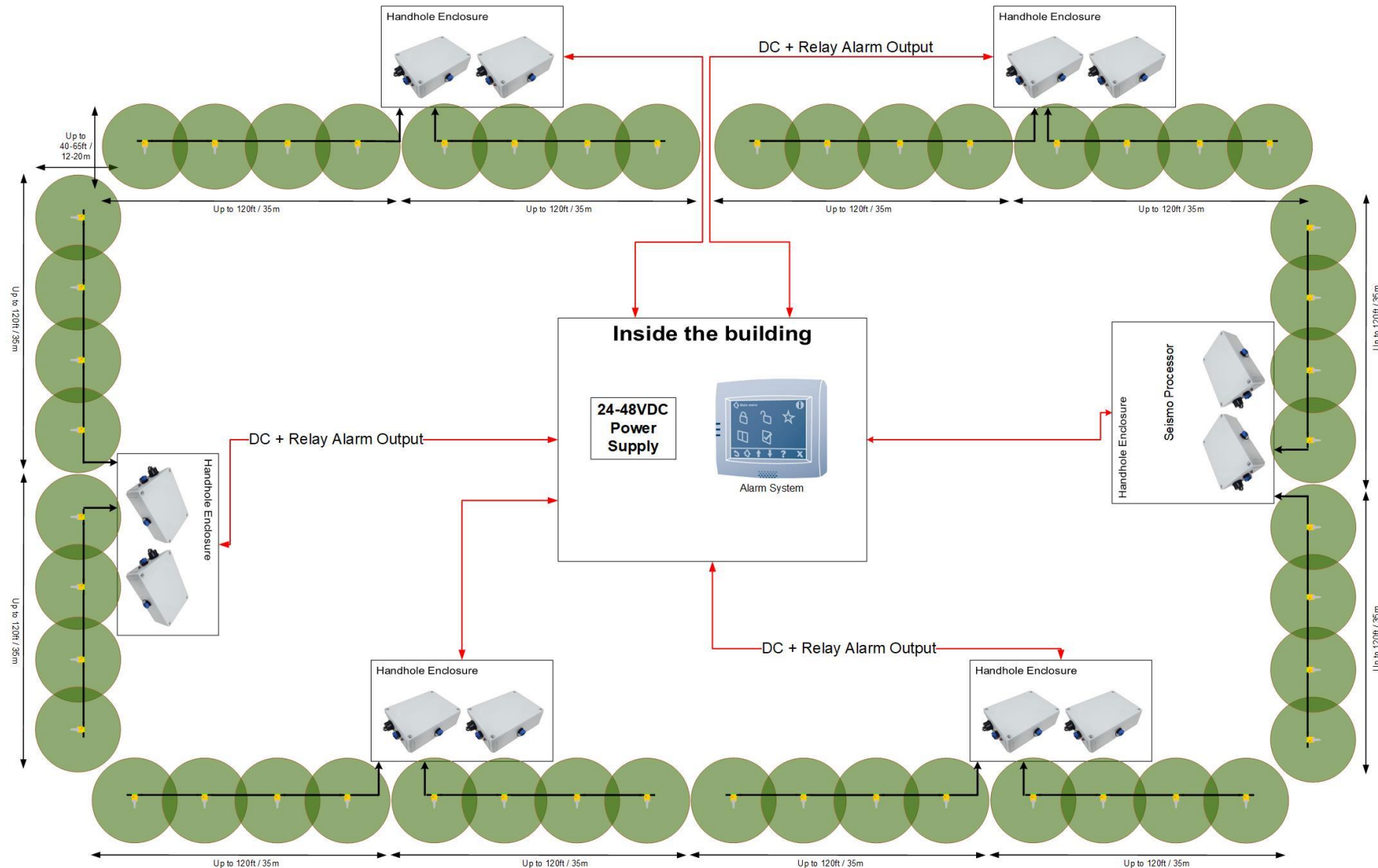
When an activity is registered in the protected area, the seismic sensor produces a signal which is processed in real time through an advanced algorithm. The algorithm is based on “machine learning – AI” that can identify and classify the type of activity that has been registered. Not every seismic vibration generates an alarm.

