RBtec
Perimeter Security Systems

Perimeter Security Systems
Detect Them at The Perimeter

Real Time Detection Because Cameras are not Enough!
Prevent Theft and Vandalism Before They Enter

Our End Users & Their Solutions




RV/Camper & Boat Storage Facility


PV Solar Farms


Electric Infrastructure


Oil & Gas


Car, Truck, Heavy Equipment Dealerships

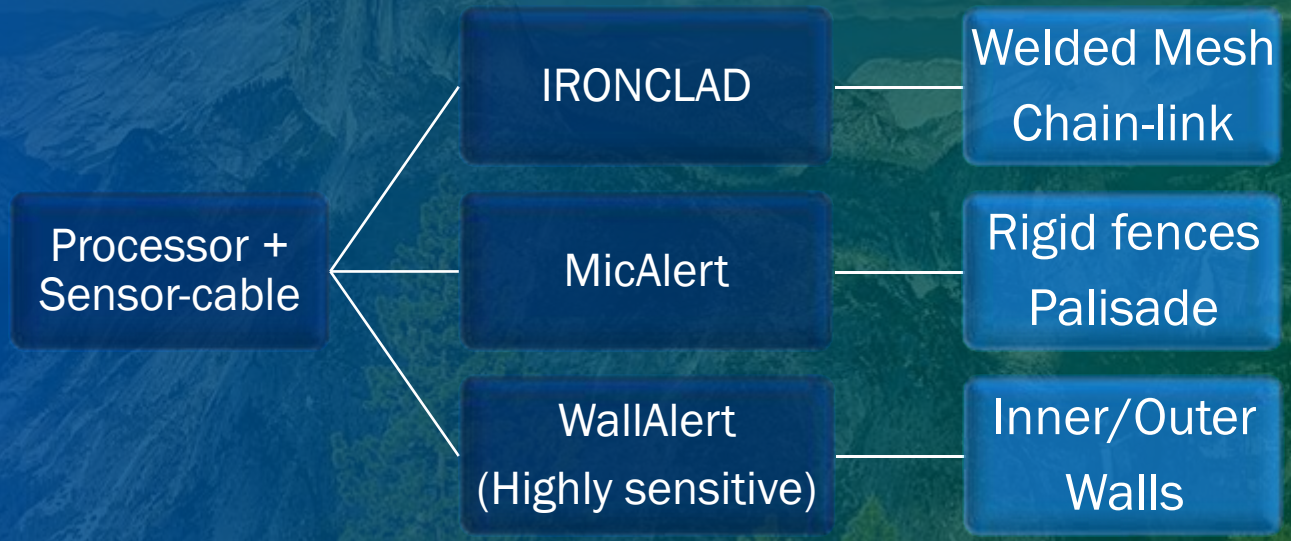

VIP Residential / Gated Communities


Manufacturing + Logistic / Industrial


Cannabis Grow Operation

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Our Plug & Play Systems



IRONCLAD

Fence Alarm System

Simple, Reliable and Affordable Perimeter Intrusion Detection System

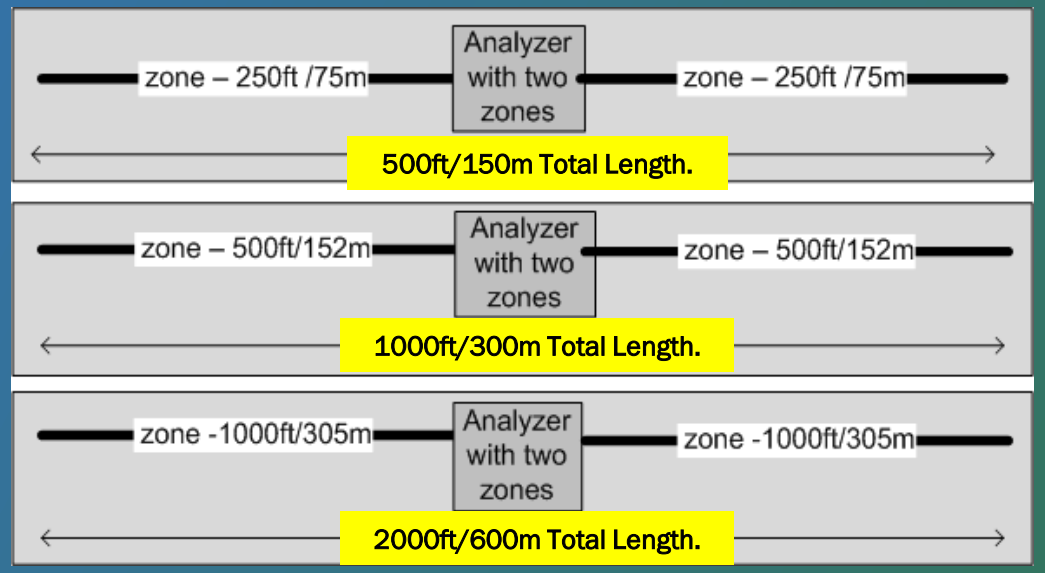
The IRONCLAD is a sensor cable designed to detect cuts or climbs for fences for commercial, industrial, and enterprise applications.

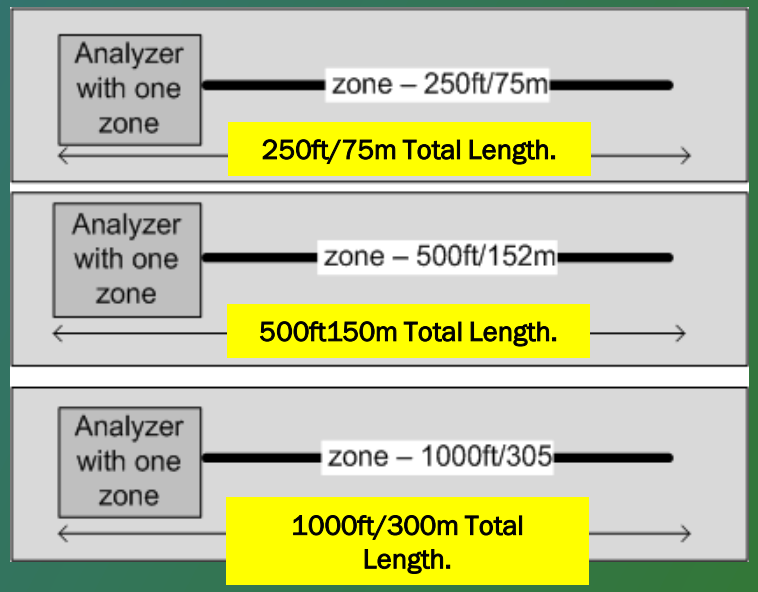
- ✓ Plug & Play installation, Anyone can install the system without prior experience!
- ✓ Economical and affordable technology to cover 100% of the perimeter
- ✓ No training or special tools are required. Comes with an installation manual.
- ✓ No sophisticated calibration, zone sensitivity easily adjusted
- ✓ Protects fences up 10ft/3m with a single cable.
- ✓ No maintenance needed
- ✓ 2x Dry contact relay alarm outputs (NO or NC), can be connected to any alarm system/DVR/access control/SCADA.



