

security  
aesthetics  
longevity



**A-1 FENCE PRODUCTS COMPANY PVT. LTD.**

## ABOUT

A-1 Fence designs and manufactures high quality fencing products, and provides perimeter security solutions to wide range of applications, from farmlands to political borders. Starting in 1998 with a single product manufacturer to a complete range of security solutions, including physical and electric fences, vibration sensors, high end cameras, gates, access control, etc. One of the leaders in International markets, with manufacturing facilities spread over six units in India and Middle East, and sales office in India, UAE, South Africa and Oman. By 2020 A-1 Fence has supplied its solutions to over fifty countries including, Afghanistan, Australia, Chad, Chile, France, Germany, Guatemala, India, Kuwait, Oman, Poland, Saudi Arabia, etc. A-1 Fence continues to invest in people and technology to remain at the forefront of the perimeter security industry.



## VISION

10x growth through entrepreneurial spirit, global connect and passion for excellence.



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## MANUFACTURING CAPABILITIES

1500<sup>MT</sup>  
PRODUCTION



1400<sup>MT</sup>  
PRODUCTION



600<sup>MT</sup>  
PRODUCTION



300<sup>MT</sup>  
PRODUCTION



200<sup>MT</sup>  
PRODUCTION



50<sup>MT</sup>  
PRODUCTION



*\*Monthly capacity*

## FENCING APPLICATIONS



RESIDENTIAL  
COMPLEX



PARK /  
PLAYGROUND



FACTORY



HOUSING  
SOCIETY



FARM /  
FARMLAND



HIGHWAY



INDUSTRIAL  
ESTATE



COMMERCIAL  
COMPLEX



IMPORTANT  
CITY STREET



IT PARK



AMUSEMENT  
PARK



SOLAR PARK

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# DELAY RATED FENCE

Delay Rated Fence are a special type of high security fence systems that give high intrusion time which helps protect critical area/infrastructure. The delay time varies with the complexity of the fence. These fences are anti-climb, anti-cut & anti-corrosive.



## A-1 Akat Pro 6:

A-1 AKAT PRO 6 is a high security fence which consists of reinforced rigid panel which provides uncompromising strength & protection against unwanted intrusion owing to its anti climb & anticut properties while maintaining good visibility. Our fence system has been evaluated against three levels of threat, low, medium and aggressive, using an inventory of limited hand and power tools. The tools used at each threat level are known to have a maximum destructive effect on structures.

American Society for Testing and Materials **ASTM F2781 certified:**

Threat Level	Delay Time	Forced Entry Resistance Ratings
Low (Hand Tools)	60+ Minutes	Self Tested L60+
Medium (Power Tools)	25 Minutes	M24.9
Aggressive (Ballistic Power Tools)	6 Minutes	A5.5

### TESTING STANDARDS



American Society for Testing and Materials ASTM F2781

### TESTING AGENCY



These Fences are Forced entry resistant fence tested by SwRI



**HIGH SECURITY FENCING**





# WELD MESH

## A-1 Kavach

A-1 Fence's High Security Weld Mesh System uses a weld mesh panel which is popularly known as 358 mesh panel. This is an international standard used for high security sites. This mesh has many qualities which makes it an ideal perimeter fence to keep the intruders out of the protected area.

### Key features:

- Mesh opening is so small that it is very difficult to grip and climb the fence
- It is almost impossible to cut the fence without using power tools
- The mesh opening along the horizontal axis is such that visibility is uninterrupted which makes it ideal for areas under camera surveillance and human patrolling
- Ideal fence for mounting sensors



High Security Weld Mesh Fence System can be fixed in many different ways, depending upon the level of security required.

358 stands for mesh size of 3 inch x 0.5 inch, with the wire diameter of 8 gauge.

358 mesh can be made more effective by integrating with Concertina Razor Wire, Wall Spikes, Electric Fences or various detection systems.

A more secure, denser and heavier version of 358 is 356, in which the mesh is made out of 5mm wire.

A more economical version of 35-8 is 35-10, in which the horizontal wires are of 3.15 mm instead of 4 mm. This version is fast becoming more popular for industrial and residential purposes.

Concertina Razor Wire



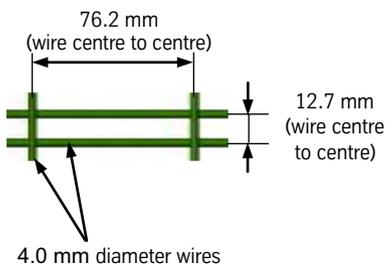
Wall Spikes



Electric Fence



Detection System





## Industrial Weld Mesh

Industrial Weld Mesh System uses a panel with mesh size of 50 mm x 150 mm, with wire diameters of 4.5 mm or 5 mm. Strong, long lasting, easy and fast to install.



## UNICO Series

**UNICO** uses a panel with mesh size of 50 mm x 200 mm, with wire diameter of 4.5 mm or 5 mm. Aesthetic appeal of these fences are greatly enhanced by patterns on wire, V-bends, attractive colours and special profiled posts used for fittings.

**UNICO** Fences:

1. **UNICO**Prima
2. **UNICO**Pro
3. **UNICO**Aura
4. **UNICO**XI
5. **UNICO**Robusta
6. **UNICO**Crown



## UNICOCrown

**UNICOCrown** has a twin wire mesh structure which gives it a sleek but sturdy appearance. Its artistic design creates a beautiful backdrop for borders and entertainment areas. Not only are they attractive, but also have a long life cycle as the wires used are galvanised and powder coated improving its durability. It is available in a number of colour variants.



## TRELLIS WALL

Trellis Walls are used in high rise residential and commercial building alongside approach ways, lawns and gardens. They may be indoors or outside, freestanding or attached to an existing wall, and come in a great variety of sizes. They require no structural maintenance and provide insulation keeping the building's inside temperature consistent. The wires are galvanised and powder coated improving its corrosion resistance.



## SAFENCE



Safence is a modular weldmesh system which is used for fall protection at the edges of construction sites. It incorporates guardrails, toeboards and debris mesh into one single lightweight steel mesh barrier. It has a unique snap and go mechanism which eliminates use of fixtures for installation thus enhancing its ease of usage.

## WINDOW GRILL

Window Grill is made of welded wire mesh which has a secure and sleek look. With a wire thickness of 6-8 mm it is difficult to cut through while maintaining good visibility. The wires are galvanised and powder coated giving it dust and water resistance further improving its durability.

### Key features :

- Ease of handling
- Economical
- Long life
- Customisable to need



## CABLE TRAY

Cable trays are used as an alternative to open wiring or electrical conduit systems for cable management in commercial and industrial construction. The wire mesh is galvanised and powder coated to prevent rusting and further longevity. Cable trays are available in a number of variants made from light/medium/heavy duty material based on the type of application. The tray width can also vary from 50 mm - 600 mm



## UNICOAura

**UNICOAura** is a modular weldmesh fencing system with built-in illumination. It is an innovative light post that integrates seamlessly with the fence and helps illuminate the nearby area.

### Key Features:

- IP67 rated
- Light and compact
- Energy efficient
- Vandal proof



## TREE GUARD

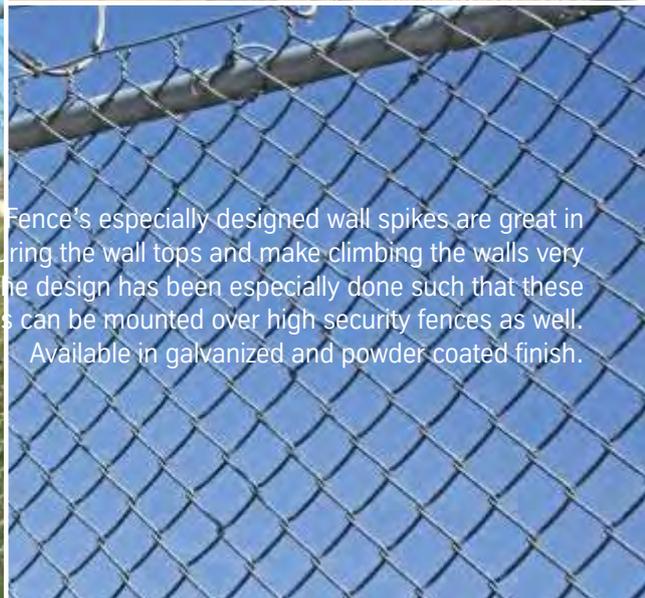
Tree guards are used to protect and demarcate tree saplings in the early stages of their growth and help in beautification of the vicinity. The spiral wound wire helps provide rigidity to the structure while maintaining good aesthetics and its modular design ensures easy logistical handling. Galvanised and powder coated wire mesh prevents formation of rust further improving its durability.