Walking/Running/Crawling of any intruder in the area of the sensor’s proximity triggers an alarm. The alarm is based on the sensitivity level, the database recorded into the unit, ground type and surrounding environment.



Multiple Independent & Standalone Seismo Units

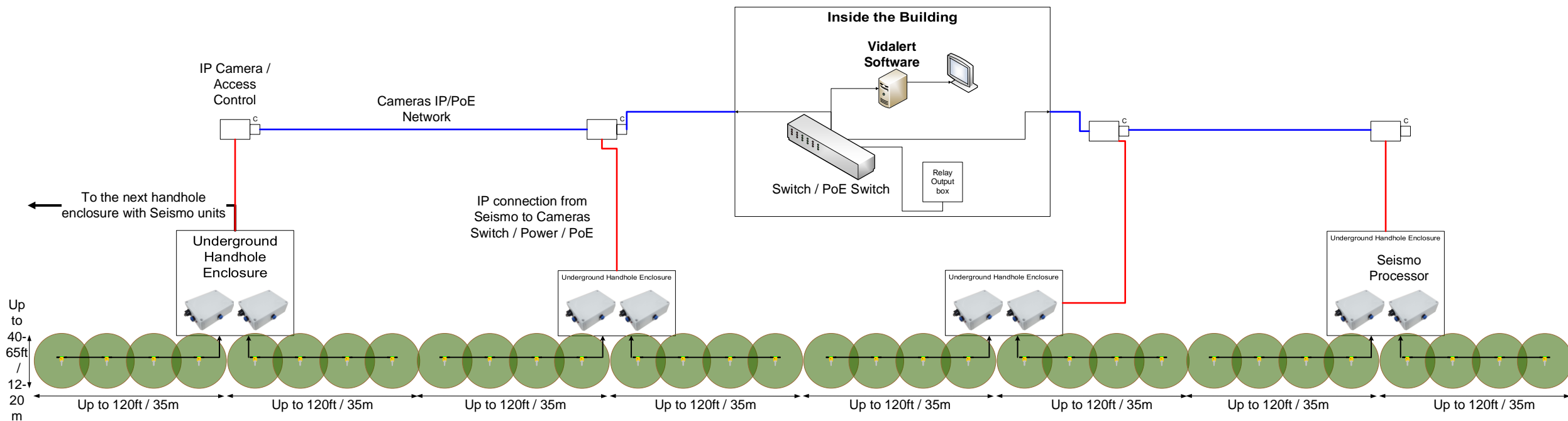
Each System is wired with DC power and relay to the alarm system



Seismo Units Connected to an Existing Network

The Seismo processors are IP based units. The units can connect to an existing network installed on site to communicate alarms back to the control center.

In this layout the Seismo will communicate and be powered from the existing infrastructure. That infrastructure can be cameras, access control or any other network laid around the site.



Calibration Software

Each Sensor is calibrated and monitored independently

The screenshot displays the 'Configuration' tab of the calibration software. At the top, there are fields for 'Node IP: 192.168.1.5', 'Node ID: SV100-4G', 'HW ver.: 1', 'SW ver.: 1', and 'Manual IP: 192.168.1.5'. A yellow callout box points to the 'Manual IP' field with the text 'IP Address of the unit'. Below these fields are controls for 'Recording time [s]' (set to 1), 'No. recordings' (set to 0), and a red 'ALARM' button. A 'Browse' button is next to the 'Filepath' field (C:\Users\Dor\Desktop) and the 'Filename' field (data). A table shows sensitivity levels for 'Walking' and 'Car' for sensors S1 through S4. A yellow callout box points to this table with the text 'Sensitivity levels for Cars and Walking Per Sensor'. Below the table are 'Scale [mV]' (set to 11) and 'Set scale' and 'FFT' buttons. On the right, it says 'Detection classes: (Silence, Car, Walking, Fault)'. The main area shows four graphs for 'Sensors 1-4'. Each graph plots 'Amplitude [mV]' (y-axis, -11 to 11) against 'Time [s]' (x-axis, 0 to 1). The graphs are labeled: 'Sensor 1 - Walking (0, 2, 97, 0)', 'Sensor 2 - Walking (0, 0, 100, 0)', 'Sensor 3 - Walking (0, 0, 100, 0)', and 'Sensor 4 - Walking (0, 0, 100, 0)'. A yellow callout box points to the top-left graph with the text '4 Signals per Seismic Sensor'. At the bottom left, it says 'NaN, NaN Current cursor position Cursors difference'. At the bottom right is the 'RBtec Perimeter Security Systems' logo.