The kit includes:

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







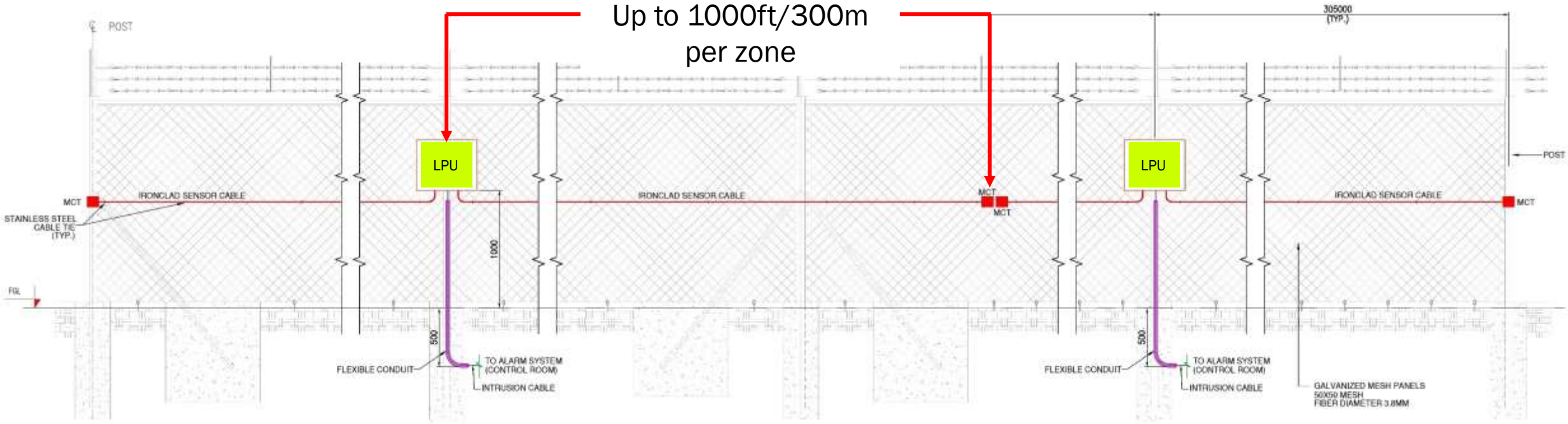


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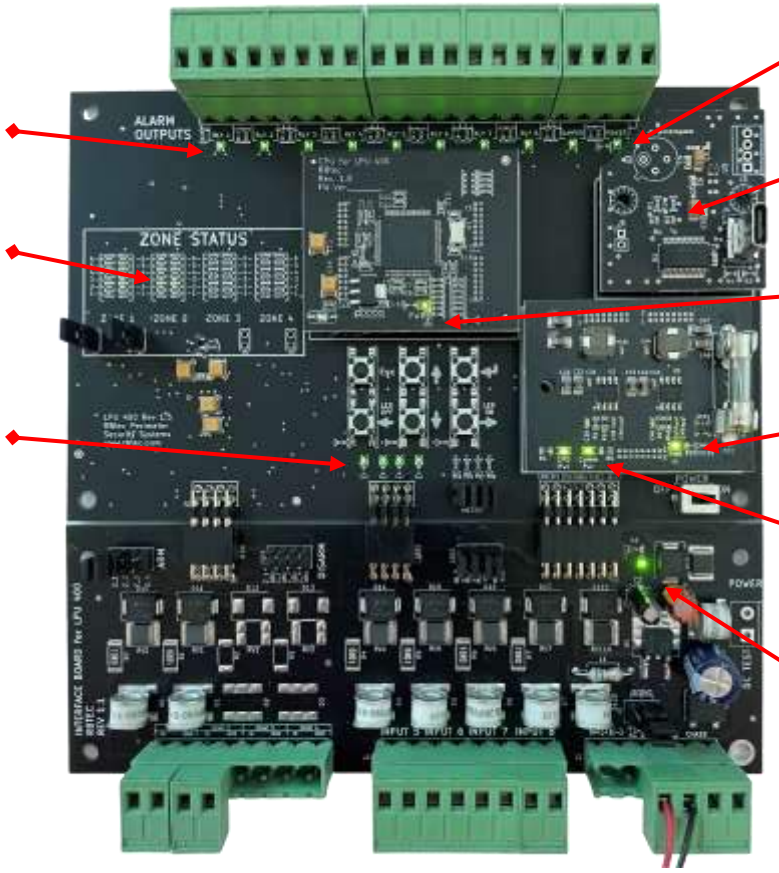
https://youtu.be/mr8uUl2cIJQ

System Layout



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LPU-400 – Indicator Lights Overview