A-1 Fence has few innovative styles of temporary fences which are of great utility during construction and road works. Temporary fences can be customized as per the sites requirements.



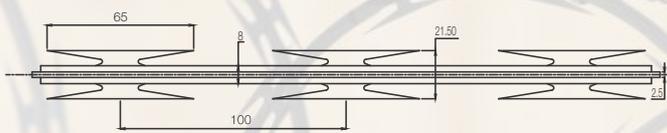
A-1 Fence's especially designed wall spikes are great in securing the wall tops and make climbing the walls very difficult. The design has been especially done such that these spikes can be mounted over high security fences as well. Available in galvanized and powder coated finish.

# RAZOR WIRE

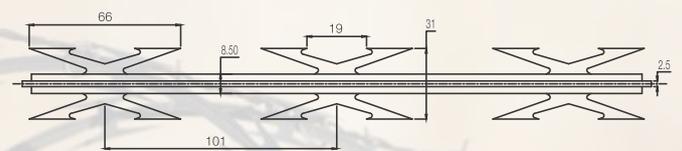
A-1 Fence manufactures razor wire in two different styles- concertina or flat wrap. The blade in razor wire is made in five different profiles.



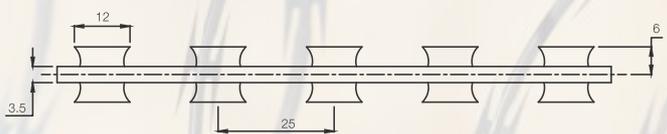
**LONG BLADE**



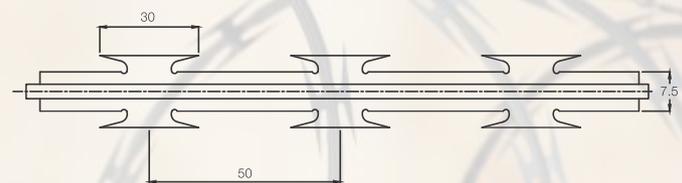
**FISH HOOK BLADE**



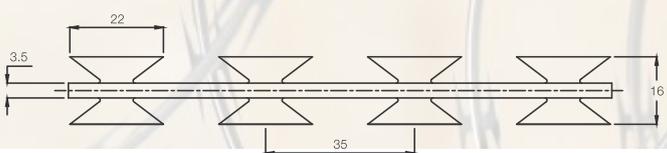
**SHORT BLADE**



**TEAR BLADE PROFILE**



**MEDIUM BLADE**



## BARBED WIRE

### Variants of Barbed Wire:

- Surakshak - Heavy Galv BW with Red PVC barbs for longer life and better visibility
- Surakshak+ - High tensile double stranded Barbed Wire made from thinner, yet stronger high tensile GI wires
- High Tensile Single Strand Barbed Wire
- PVC coated Barbed Wire - Full coated with PVC, available in multiple colours and has long life
- Stainless Steel Barbed Wire - For coastal application



## TEMPORARY FENCE



## WALL SPIKES



## SECURITY GATES



A-1 Fence is in a position to offer wide variety of gates to suit requirements of a project. A-1 Fence is also manufacturing cantilever gates for sites which might be too dusty and where there is an unlevelled ground condition. It could be a standalone gate or, a gate to be integrated with the perimeter fence, where the gate construction is done such that fence and gate blend into each other, which adds immensely to the aesthetic appeal of the whole construction.

There are several design considerations before deciding upon the gate design which fulfills the project requirements - whether it should be a sliding, or single swing, or double swing, telescopic, or should there be a small pedestrian gate built inside a large industrial gate, what are the security requirements, should there be an access control, should the gate be motorized or manual, etc.



### Types of Gates Available:

- Swing Gates
- Tracked Sliding Gate
- Telescopic Sliding Gate
- Cantilever Sliding Gate



### Telescopic Sliding Gate

The Telescopic Sliding Gate is an adaptation of the normal tracked sliding for modern day structures where there are space limitations.

A telescopic gate reduces the parking distance required by a sliding gate by at least 40 percent. This makes it the ideal choice when the entry or exit road is at one corner of the property with limited space to sacrifice for the gate parking area.



## Cantilever Sliding Gate

The Cantilever Sliding Gate is an ultra-modern gate design which lays emphasis on security, safety and maintenance-free operation. The gate virtually floats in air as it crosses the roadway. The gate is balanced on set of two precision engineered roller carriages which do the trick.

All running parts are completely hidden, preventing them from being affected by the elements and no guide track is required; implying reduced civil work during installation.

## Material, Finish & Design of Gate

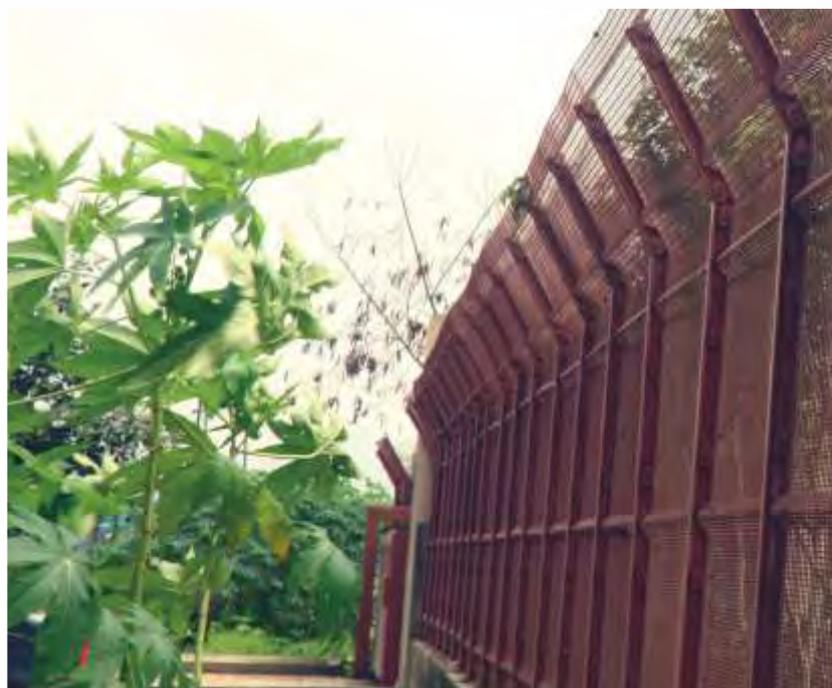
We use only galvanised steel to make our gates. We have various designs options for the gate infill ranging from vertical bars to mesh that will match your fencing. And we would be more than glad to cater to your custom designs.