Calibration Software

The screenshot displays the RBtec Calibration Software interface, which is divided into several sections:

- System control:** Includes a 'Disconnect' button, Node IP (192.168.1.5), Node ID (SV100-4G), HW ver. (1), SW ver. (1), Manual IP (192.168.1.5), and the RBtec logo.
- Configuration:** Features a 'Stop' button, Recording time [s] (1), No. recordings (0), Filepath (C:\Users\Dor\Desktop), and Filename (data).
- Alarm:** A prominent red 'ALARM' button is highlighted with a yellow callout box labeled 'Indication of Alarm and Relay Triggered'.
- Status:** Shows Tampered: yes, Water: no, Walking: S1 [mV]: 5, S2 [mV]: 5, S3 [mV]: 5, S4 [mV]: 5, VCC [V]: 25.67, and Car: S1 [mV]: 12.5, S2 [mV]: 12.5, S3 [mV]: 12.5, S4 [mV]: 12.5. A legend indicates 'Lower is more sensitive' with red and orange lines.
- Scale [mV]:** Set to 11, with 'Set scale' and 'FFT' buttons.
- Detection classes:** (Silence, Car, Walking, Fault).
- Sensors 1-4:** Four graphs showing Amplitude [mV] vs Time [s] for each sensor. Each graph has a title: 'Sensor 1 - Walking (0, 2, 97, 0)', 'Sensor 2 - Walking (0, 0, 100, 0)', 'Sensor 3 - Walking (0, 0, 100, 0)', and 'Sensor 4 - Walking (0, 0, 100, 0)'. A yellow callout box labeled 'Detection Type' points to the title of the first graph. A yellow callout box labeled 'Detection Signal' points to a sharp spike in the third graph.

At the bottom left, the text 'NaN, NaN Current cursor position Cursors difference' is visible. The RBtec logo and 'Perimeter Security Systems' are at the bottom right.

EXAMPLES OF SEISMO INSTALLATIONS



RaySense

The Intelligent Fence and
Ground Fiber Optic Sensor

- ✓ Up to 100km per processing
- ✓ Sensing standard single mode fiber
- ✓ Distributed Acoustic Sensing (DAS) Technology
- ✓ 3-20m resolution over the entire perimeter.
- ✓ Can be used on the fence and underground
- ✓ No electronics or power required in the field.
- ✓ IP based monitoring – Software-based zones.

System Advantages



No power or communication needed throughout the length of the system



24/7 monitoring of secured area – no gaps in monitoring or dead spots



Resistant to extreme environmental conditions. Immune to electromagnetic, lightning and radio frequency interference (EMI/RFI)