Alarm Indication / Relay Latched

Sensor Zone Status

General Inputs Zone Status

Power Outage (Power Cut/Drop) Alarm Relay Output LED

USC-C communication LED

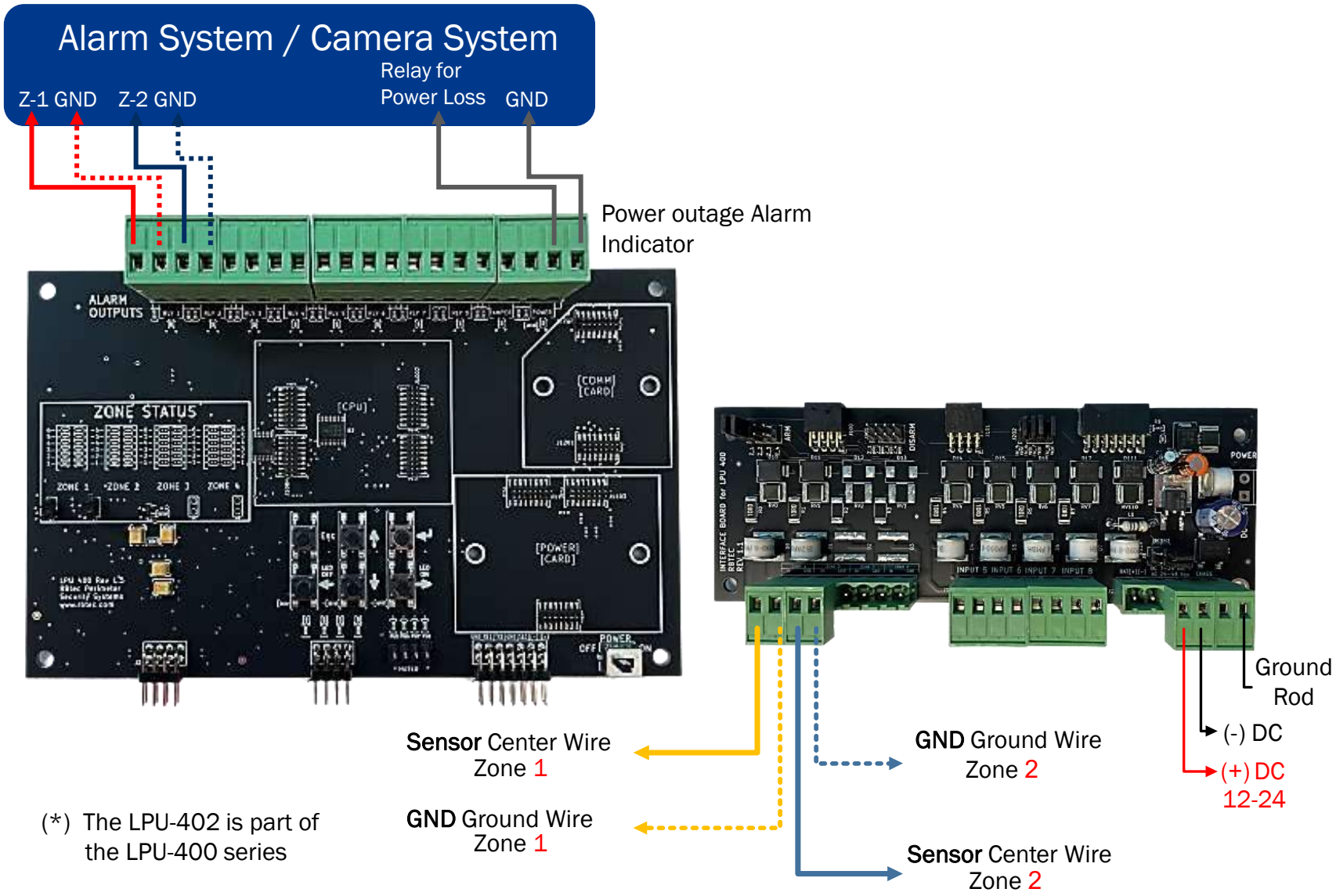
CPU Power Indicator LED

Voltage Input Indicator LED

Power Interface Operation Indicator LED

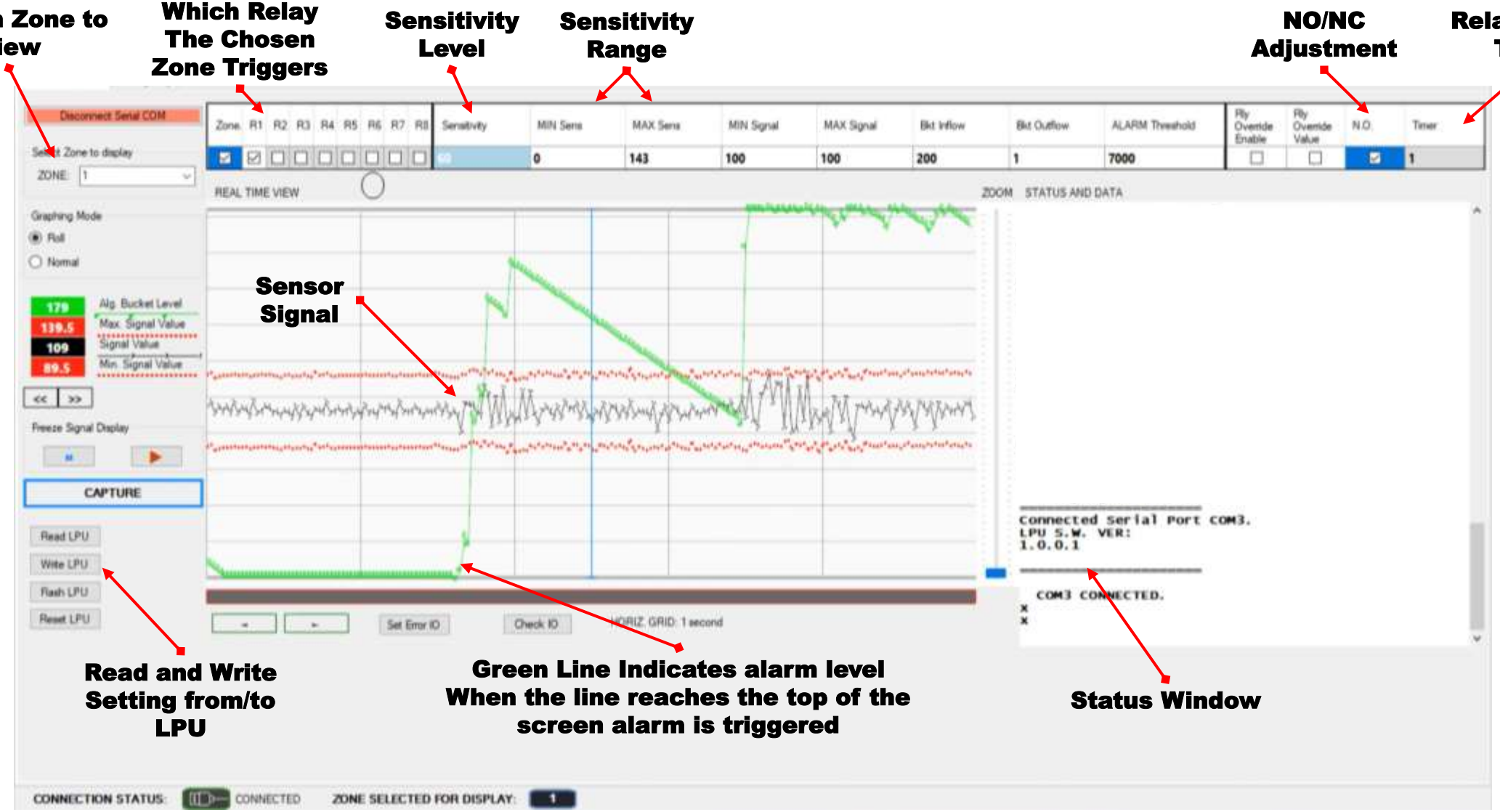
Voltage Passes the Surge Protection of the Surge Protection

LPU-402 Wiring Overview (*)



(*) The LPU-402 is part of the LPU-400 series

Optional Calibration Software



System Installation





Labor Estimate:
300m/1000ft of fence line per day for 2 techs -
4 hours labor







End Of Line Termination Kit - MCTR

Simple installation

End Of Line Termination Kit - MCTR



Extension/Repair Kit - MCTXT



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 splice with RG6 into a conduit and then spliced back on the other side. Splicing with RB-RBMCTXT Box