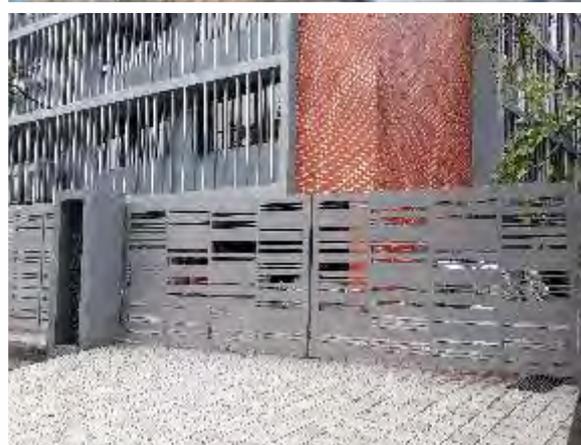
One of unique features A-1 Fence has is it provides powder coated gates. And this powder coating is done over hot dip galvanized steel sections, which ensures very long life. The following two finishes are available with any gate:

- Hot Dip Galvanized
- Powder Coated

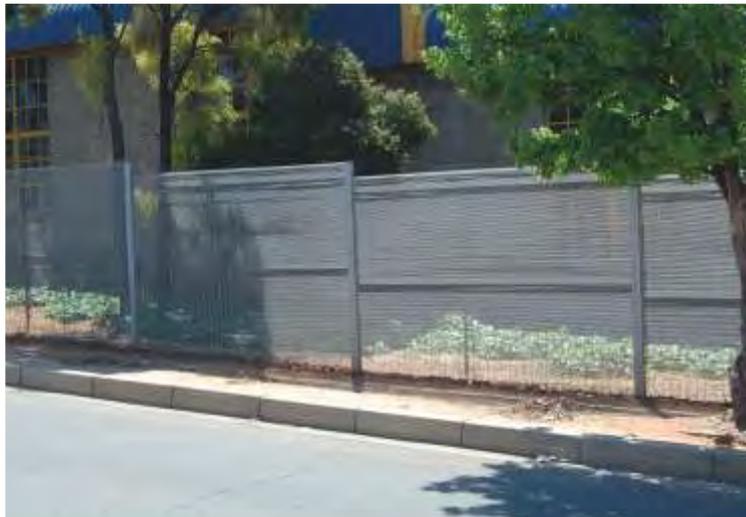
A variety of colors are available for powder coated gates. For greater aesthetic appeal, A-1 fence matches the colour of the gate frames with the colour of fence, and the gate infill with the mesh of the fence panel, this creates a visually pleasing sight.











## GABIONS



Gabions are rectangular wire mesh baskets filled with rock at the project site to form flexible, permeable, monolithic structures such as retaining walls for commercial, industrial and road projects. Gabion and Gabion mattresses are trusted, well proven and technically sound solutions to retain earth and reduce erosion. This technique is extensively used around the world. They are also used for river bank stabilization, channel linings and weirs.

(Note: Retaining wall are permanent structures typically constructed at a toe of slope or to retain backfill.)

The key to longevity of these gabion structures is based on the quality of the wire used for manufacturing gabion boxes and the correct design aspects. A-1 Fence is committed to fulfill both these parameters and provide our customers with finest quality product with technical support as and when required.

The assembly and installation of gabion is enormously simple and can be carried out in any environment without the assistance of specialized tools and workforce. Our products are supported by design assistance from qualified Geotechnical engineers who can provide timely technical support.



### **Gabions are made out of following material:**

- Heavy galvanized steel wire
- PVC coated wire
- Galfan

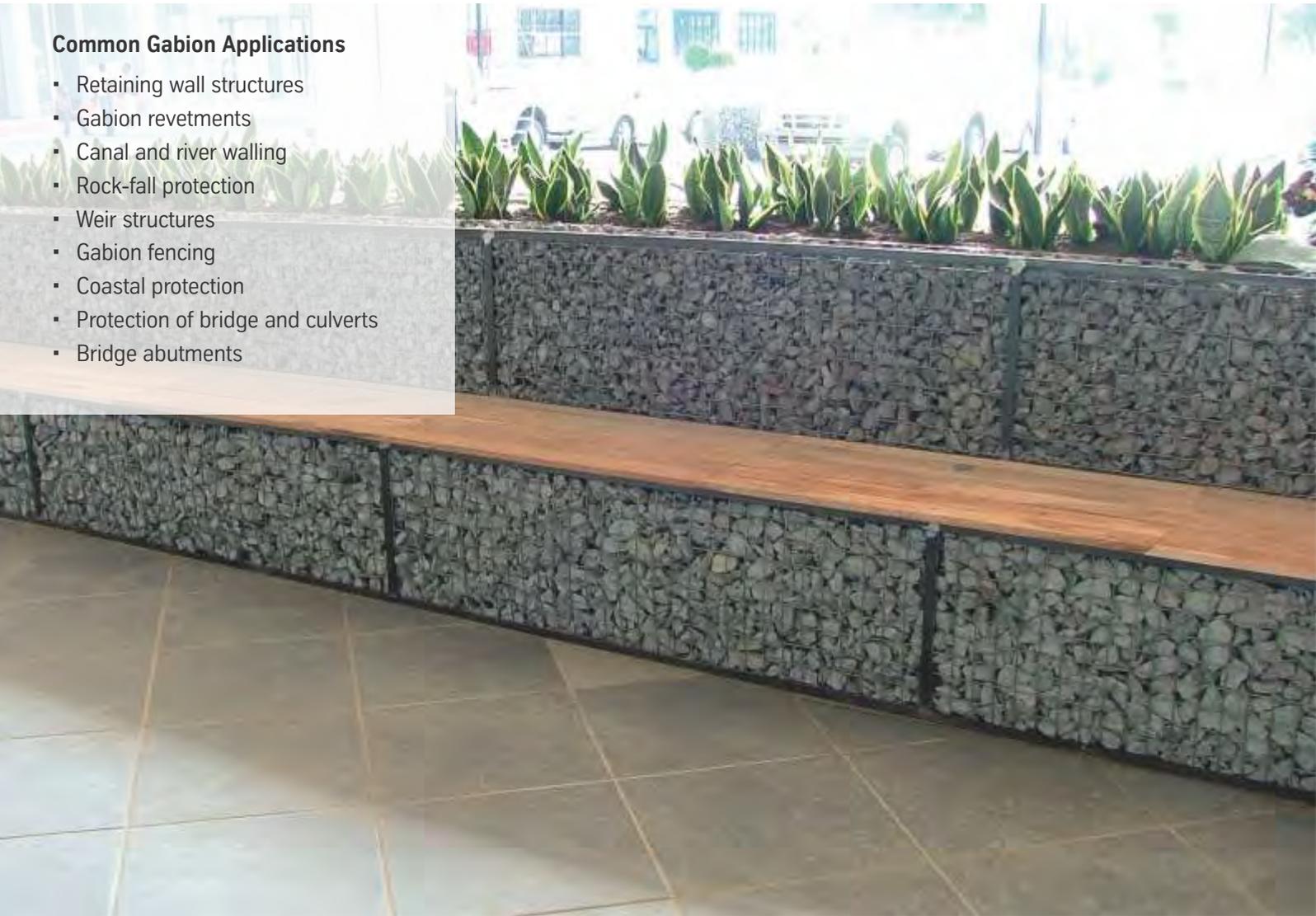
### **Common Gabion Products**

- Boxes** : These are blocks made of gabion mesh, which can be filled on the site with rocks, stones, debris and crushed concrete.
- Mattresses** : Gabion Mattresses are used to provide protection on water courses.
- Rockfall netting** : As the name suggests, this kind of netting made out of gabion mesh finds application in preventing rocks and debris from spilling.
- Gabion sack** : Used in controlling water flow.



## Common Gabion Applications

- Retaining wall structures
- Gabion revetments
- Canal and river walling
- Rock-fall protection
- Weir structures
- Gabion fencing
- Coastal protection
- Protection of bridge and culverts
- Bridge abutments



### Advantages Against Conventional Methods

- Exemplary modularity and ability to stack in various sizes and shapes
- Gabion structures are capable of resisting any types of stresses, bending, tensile and shear
- Gabion structures can accommodate differential settlements without disturbing the structural integrity
- The permeability characteristics of gabion structures eliminate the problems caused in RCC structures, such as soil instability, water logged backfills/foundation, etc.
- Gabion and gabion mattresses are backed with well documented research and certifications concerning durability of the structure



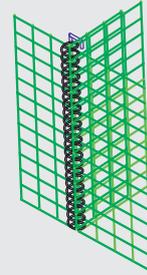




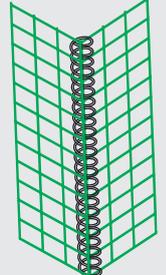
## RAPID DEPLOYMENT BARRIER



JOINTING PIN



CORNER JOINT



Rapid Deployment Barrier (RDB) modules are collapsible structures made out of welded mesh panels lined by a geo-textile fabric. These modules (boxes) can be filled with sand/debris/stones etc as filler material to provide strength. The modules are then aligned and stacked adjoining each other to form a wall like protective structure. Their greatest utility is the speed at which these can be deployed in conflict or problem regions to create an obstacle, or make protective bunkers, without having to do any civil construction work.