Can be integrated with any VMS or Command & Control system



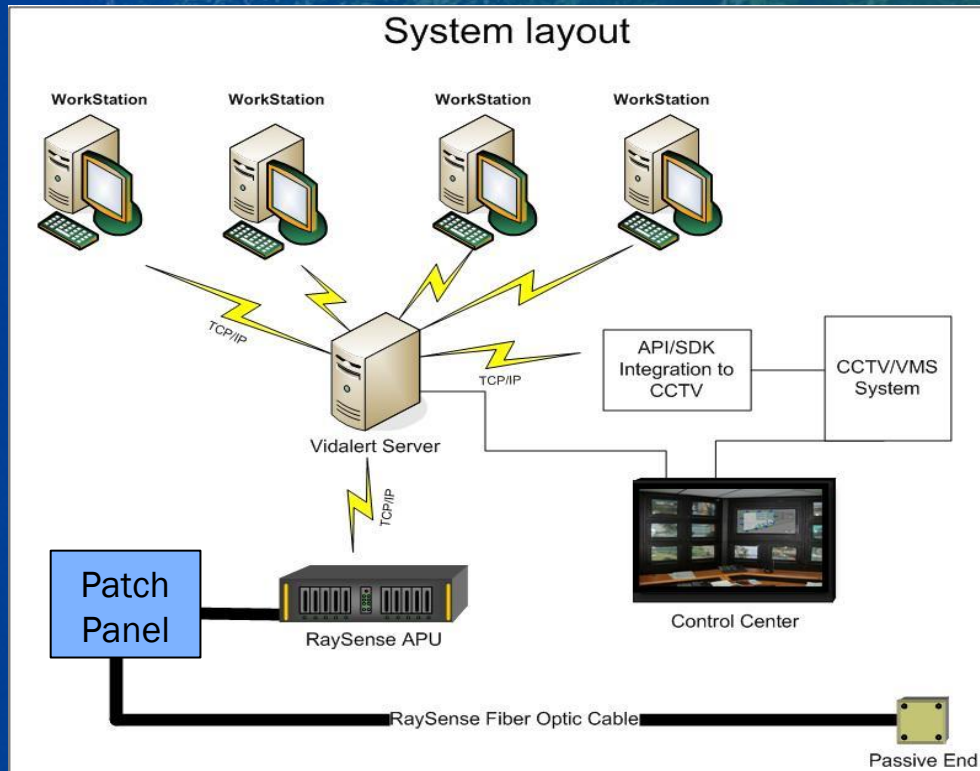
TCP/IP interface allows non-proprietary communications to 3rd party systems



Installed directly on the fence and direct burial in the ground. Does not require conduits or HTPA



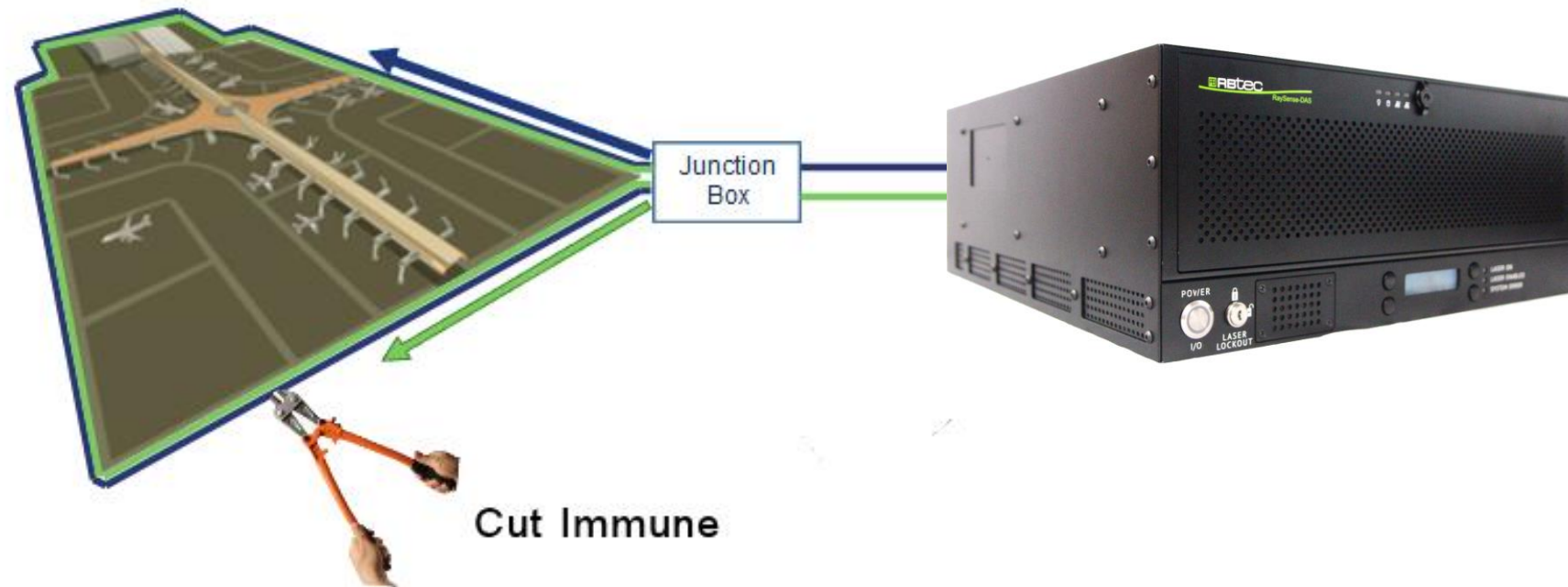
Installation with standard fiber tools, no special tools required. Any fiber tech can connect the system