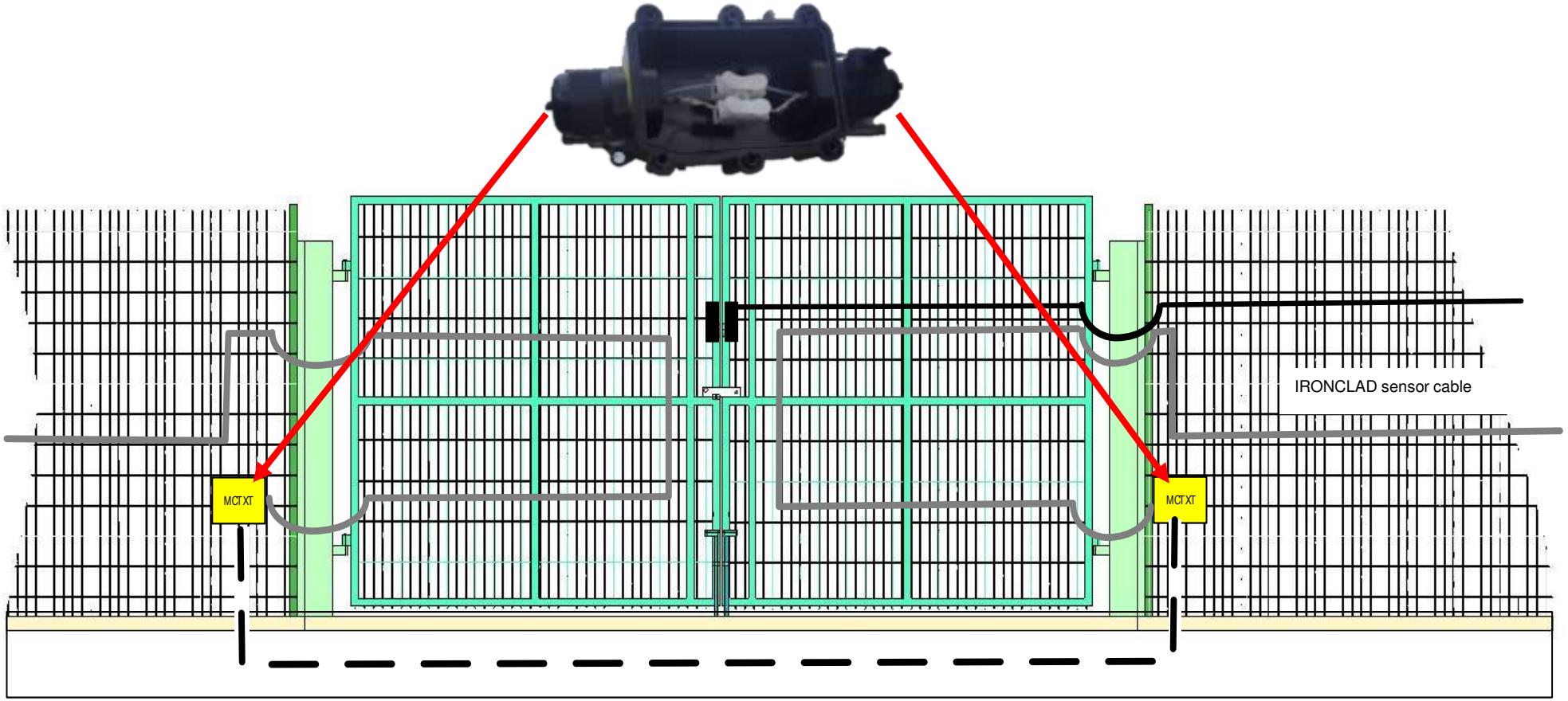
Emergency gate / No Conduit – For swing gates where there is no conduit or the gate rarely opens there is an option to splice the cable and install a pull out quick connector which allows to open the cable and as a result open the gate the cable is going over.



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Swing Gate Protection

RB-MCTXT
Junction Box



Non-sensitive cable RG6 Direct Burial under the gate in waterproof conduit

North America and Latin America Part Number / Code	Part Description and kit content	Quantities
RB-IR0C1Z250	SINGLE ZONE KIT 250ft/75m	
RB-IR0C250	Outdoor armored sensor cable. Roll of 75m/250' of sensor cable	1 rolls
RB-MCTR	End-of-line termination board. Pre-installed at end of sensor cable	1 units
RB-LPU402	Local Processor (LPU-402 Analyzer) Unit (Dual Zone) w/ 2 relay output	1 unit
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit
RB-IR0C2Z250	DUAL ZONE KIT 500ft/150m (2x250ft/75m)	
RB-IR0C250	Outdoor armored sensor cable. Roll of 75m/250' of sensor cable	2 rolls
RB-MCTR	End-of-line termination board. Pre-installed at end of sensor cable	2 units
RB-LPU402	Local Processor (LPU-402 Analyzer) Unit (Dual Zone) w/ 2 relay output	1 unit
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit
RB-IR0C1Z500	SINGLE ZONE KIT 500ft/150m	
RB-IR0C500	outdoor armored sensor cable. Roll of 152m/500' of sensor cable	1 roll
RB-MCTR	End-of-line termination board. Pre-installed at end of sensor cable	1 unit
RB-LPU402	Local Processor (LPU-402 Analyzer) Unit (Single Zone) w/ 1 relay output	1 unit
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit
RB-IR0C2Z500	DUAL ZONE KIT 1000ft/300m (2x500ft/150m)	
RB-IR0C500	outdoor armored sensor cable. Roll of 152m/500' of sensor cable	2 rolls
RB-MCTR	End-of-line termination board. Pre-installed at end of sensor cable	2 units
RB-LPU402	Local Processor (LPU-402 Analyzer) Unit (Dual Zone) w/ 2 relay output	1 unit
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit
RB-IR0C1Z1000	SINGLE ZONE KIT 1000ft/300m	
RB-IR0C1000	outdoor armored sensor cable. Roll of 305m/1000' of sensor cable	1 roll
RB-MCTR	End-of-line termination board. Pre-installed at end of sensor cable	1 unit
RB-LPU402	Local Processor (LPU-402 Analyzer) Unit (Single Zone) w/ 1 relay output	1 unit
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit
RB-IR0C2Z1000	DUAL ZONE KIT 2000ft/600m (2x1000ft/300m)	
RB-IR0C1000	outdoor armored sensor cable. Roll of 305m/1000' of sensor cable	2 rolls
RB-MCTR	End-of-line termination board. Pre-installed at end of sensor cable	2 units
RB-LPU402	Local Processor (LPU-402 Analyzer) Unit (Dual Zone) w/ 2 relay output	1 unit
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit








MICALERT

Vibration sensor cable for Rigid 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