**USING THE RDB, A HIGH SECURITY ANTI CLIMB FENCE CAN BE ERECTED WITHOUT ANY CIVIL CONSTRUCTION WORK**



## AGRICULTURAL / FARM FENCING



### Honeycomb Fence®

Keeping up with its commitment to innovate and keep improving perimeter fencing solutions, A-1 Fence introduced a woven wire mesh fabric which is, at the same time, more cost efficient and stronger than conventional chain link fence. Owing to the neat honeycomb structure this mesh makes, it is called **Honeycomb Fence®**.

The difference between chainlink fence and honeycomb is the way two adjacent wires attach with each other, while in a chainlink fence the wires are 'tied' to each other at one point, in a honeycomb fence the wires cross each other multiple times which gives it the strength and rigidity.



## AGRICULTURAL ELECTRIC FENCING



Electric fence was originally introduced for control of animals - both domestic and wild. Its application in agriculture, i.e., protection of crops from animals and humans is many fold.

### Key features of an agriculture electric fence are:

- Economical
- Doesn't harm animals in any way, just keeps them away
- Most effective form of fencing
- Energy efficient, consumes very little power and can run on solar
- Works on principle of psychological barrier
- Fast installation



# SLIDING GATE OPERATORS

## D5-Evo

The evolution of the tried and tested D5, 500kg gate operator for domestic and light-industrial applications



Technical Data	D5-Evo
Input voltage	220V - 240V AC $\pm$ 10%, 50Hz
Motor voltage	12V DC
Motor power supply	Battery driven <sup>+</sup> - 2A charger
Push force – rated	17kgf
Gate speed at push force <5kgf	22m/min
Gate speed at rated push force	18m/min
Duty cycle - mains present	50% <sup>⊛</sup> *
Daily operations - max	150 <sup>⊛</sup>
Gate mass - max	500kg
Onboard receiver specification	CENTURION code-hopping, multichannel, 433MHz, with 500 remote control button storage capacity

- \* Can operate off a solar supply, consult Centurion Systems for assistance
- + 7Ah battery (can be upgraded for longer power failure autonomy)
- ⊛ Based on a push force of less than 50% of rated
- \* Based on 25°C ambient temperature and unit not in direct sunlight

### Main Features:

- Battery backup
- Potent push force
- Intelligent speed control
- Sensitive anti-crushing protection
- Rapid and smooth opening and closing
- Exceptionally easy system setup via LCD user interface
- Integrated ChronoGuard timer functionality (a world first)
- Multiple operating features including Intruder-detection Alarm Modes (a world first)
- Onboard CENTURION code-hopping multichannel receiver with selective add and delete

## D10

Using CENTURION's proven DC technology, this is the complete solution for commercial and industrial gates up to 1000kg



Technical Data	D10
Input voltage	220V - 240V AC $\pm$ 10%, 50Hz
Motor voltage	24V DC
Motor power supply	Battery driven <sup>+</sup> - 1.8A charger
Push force – rated	30kgf
Gate speed (varies with load)	22 - 26m/min
Duty cycle - mains present	45.00% <sup>⊛</sup> *
Daily operations - max	750 <sup>⊛</sup>
Gate mass - max	1000kg
Onboard receiver specification	CENTURION code-hopping, multichannel, 433MHz, with 500 remote control button storage capacity

- \* Can operate off a solar supply, consult Centurion Systems for assistance
- + Two x 7Ah batteries (can be upgraded for longer power failure autonomy)
- ⊛ Based on a push force of less than 50% of rated
- \* Based on 25°C ambient temperature and unit not in direct sunlight
- ⊛ With a brush replacement interval of two years



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## A10 Heavyweight

An all round performer for gates up to 2000kg

### Main Features:

- High push force
- High duty cycle capability
- Extremely rapid operating speed
- Intelligent and smooth speed control
- Multiple programmable features
- Optional battery backup
- Suitable for gates upto 2 tons.



Technical Data	A10 Heavyweight
Input voltage	220V - 240V AC ±10%, 50Hz (single phase)
Motor voltage	220V three-phase
Push force – rated	
Standard speed	35kgf
Sprint speed	NA
Gate speed at rated push force	
Standard speed	13.6m/min
Sprint speed	NA
Duty cycle - mains present	80%
Gate mass - max	
Standard speed	2000kg
Sprint speed	NA

\* Based on 25°C ambient temperature and unit not in direct sunlight

## SWING GATE OPERATORS



### Main Features:

- Exceptionally easy system setup via LCD user interface.
- Supports inward- and outward-opening gates without needing mechanical endstops.
- High push force.
- Full position control.
- Fast operating speed, with smooth acceleration and deceleration.
- Safe anti-crushing protection.
- Multiple operating features including Intruder-detection Alarm Modes (a world first).
- Onboard CENTURION code-hopping multi channel receiver with selective add and delete.
- Battery backup for uninterrupted operation during power failures.

### Models:

- VANTAGE 400 – Reliable operator with a shorter stroke for the majority of domestic swing gate applications.
- VANTAGE 500 – Extended stroke for larger domestic and light-industrial swing gate applications.

### Vantage Technical Data:

Characteristics	Description
Input Voltage	90v - 240V AC +/- 10%, 50/60Hz [*]
Motor Voltage	12V DC
Motor Power Supply	Battery-driven [**] 1.8A Charger
Push force – Max	250kgf
Typical Gate Opening Time	V400 (short stroke) 14.3 sec / V500 (long stroke) 17.8 sec (V500)
Duty Cycle - Mains Present	50% [***]
Daily Operations - Max	250
Maximum Leaf Width for Corresponding Gate Mass	(90° opening) [****] V400, 2.5m = 500kg <4m = 150kg V500, 2.5m = 750kg <4m = 230kg
Onboard Receiver Specification	CENTURION code-hopping, multichannel, 433MHz, Capacity - 65 transmitter buttons

[\*] – Can operate off a solar supply, consult Centurion Systems for assistance.

[\*\*] – 7Ah battery (can be upgraded for longer power failure autonomy).

[\*\*\*] – Based on 25°C ambient temperature and the unit not in direct sunlight.

[\*\*\*\*] – An electric lock must be fitted to gate leaves 2.5m and over to secure the gate in closed position.



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# INDUSTRIAL TRAFFIC BARRIERS

- SECTOR 3 Rapid speed, high-volume barrier, 3m boom pole
- SECTOR 4.5 High speed, high-volume barrier, 4.5m boom pole
- SECTOR 6 High speed, high-volume barrier, 6m boom pole

## Main Features:

- Battery backup
- High volume capability
- Rapid boom pole raise (3m version < 1.2sec)
- Smooth intelligent speed control
- High torque boom pole operation
- Robust, durable and slim-line operator casing
- LCD user interface for simple setup
- Onboard code-hopping multichannel receiver with selective add and delete
- Integrated ChronoGuard (a word first) timer functionality



Technical Data	SECTOR 3	SECTOR 4.5	SECTOR 6
Input voltage	220V - 240V AC ±10%, 50Hz		
Motor voltage	12V DC *		
Motor power supply	Battery driven <sup>+</sup> - 2A charger		
Boom pole length and raise time	3m - 1.2 sec	4.5m - 3 sec	6m - 3 sec
Daily operations - max	3000		
Duty cycle - mains present	80% *		
Housing anti-corrosion specification	Inland: Zinc-passivated mild steel **: Coastal plains: Grade 430 stainless steel with epoxy coating Marine: Grade 316 brushed stainless steel		
Barrier pole specification	Aluminium, round profile, epoxy-coated white with red reflective tape		
Onboard receiver specification	CENTURION code-hopping, multichannel, 433MHz with 500 remote control button storage capacity **:		

\* Can operate off a solar supply, consult Centurion Systems for assistance

+ 7Ah battery (can be upgraded for longer power failure autonomy)

\* Based on 25°C ambient temperature and unit not in direct sunlight

\*\* Housings are also epoxy-coated for further protection from corrosion



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## SAFETY DEVICES

### i5 Beams

Infrared beams for added safety and security

Cost-effective detection device in applications from safety beams to simple perimeter protection. CENTURION's i5 beams have a range of 40 metres, are self-aligning and are unaffected by the sun. They have a wide 12 - 24V AC/DC voltage supply range.



