

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







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)











https://youtu.be/mr8uUl2clJQ







LPU-400 – Indicator Lights Overview



LPU-402 Wiring Overview (*)



9/28

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.







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-IROC1Z250	SINGLE ZONE KIT 250ft/75m			
RB-IROC250	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	PO-	
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit	10 10 10 10 10 10 10 10 10 10 10 10 10 1	
RB-IROC2Z250	DUAL ZONE KIT 500ft/150m	(2x250ft/75m)		
RB-IROC250	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	4004	
RB-JB402	IP66 / NEMA4X rated weatherproof enclosure for LPU-402 processing unit	1 unit		
RB-IROC1Z500	SINGLE ZONE KIT 500	ft/150m	BRIES / 12	
RB-IROC500	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-IROC2Z500	DUAL ZONE KIT 1000ft/300m (2x500ft/150m)			
RB-IROC500	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	JUL	
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-IROC1Z1000	SINGLE ZONE KIT 1000ft/300m			
RB-IROC1000	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-IROC2Z1000	DUAL ZONE KIT 2000ft/600m (2x1000ft/300m)		-	
RB-IROC1000	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	- 000 P	
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







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.



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

Types of WallAlert kits





EXAMPLES OF WALLALERT INSTALLATIONS





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EXAMPLES OF WALLALERT INSTALLATIONS







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 & 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



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 | Processor, | Zone, | 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 I Processor, 2 Zones, I 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

IRONCLAD

Fence Alarm System



SECURE YOUR

BUSINESS

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

ABB Industrial Outdoor Storage







PV Solar Farm / Solar Parks







RV / Camper Storage Sites and Dealerships









Cannabis Grow Farms



Self Storage Facilities

ExtraSpace Storage

Scrape Yards and Recycling

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

Preimance Boalety Systems

Wireless or Wired – Solar or DC Power

Thank you! Any Questions?

Dori Ribak VP Marketing & Technology <u>dori@rbtec.com</u> 301-760-4016

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