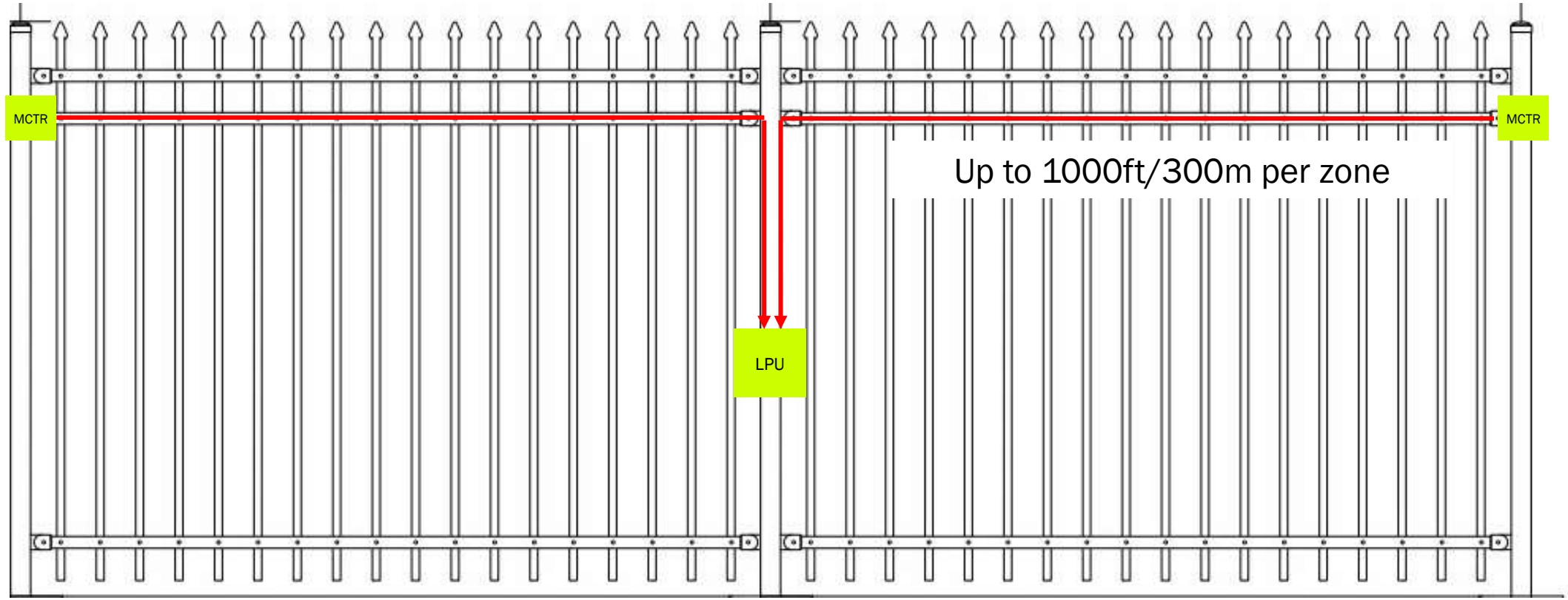
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MicAlert Example Diagram



Optimal Layout:

- The diagram shown above shows how the MicAlert system should appear when installed correctly.
- Please note the positioning of the sensor cable approximately halfway up the fence and running parallel to the ground.
- Deviation from this template will result in decreased performance.

Sensor Cable Installation (MicAlert)









- The sensor cable **must** be attached to the **internal (protected)** side of the fence.
- Outdoor Zip-Ties or metal clips are recommended. Place approximately every 12 inches/30 cm.
- The cable must be attached to a support strut similar to the ones shown on the upper half of the fence. If there are multiple, attach the cable to the lowest strut on the upper half of the fence.

WallAlert

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



Types of WallAlert kits

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Packaging options per WallAlert 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