## REMOTE CONTROLS

### NOVA

CENTURION'S ultra-secure code-hopping remote controls

#### What is the threat with remote controls?

What is the threat with remotes? Fixed-coded remote systems - particularly those using dipswitches to set the code, are very easy to copy or clone. They also offer a very limited number of possible codes. In other words, these systems only provide convenience, with very limited security!

#### CENTURION's solution?

The award-winning NOVA remote controls offer code-hopping technology. Each code that is transmitted by the remote is totally and randomly different to the last code transmitted. This prevents unwanted copying of the remote signal and cloning of the remote itself.

NOVA offers the same level of security as currently provided by leading brand automobile manufacturers for immobilising vehicle alarms and activating door locks.

#### Main Features:

- Remotes are quick and easy to open for battery replacement
- Receivers are self-learning, with either one, two, three or four channels
- Available with one to four buttons
- Receivers incorporate stable narrow band technology
- 433MHz operating frequency
- Belt or visor clip supplied as standard
- Remote belt clip doubles as wall mounting bracket
- Weatherproof housing for receivers and remote controls



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# PHOTON II

CENTURION's Photon II infrared gate safety beam with a wireless transmitter. Photon II makes short work of achieving a safe automation system for even the most challenging of installations. With a wireless transmitter there's no need to tunnel under the driveway. Simply align, attach and you're away!

## Main Features:

- The transmitter is wireless and battery-operated saving time and money.
- Two-year battery life using two AA Alkaline batteries (included).
- Thirty-metre operating range – ideal for almost any entrance gate.
- Fully ant-proof and weather-resistant enclosure for greater reliability.
- Transmitter provides audible feedback for easy setup and battery-low indication.
- Low power consumption throughout the system for greater efficiency.
- Installer Mode with audible feedback makes alignment a dream.
- Elegant slimline construction – only 50mm wide.
- Compatible with Intruder-detection Alarms for enhanced perimeter security<sup>3</sup>.



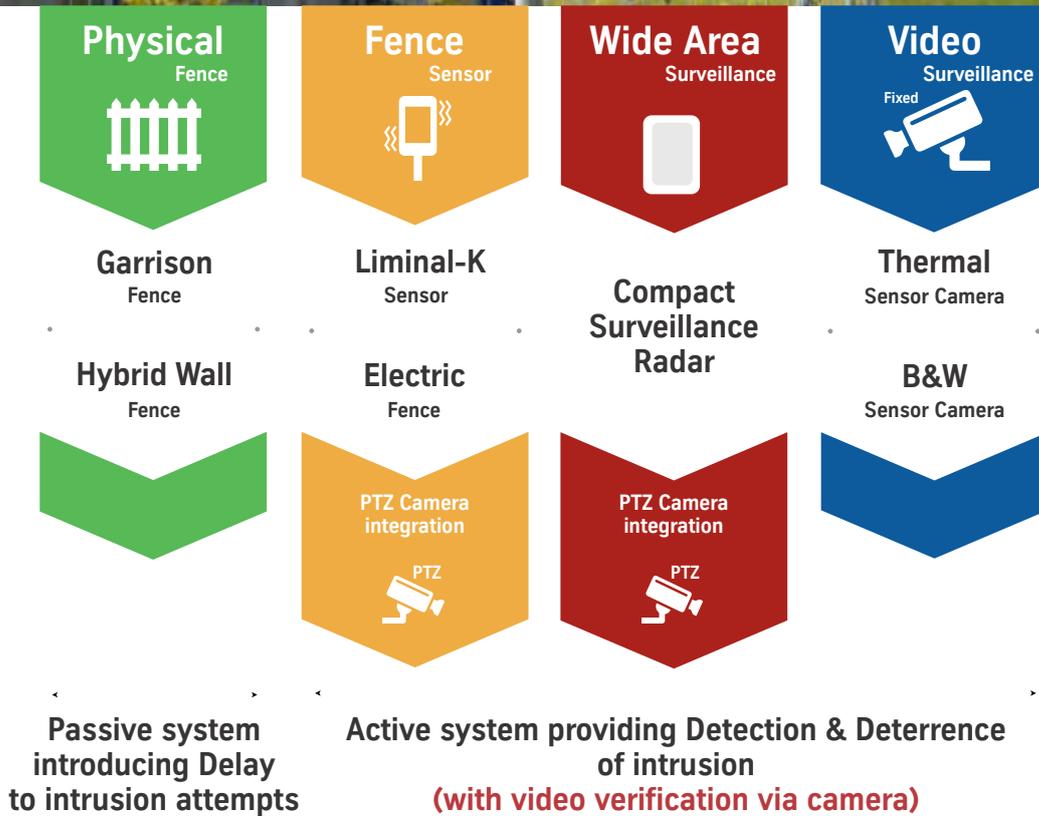
Characteristics	Description
Power Supply Transmitter	2 x AA Alkaline Batteries (Supplied) Only replace with alkaline batteries; do not use rechargeable batteries with this product
Receiver	12 - 24V AC 12 - 30V DC
Receiver Power Consumption	30mA @ 12V DC
Transmitter Battery Life	Minimum 2 years
Battery Low Indication	Audible Beep
Specified Operating Distance	30m
Alignment	Automatic – 1m <sup>2</sup> @ 10m (circular area - assumes parallel surface)
Output Contact	Fail-safe, N/C and N/O, potential free contact
Output Contact Rating	3A @ 30V DC Non-inductive
Operating Temperature	-15°C - +65°C
Operating Humidity	0 - 90° Non-condensing
Housing Material	0 - 90° Non-condensing
Degree of Protection	Ip54



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# SMART PERIMETER SECURITY

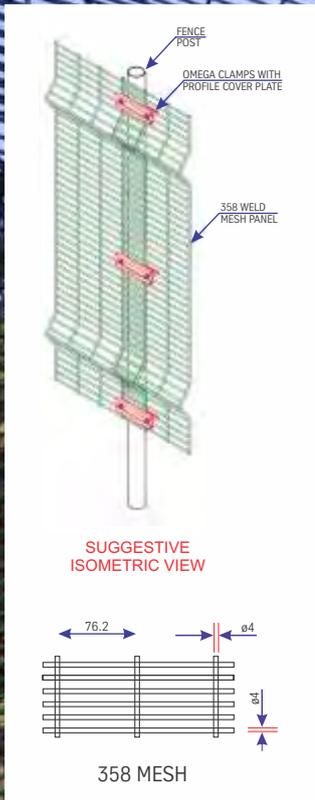
Next Generation Perimeter Security with Reliable Alarm Management



For robust perimeter security we recommend fence as the “Physical Barrier” which introduce delay in case of intrusion attempts & provides extra time for taking preventative action of stopping the intruder, while electronic intrusion alarm and surveillance solutions as “Smart Components”, which detect & deter the intruder during intrusion attempts providing early warning. Together these provide the Ideal Smart Fence Solution...