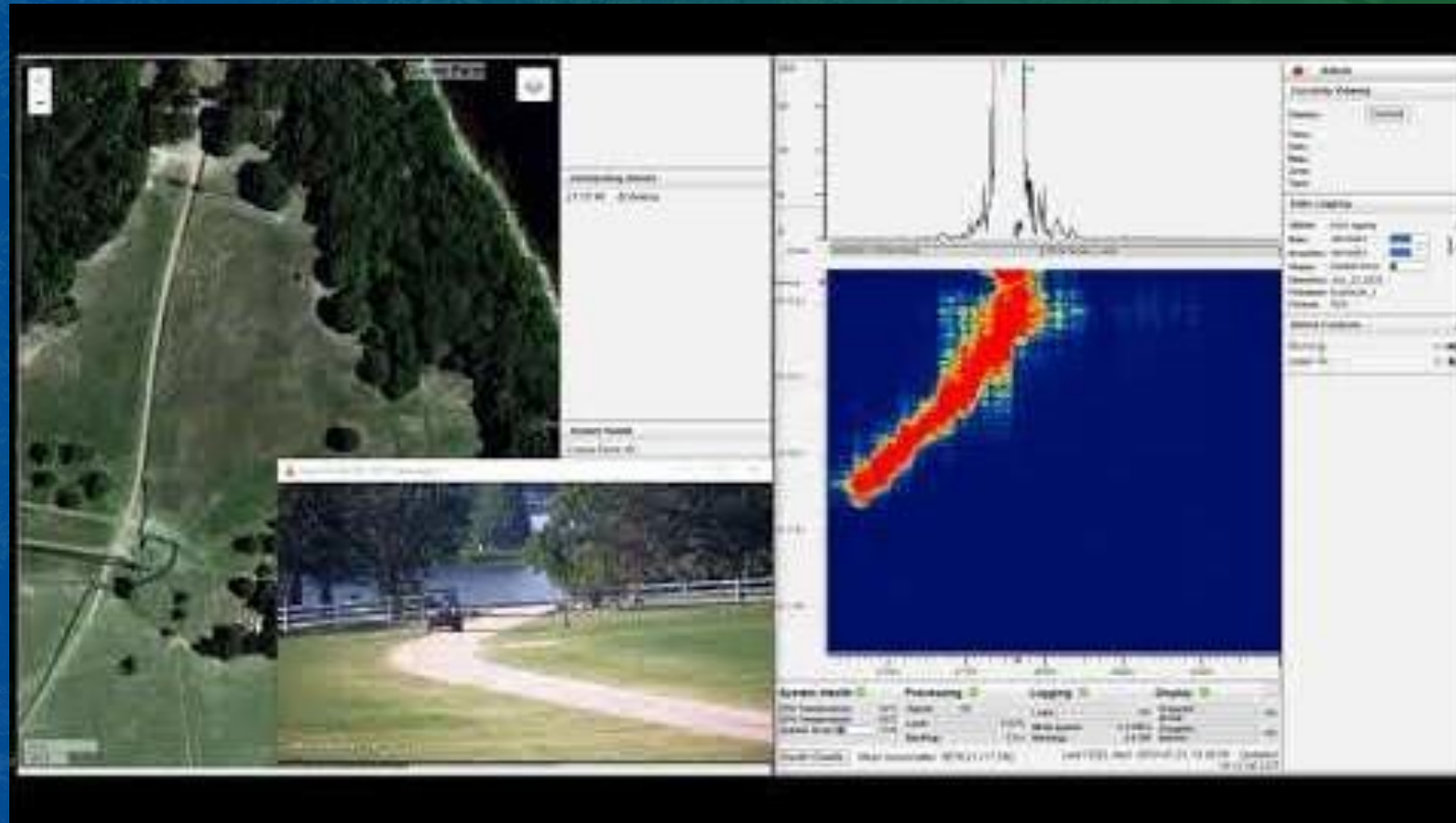
RaySense Fiber Optic Security Solution

Basic description of the solution

The RaySense System Alarm Processing Unit (APU) monitors laser signals, using sophisticated algorithms to distinguish between each of the possible intrusion scenarios, ruling out “non-threatening” alarms. RaySense performs automated calibration during power-up and operation, simplifying setup and ensuring high system performance, free of maintenance over time. RaySense is delivered in two configurations, a single channel or two channels.