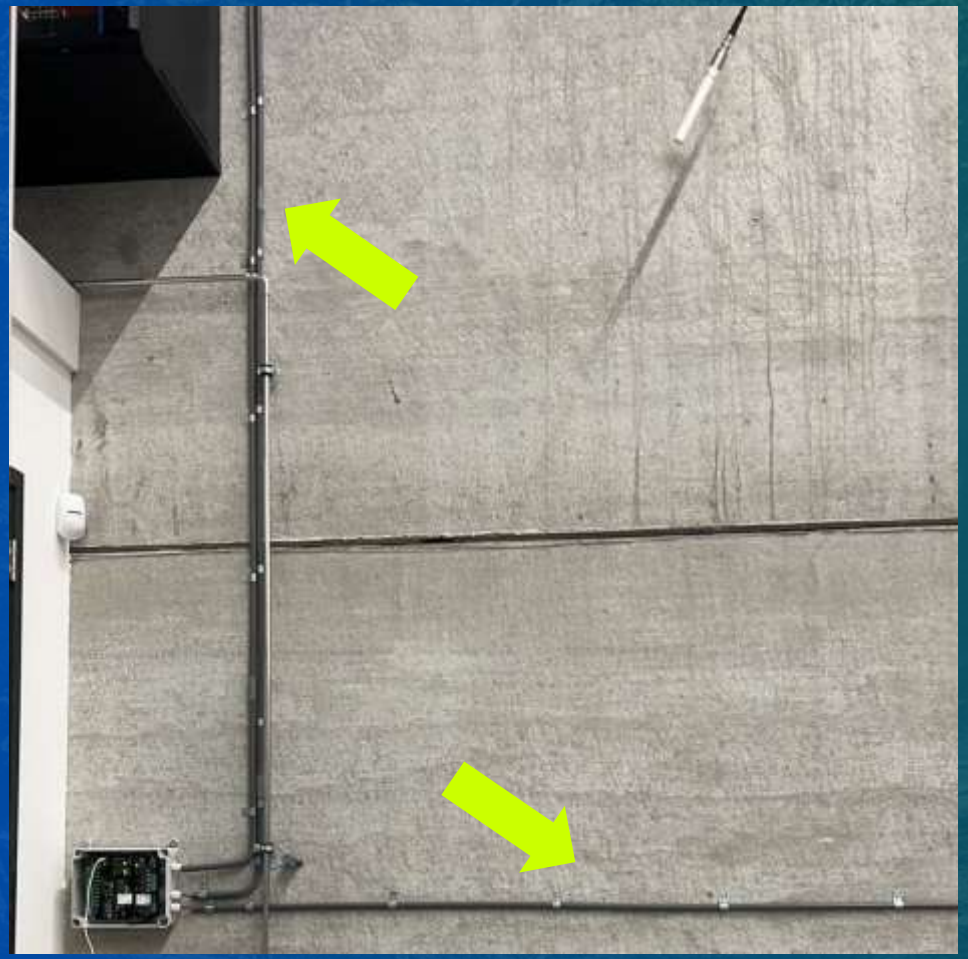
EXAMPLES OF WALLALERT INSTALLATIONS







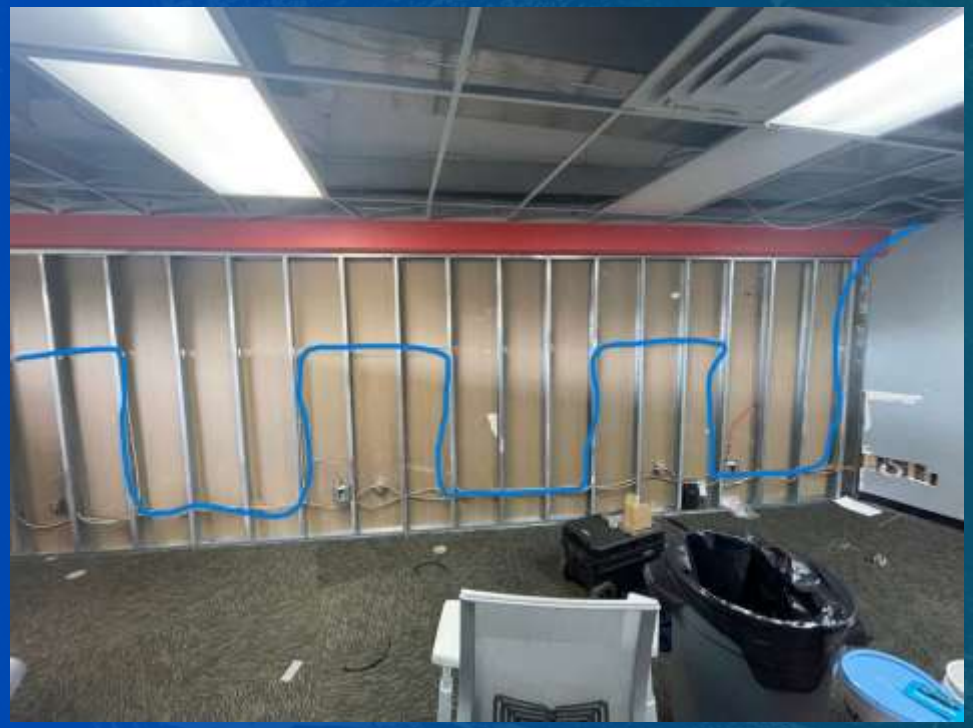
EXAMPLES OF WALLALERT INSTALLATIONS





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EXAMPLES OF WALLALERT INSTALLATIONS







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Video Analytics And Beams Are Better…

Are They Though?

RBtec Sensor Cable	VS	Video-Analytics
• 100% perimeter coverage in 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	Functionality	• 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 unharmful passerby
• One inclusive Plug & Play Kit (one item-code).	Distribution	• Video Analytics infrastructure consist of many different products: Cameras, Poles, Mounts, POE, NVR/DVR. Etc.
• Almost Zero maintenance • One-time expense	Cost & Maintenance	• Annual maintenance • Annual license per camera • High infrastructure costs and incidental expenses
• 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	Integration & Installation	• Complex Site design–choosing & poisoning the cameras. • Power & communication connection are needed for each camera. NVR/DVR needed.
• Relatively low competition • Margins are typically higher	Profitability	• Relatively High competition • Margins are typically Lower

RBtec Sensor Cable	VS	IR Beams
• 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	Functionality	• Challenging weather can lead to false alarms and/or non-detection. • Sensors can be blinded by the sun/flashlight • Can't differentiate between an unharmful animal/passerby and an actual intruder
• One inclusive Plug & Play Kit (one item-code).	Distribution	• Beams infrastructure consists of many products (multiple item-codes)
• Almost Zero maintenance • One-time expense	Cost & Maintenance	• Trimming nearby vegetation • Cleaning the lenses regularly
• 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	Integration & Installation	• Complex Site design–Sensors must "See" each other. Each turn, curve or height difference across the perimeter, requires stationing another set of sensors. • Require approx. 1 meter of a sterile area around the fence line
• Relatively low competition • Margins are typically higher	Profitability	• Relatively High competition • Margins are typically Lower

Perimeter Layout Design

Based on the information you collected above, it's now time to divide the perimeter to zones. Here what you should consider



Security Plan

Divide the perimeter for zones to comply with the security planes. For example camera coverage

Multiple Shorter zones = Higher precision of detection resolution



Topography

Divide the site layout into zones that comply with the topography of the site such as North, South side or road vs back



Budget

Less zones, reduces the price.

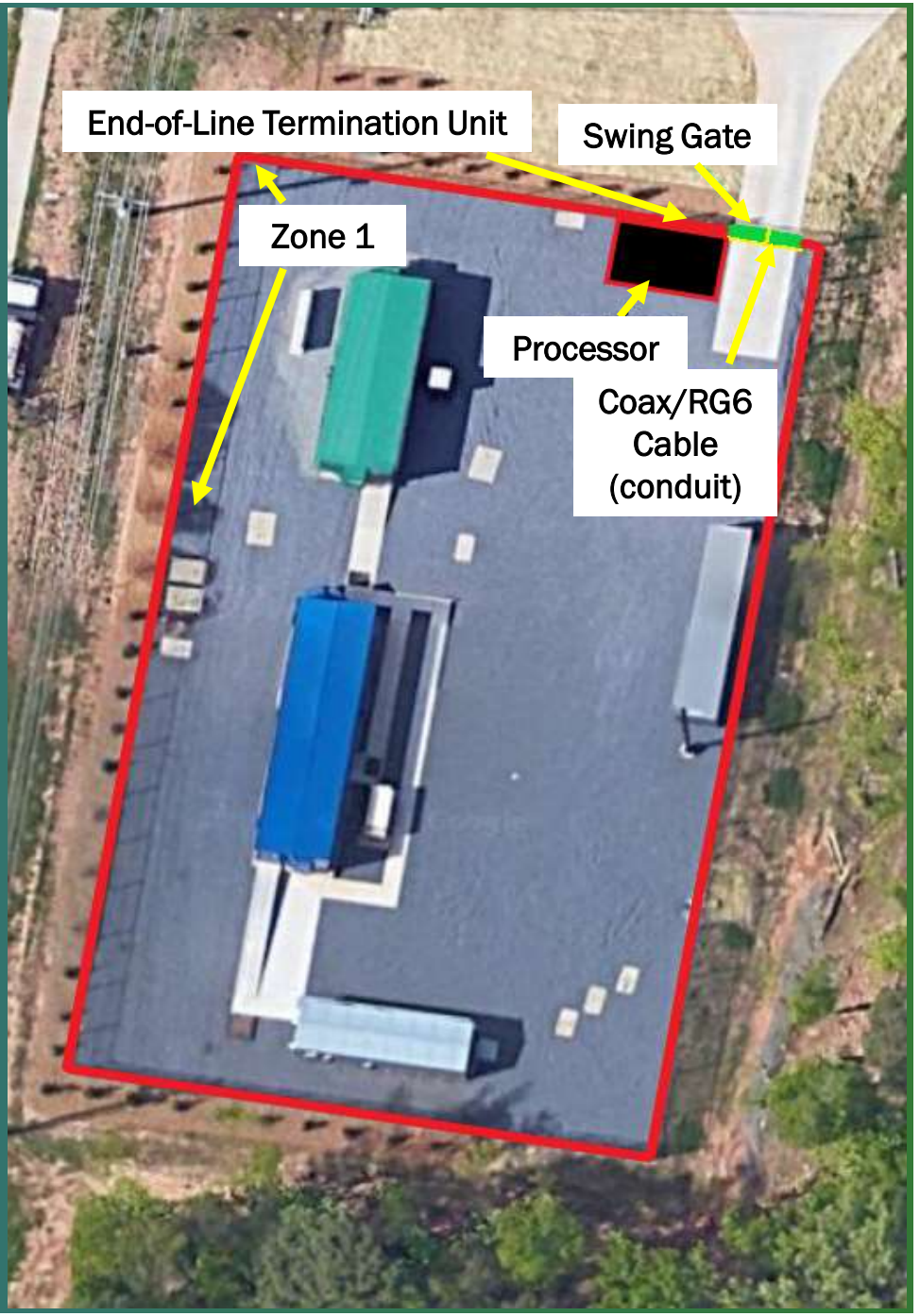
Longer/max length zones – Cheaper solution since less processors will monitor more cable/fence.