# GARRISON FENCE

Highest Physical Security along the Perimeter Line

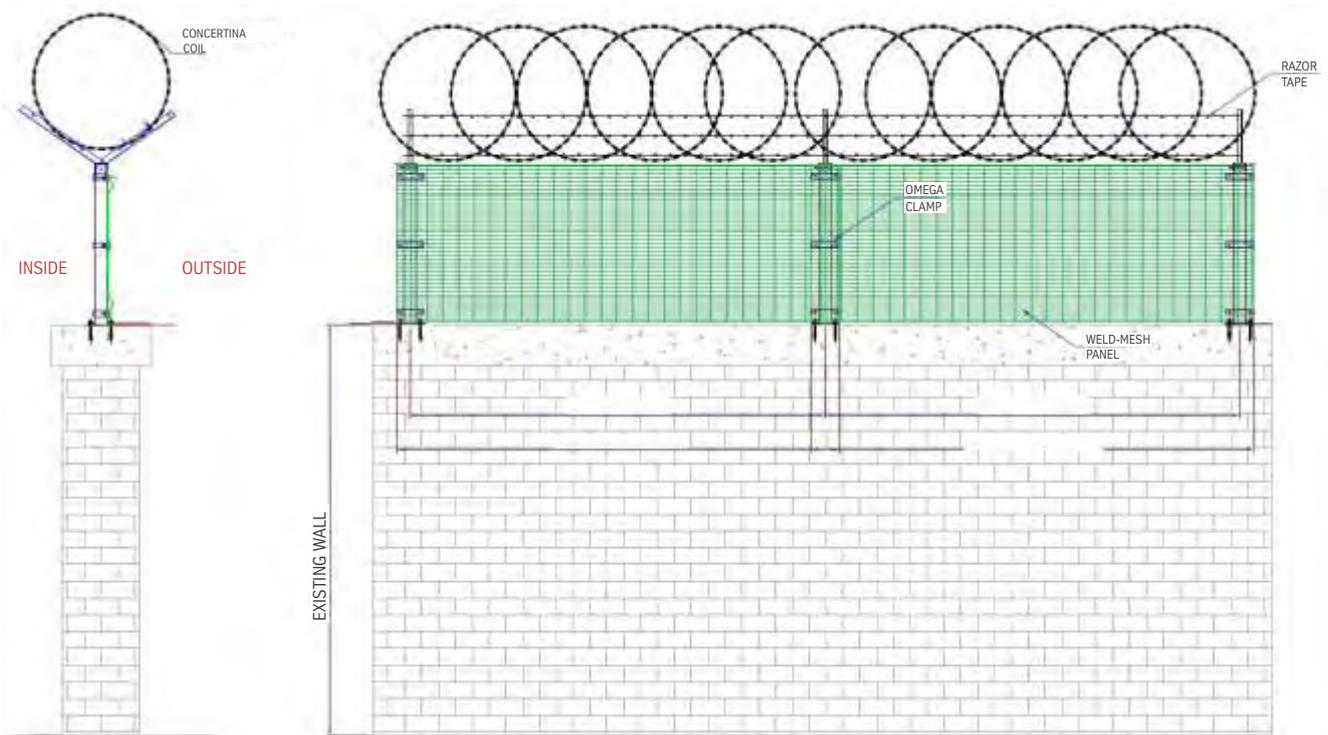


Garrison fence system comprises of three vertically installed welded mesh along the circular hollow section post's & concertina coils over Y-arm of the fence providing strong and heavy perimeter protection structure.

## Main Features:

- Garrison fence is one of the best modular design used to provide high security across the garrison/high security premises
- The design of the system is to provide quick and easy installation with maximum see through
- This design is one of the most difficult single layer system as the delay to intrude is high considering the challenge to bypass anti climb weld mesh and concertina coil on the top
- Further the system is a modular design by which it becomes easy for quickly installing moving the fence material at the perimeter which is a challenge for the alternate perimeter solutions\
- Mesh opening is so small that it is very difficult to grip and climb the fence
- It is almost impossible to cut the fence without using basic cutting tools
- The mesh opening along the horizontal axis is such that visibility is un-interrupted which makes it ideal for areas under camera surveillance and human patrolling
- Ideal fence for mounting sensors & recommended where wall is not present
- Powder coating on the pre galvanized wires makes fence corrosion free and increase life of fence

# HYBRID WALL FENCE



## Main Features:

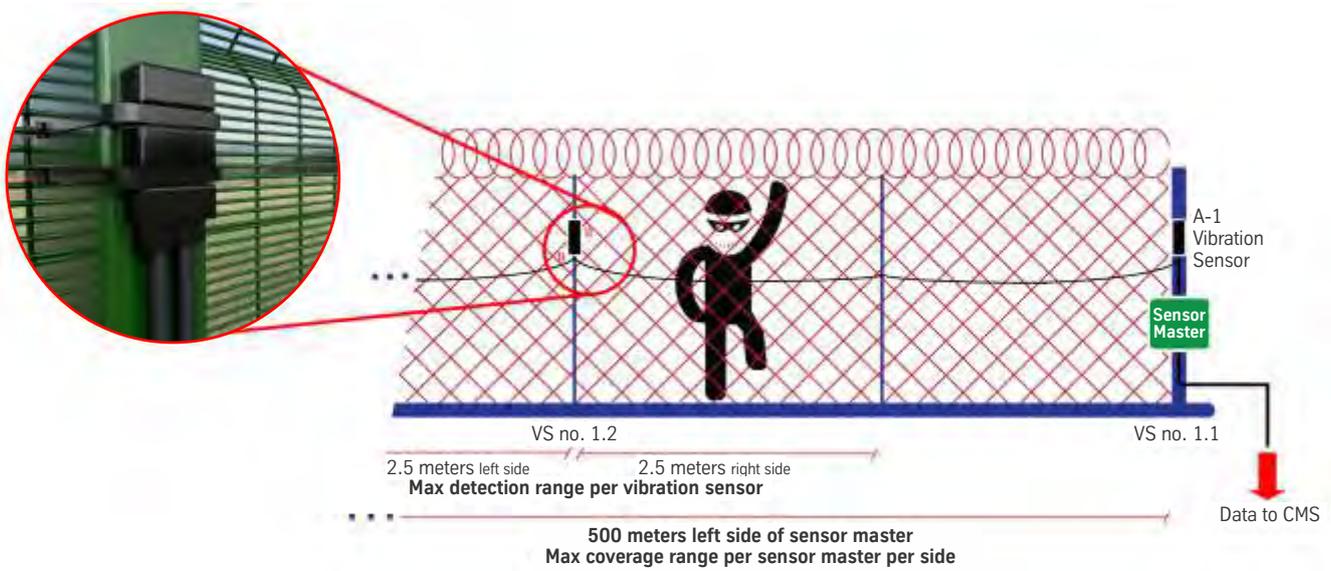
- Hybrid wall includes garrison fencing over the wall top using base plate and anchor fastner
- Due to uneven soil across the perimeter hybrid Wall is more suitable providing height as well as deterrence across the perimeter
- Quick installation compared to ground installation, considering installation on base plate
- One anti-climb weld mesh panel above existing wall with 1 meters height
- All other parameter are almost similar to garrison fence

## Corrosion Protection Certification by CECRI for A-1 Fence Manufactured Garrison Fence INDIA for corrosion protection

- All A-1 fence products are certified by central electro chemical research institute (CSIR - CECRI, Karaikudi, Tamil Nadu, INDIA) for corrosion protection standards: C3, C3+, C4 and C5
- **C3:** For low/moderate rainfall areas C3 standard is used: Powder coated weld mesh, Hot dip galvanised posts, Clamps and Y arms, SS304 fasteners and heavy galvanised razor coils and tapes. This is suitable for the plains in some parts of West Bengal, Punjab, Bihar and UP
- **C3+:** For medium to slightly heavy rainfall areas C3+ standard is used: Dual powder coated weld mesh, hot dip galvanised and thermoplastic coated posts, clamps and Y arms etc. Suitable for some parts of North east
- **C4:** For Heavy rainfall areas with some salinity C4 standard is used: Extreme areas in North east. Heavy rainfall areas with some salinity C4 standard is used: Extreme areas in North east
- **C5:** For high salinity areas like Bhuj C5 standard is used
- A-1 has system components for garrison fence meeting all the above 4 standards

# LIMINAL-K

Product developed by A-1 Fence R&D team



LIMINAL-K (Vibration Sensor) is a fence/wall mounted intrusion detection sensor. It raises an alarm against intrusion attempts like climbing, cutting, breaking etc. by measuring the kinetic energy imparted to the fence/wall.

The sensor along with the Sensor Master & the VIGIL Software makes a complete perimeter intrusion detection system.