System Demonstration



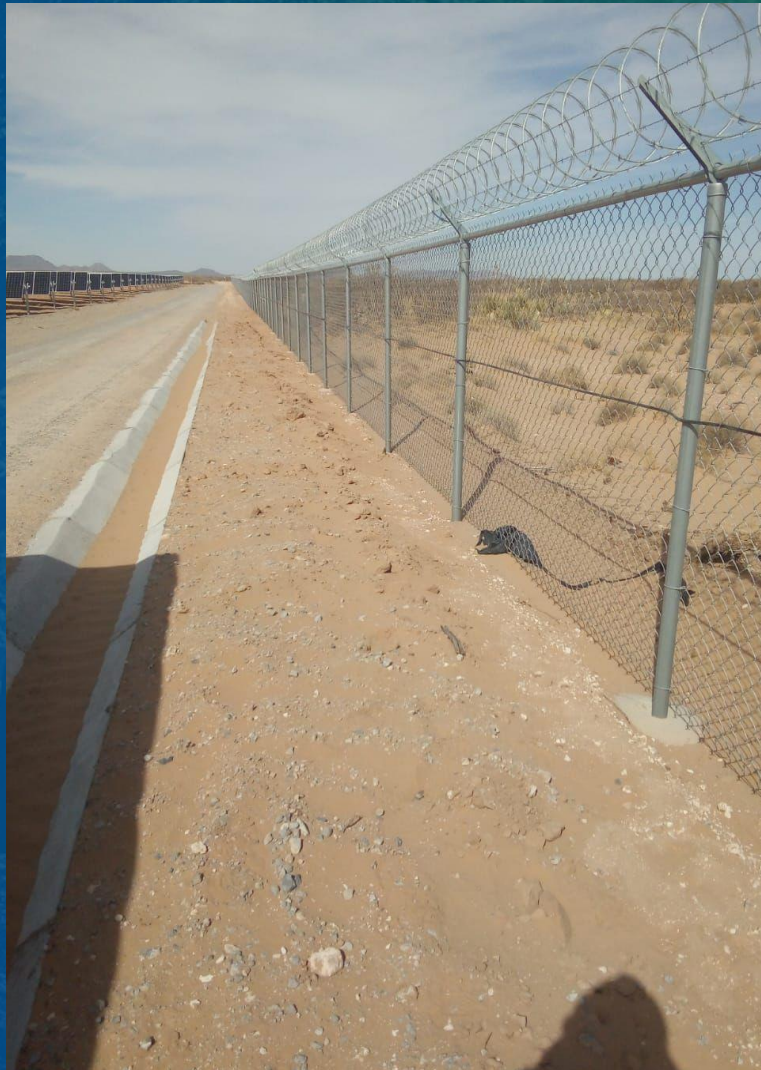
<https://youtu.be/6KvogqMZPmM>

Packaging Options

RaySense is sold in different lengths and number of detection channels.

Up to 5km/3.1Miles unit	1 or 2 Channels – Cut immune system	Software Based zones
Up to 10km/6.2Miles unit	1 or 2 Channels – Cut immune system	Software Based zones
Up to 20km/12.4Miles unit	1 or 2 Channels – Cut immune system	Software Based zones
Up to 40km/25Miles unit	1 or 2 Channels – Cut immune system	Software Based zones
Up to 50km/31Miles unit	1 or 2 Channels – Cut immune system	Software Based zones
Up to 50km/31Miles x2 unit	1 or 2 Channels – Cut immune system	Software Based zones

EXAMPLES OF RAYSENSE INSTALLATIONS



RBtec

Perimeter Security Systems
Choose RBtec, Your customer will thank you.



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