Example Site 1: 700ft/213m Fence
1 Processor, 1 Zone, 1 Swing Gate

Simple and affordable setup utilizing 1 processor directly on the fence, 1 sensor zone, and incorporating 1 swinging gate.

- In this configuration we have 1 processor that monitors 1 sensor cable. These components are all included in the RB-IROC1Z1000 kit.
- The advantage of this configuration is that the installation is the very simple, as the entire perimeter is covered by 1x700'/213m zone (trimmed down from the 1000' roll provided in the kit) that runs around the entire perimeter and through the gate, and terminates in an end-of-line unit back by the processor.
- The swing gate is covered by the sensor as shown earlier in this presentation. The sensor cable runs through both gate arms and connects under the gate via non-sensory RG6 coax, splicing out and back in using the RB-MCTXT splice terminal.
- The entire sensor line terminates adjacent to where it begins in an end-of-line termination unit (MCTR) which comes included in the RB-IROC1Z1000 kit.

Quantities	USA/Canada/Latin America Codes	Rest of the world	Description
1	RB-IROC1Z1000	RB-IROC1Z300	1-Zone Processor with 1x300m/1000' roll and EOL (end of line) kit
2	RB-MCTXT	RB-MCTXT	Extension junction box to splice RG6 coax under the gate
3	RB-RBTIES610	RB-RBTIES610	Stainless steel twist ties and tool

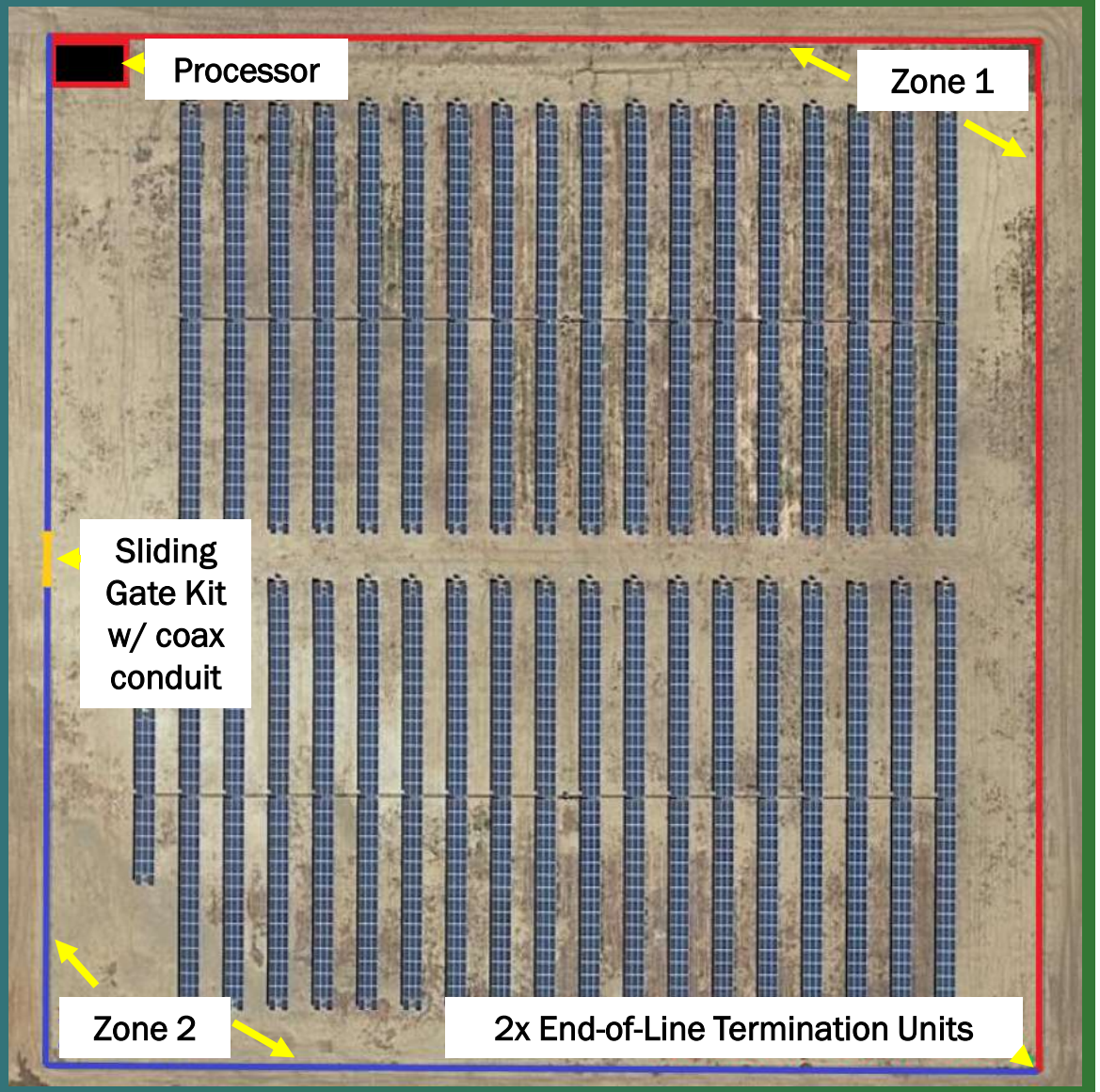


Example Site 2: 2000ft/600m Fence
1 Processor, 2 Zones, 1 Sliding Gate

Simple and affordable setup utilizing 1 kit, providing larger-scale perimeter coverage, 2 sensor zones, and incorporating 1 sliding gate.

- In this configuration we have one processor that monitors 2 sensor zones. These components (except for the sliding gate kit) are all included in the RB-IROC2Z1000 kit.
- The advantage of this configuration is that the installation is simple, as the entire perimeter is covered by 2x1000'/300m zones that start at the processor and run left and right around the entire perimeter. The sliding gate is easily integrated into Zone 2 the RBtec Sliding Gate Kit (all included in the RB-SLIDINGKIT).
- The sensor lines terminate opposite to the processor's location in 2 end-of-line termination units (MCTR) which come included in the RB-IROC2Z1000 kit.