## Key Features:

- Accurate detection
- Software zoning
- Customized Sensitivity
- Weather proof
- Configurable redundancy
- Reduced nuisance alarms due to advanced detection algorithms.
- CCTV & Alarm Integration ready

## ELECTRIC FENCE / SOLAR FENCE

Authorized INDIA Distributors for JVA Energizers

Electric fence is powerful intruder detection system powered by electricity. As soon as an attempt to climb or cut the fence is made a safe, short, sharp, very unpleasant shock is felt by the intruder, resulting in a very effective deterrent and perimeter protection system



### Main Features:

- Any attempt to breach the fence generates an immediate alarm
- All energizers are certified by IEC 60335 2 76
- Alarm can be local as well as remote
- Easy & low-cost to maintain
- 4 Joules maximum output energy per zone
- Internal battery backup in case of power failure
- Can also run on 80 W solar panel connected through solar charge regulator (Optional)
- Perimeter can be divided in to number of zones
- No maintenance apart from vegetation, hence more rugged & longer life
- When fence detects any intrusion, it generate zone wise alarm and send to control CMS room
- Also can send command to PTZ camera to automatically cue to that zone & track the intruder
- Operator can verify the alarm before dispatching ground patrol force increasing the efficiency of security team



Energizer

# COMPACT SURVEILLANCE RADAR

Authorized INDIA Distributors for SpotterRF USA



Detect intruder up to 1,400 meters away and get updates position, heading and speed measurement up to 8 times per second. All in the size of a textbook.

## Main Features:

**Networked I/O with SPOTTERai:** SPOTTERai is an automatic track classification included as part of the NIO software that ensures a trainable neural network. The use of AI and Machine Learning in the NIO assists in reducing false alarms, and allows end-users to improve the performance of the system simply by manually selecting the type of targets being tracked and retraining the AI.

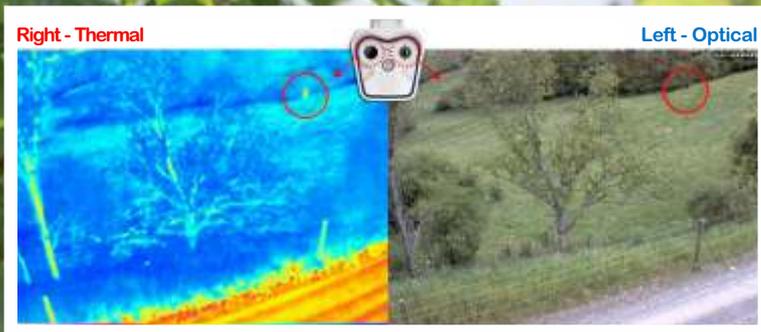
**Reduce False Alarms:** The AI classifier and trainer are an excellent tool to further reduce false alarms and reduce the workload on the operator. After the operator manually classifies 30 tracks or more of at least two different types the AI is able to differentiate between those types, such as between cars and people or birds and drones with confidence that increases as more tracks are classified.

**Intelligence & Machine Tracking:** SPOTTERai is automatic target classification based on artificial intelligence (AI) achieved by site-specific machine learning (ML). Using a neural network, it knows if the target you are tracking is a person, vehicle, animal, drone, and other subjects all without using a camera.



# RUGGED AUTOMATED SURVEILLANCE

## Integrated Intelligence in the Camera



MOBOTIX

High-resolution video surveillance systems made in Germany that contain a range of sensors and a powerful computer that analyze data, logically links it and independently initiates actions to defend against hazards.

### Main Features:

- These weatherproof MOBOTIX thermal cameras detect and register objects and people using a thermal signature, even in total darkness at a distance of over 100 meters. And importantly, thermal cameras safeguard privacy
- This camera deploys dual lens system for surveillance image capture
- One is a thermal sensor-for precise intrusion detection even in zero light conditions, while other lens will be an efficient low-light sensitive optical sensor - for visual verification of intrusion
- Thanks to the two directly adjacent lenses, there is also a thermal overlay function with image overlay (Thermal and Optical) to enhance visual perspective
- Optional remote temperature measurement
- Camera are arranged in back-to-back configuration 150 metres apart to offer continuous coverage
- They have built-in analytics, which provides robust intrusion detection using intelligent motion analytics. Therefore reducing false alarm which may be caused by swaying trees, raining, lighting or small birds/animals, by defining size perspective

Along with the compact design and the flexible installation options, these thermal cameras also take on the intelligent video functions. Objects are detected through the MxActivitySensor with almost perfect accuracy.

## RUGGED AUTOMATED SURVEILLANCE

4K resolution innovative IP surveillance system

A 4K resolution innovative IP surveillance system that makes use of AI & smart analytics to detect & alert about intrusion attempts. It has an encrypted & non-hackable system making it even more secure.



### Main Features:

- Motion Detection (Humans only, not animals)
- Audio & Visual Alarm (Locally & Remotely)
- Weatherproof mic & speaker module
- Low Power Consumption
- Solar Power (option available)
- Highest level of cyber security & GDPR Compliance

### KOPR CONTROL RECEIVER

KOPR is used to manage RADIOBARRIER system devices, namely:

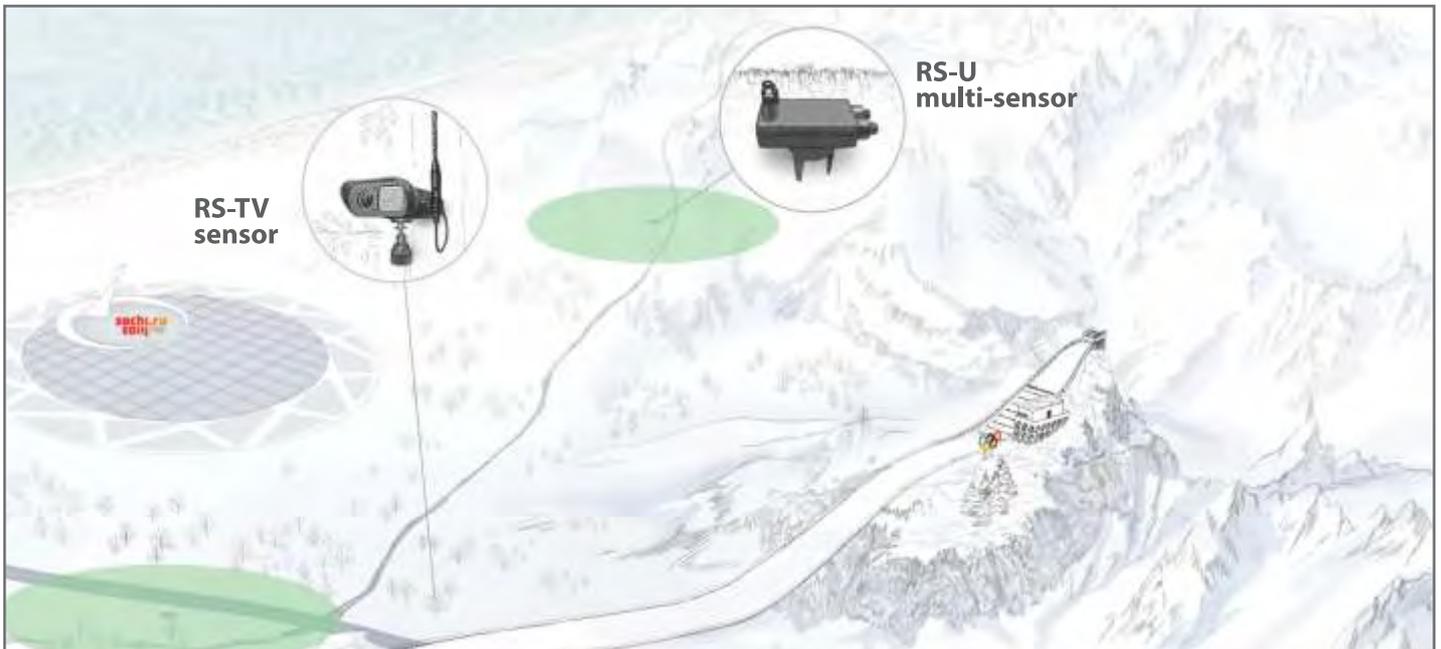
- Set up and configure sensors
- Register sensor's GPS coordinates during installation and locate when retrieving
- Monitor status of the RADIOBARRIER detection devices
- Receive and display alarm and service messages
- Control several networks
- Determine GNSS coordinates



#### Features

- Up to 3 days with an inbuilt rechargeable battery
- GPS/GNSS receiver
- Up to 1 km communication range
- Operating temperature range: from -10oC to +50 C
- IP rating: IP53
- Weight: 0,7 kg
- Dimensions: 210x95x45 mm

### Sports & Events



# RADIOBARRIER SENSORS

## DETECTION

### RS-L MICROWAVE SENSOR

RS-L sensor set consists of a receiver (PRM) and a transmitter (PRD). It detects personnel or vehicles by processing the variations in the electromagnetic field between the PRM and the PRD. Powered by an external battery.

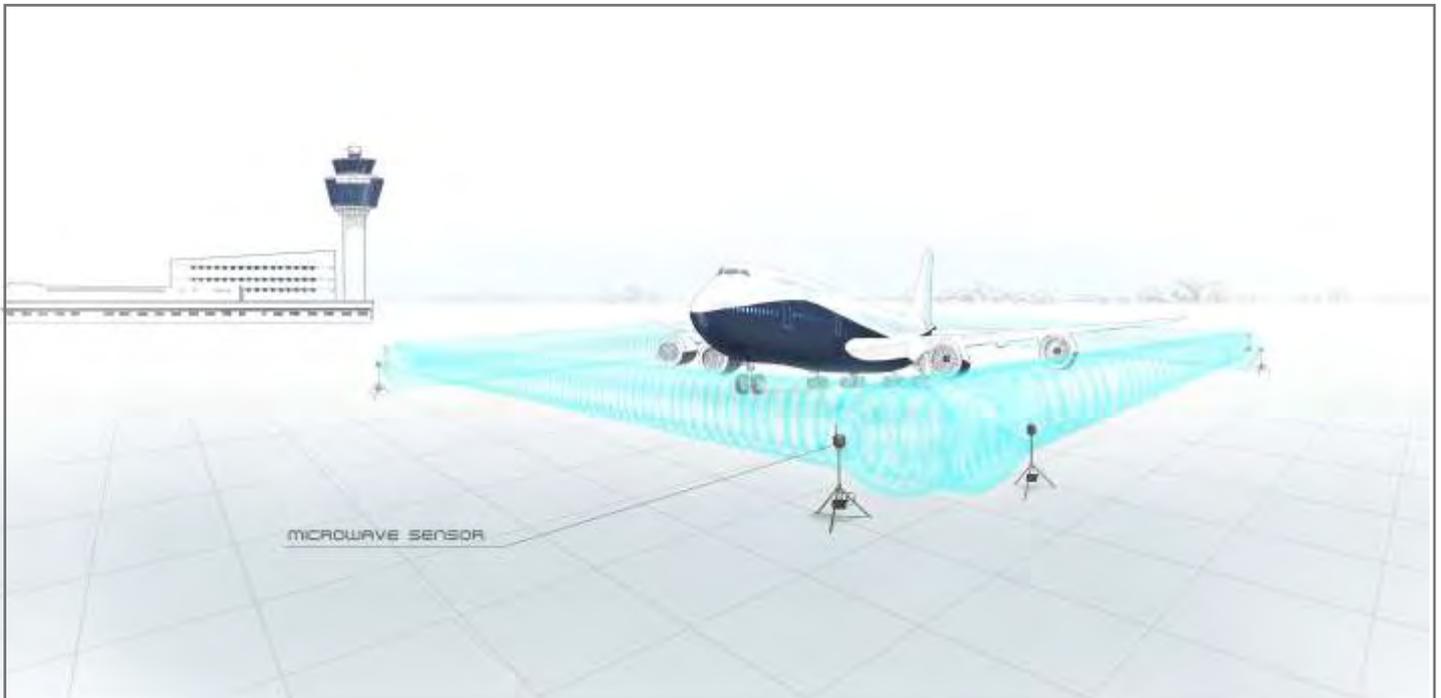


#### Features

Operating modes selective or simultaneous:

- Microwave sensor
- Break-Wire sensor
- Two versions available: with the range up to 100m and up to 200 m

#### VIP Security



### RS-IK INFRA-RED SENSOR

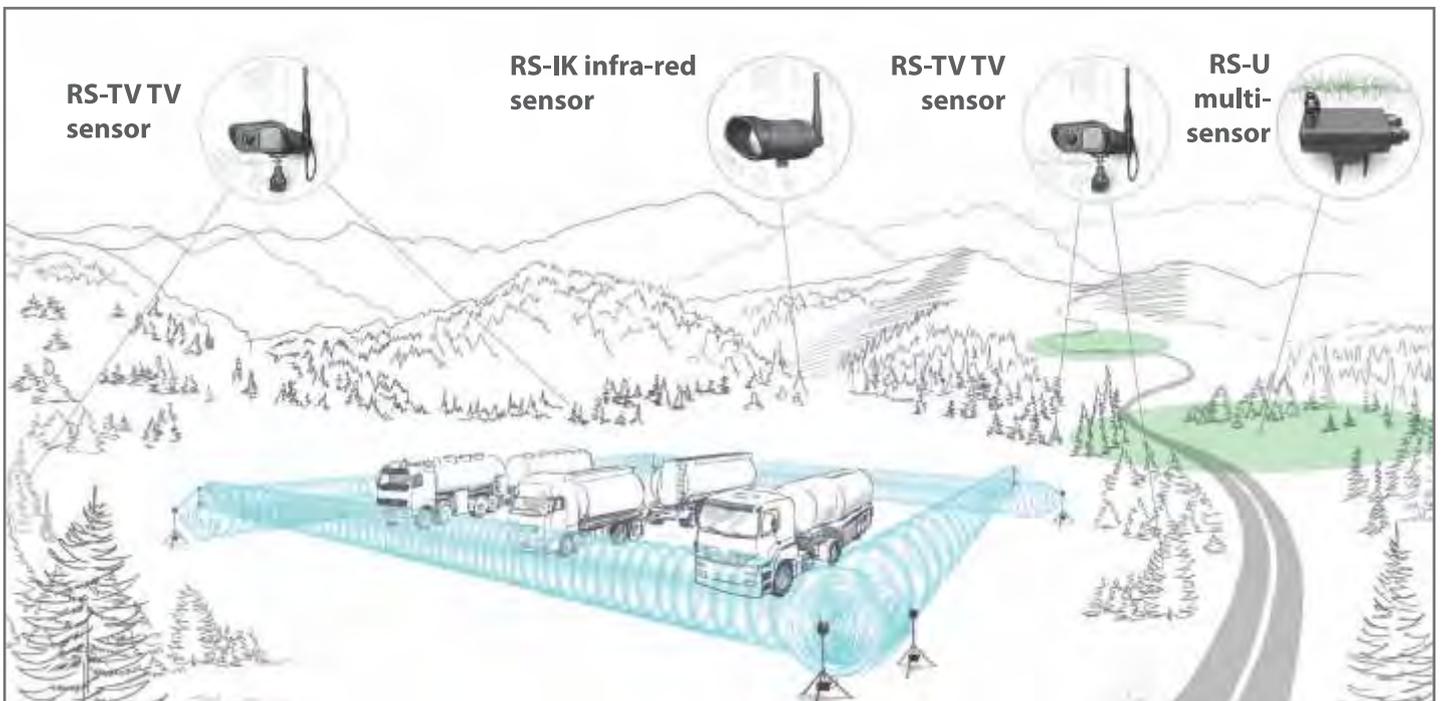
RS-IK detects personnel or vehicles by processing thermal data. Powered by an external battery.



#### Features

- Passive infra-red sensor
- Allows establishing a perimeter with narrow detection zone

#### Mobile Assets



# SITES



30 Greens, Aurangabad



TATA Babrala, UP



Akruti Trade Center, Mumbai



Hiranandani, Mumbai



Freight Wings, Talaja



Unique Industry, Mumbai



Hiranandani, Mumbai



Vasant Vihar Society, Thane



G&T, Talaja

# CLIENTELE

## Government



## Defence

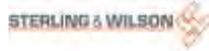


## Builders and Developers

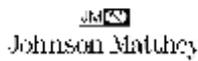


# CLIENTELE

## Solar Parks



## Industries



# CLIENTELE

## Institutions



## PMC



## Warehouse



## Architects



Nambi



New Arch Landscape



rajeev agarwal architects



Chandrashekar and Architects

## Certifications





- CUSTOMER BASE
- MANUFACTURING | SALES OFFICE



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We are here to assist you!  
We would like to hear about your problems/grievances with anything so we can improve!  
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