Quantities	USA/Canada/Latin America Codes	Rest of the world	Description
1	RB-IROC2Z1000	RB-IROC1Z300	2-Zone Processor with 2x300m/1000' roll and 2 EOL (end of line) kits
1	RB-SLIDINGKIT	RB-SLIDINGKIT	30 ft Reel in a Weatherproof Enclosure + 2 RBMCTXT Junction Boxes
3	RB-RBTIES610	RB-RBTIES610	Stainless steel twist ties and tool



Our End Users
Examples of Markets and Installations



Industrial Outdoor Storage







PV Solar Farm / Solar Parks









RV / Camper Storage Sites and Dealerships















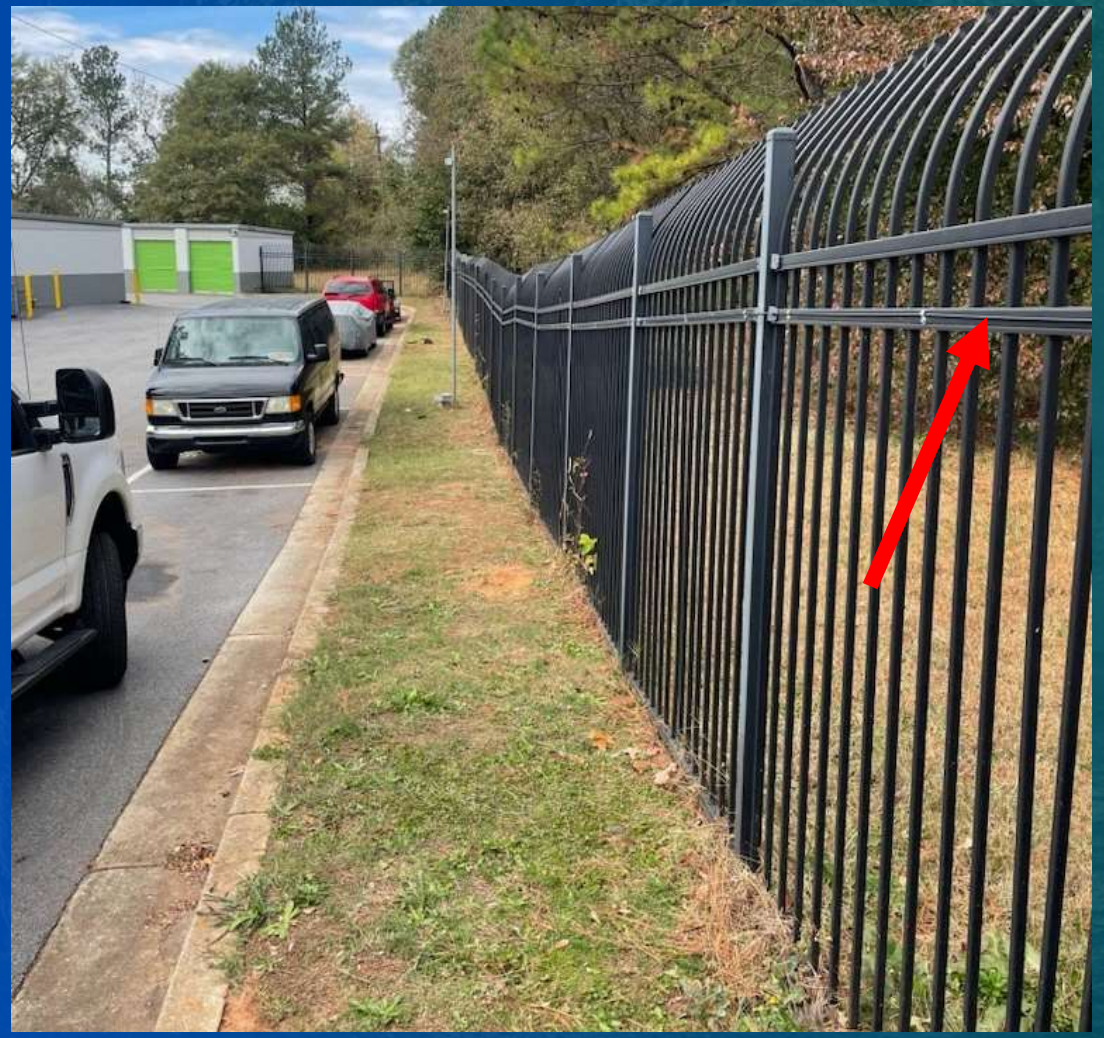

HUSTLER

Cannabis Grow Farms





Self Storage Facilities





Scrape Yards and Recycling





Transportation / Logistics



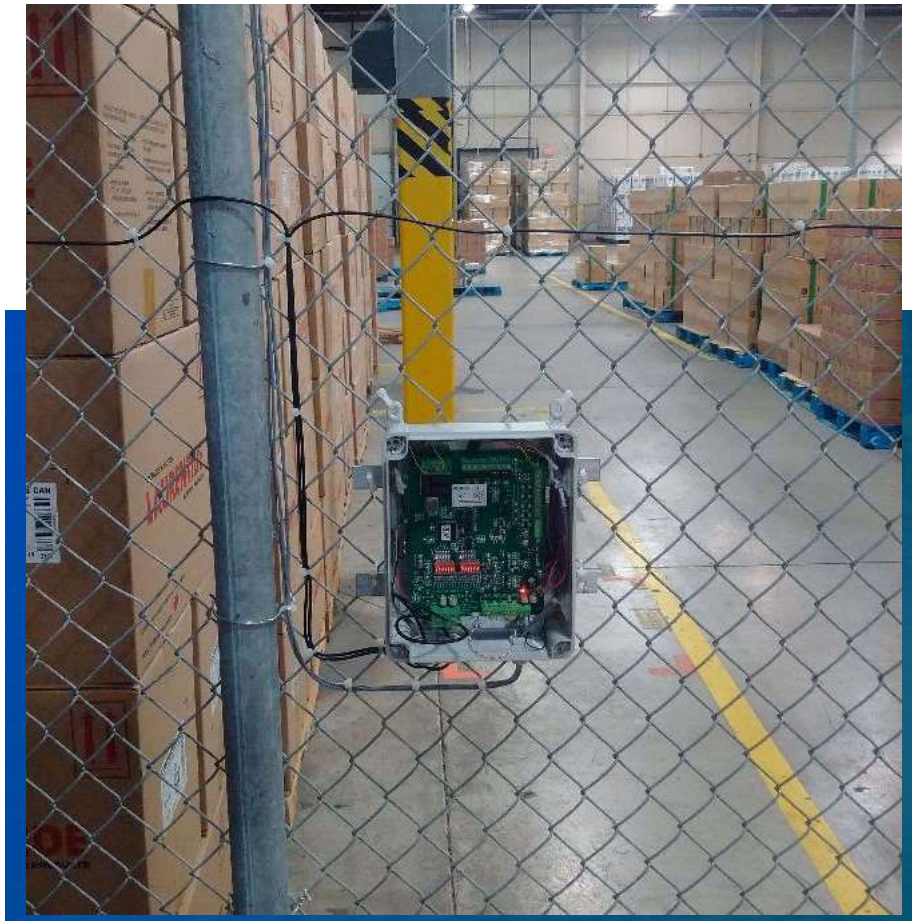








Indoor Fence Areas / Cages







Electrical, Oil and Gas Substations









Electrical, Oil and Gas Service Yards and Storage





Data Centers





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





Thank you!
Any Questions?

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