



**Bandweaver**



**Advanced Fiber Optic  
Sensing Solutions:**

**SECURITY**

**Monitored | Secured | Safe**



## PERIMETER INTRUSION DETECTION SYSTEMS (PIDS)

With ever increasing threat levels it is important that organisations properly secure their assets. This starts at the perimeter of their sites where there has never been a more important time to deploy robust, reliable and secure detection strategies to mitigate operational risk.

Prompt and highly accurate location information of a would-be intruder ensures a fast and appropriate response to minimise any loss. Ensuring that your perimeter intrusion detection system is fully integrated into your security solution provides real time data with the ability to track and respond to intruders.

Fiber optic technology is fast becoming the technology of choice for those organisations looking to deploy a cost-effective reliable solution with significantly lower full life cost of ownership.

Bandweaver's advanced range of fiber optic intrusion detection solutions provide both covert buried and fence or wall mounted detection capabilities from a single detection unit. With fully scalable systems for sites less than 5km to more than 100km Bandweaver has the solution for you.

## INTELLIGENT INSIGHTS

### Resistance to Cable Cut & Sabotage

All Bandweaver PIDS detection units are offered in a 1 or 2-channel variant. The 2-channel variant will continue to provide uninterrupted detection along the perimeter, even if the cable is cut or damaged.

### Minimising Nuisance Alarms

Using AI technology, our market leading detection algorithms are able to develop an acoustic fingerprint of different events, enabling the distinction between genuine security risks and extraneous environmental noise.

### Location Accuracy

Advanced signal processing technology combined with intelligent algorithms enables fast and accurate identification of the specific location of a potential threat to within  $\pm 5m$ .

### Integration

Our advanced software is capable of seamless integration with a wide variety of commonly used 3rd party systems, giving operational teams real-time information from a range of devices via a single interface.

### Lower Cost of Ownership

Overall reduced cost of installation and maintenance when compared with alternative technologies, plus no power needed in the field.

### Multiple Fence Types

Due to its unique configuration capabilities, the Bandweaver solution is suitable for every fence type without compromising location accuracy or event classification capability.

### Covert Buried detection

Our buried solution is totally covert and can detect personnel and vehicles long before they gain access to a site and is ideal where there is a lack of physical delineation



# TYPICAL APPLICATIONS

- › Perimeter Intrusion Detection
  - › Airports and seaports
  - › Oil & Gas facilities
  - › Power utility generation & substations
  - › Correctional facilities
  - › Critical National Infrastructure
  - › Residential complex and properties
  - › Manufacturing and light industrial
- › Border Security
- › Telecoms & Data Cable Protection
- › Railtrack and conveyor belt monitoring

## FENCE MOUNTED INTRUSION DETECTION

Bandweaver optical fiber detection is suitable for all fence types including chain link, weld mesh, and palisade. With advanced event classification the system can detect multiple simultaneous intrusion attempts with location accuracy down to  $\pm 5\text{m}$

Fence climbing, cutting and lifting are all detected with a probability of detection (POD) greater than 95% and the intelligent processing ensures that there are minimal nuisance alarms.

There is no requirement for power in the field and optical fiber cabling is unaffected by electromagnetic interference. The cabling itself is intrinsically safe so is suitable for sites that are at risk from fire or explosion.



## WALL MOUNTED INTRUSION DETECTION

Bandweaver's optical fiber detection is also suitable for wall mounting and will detect intruders climbing over or attempting to break through a wall making it suitable for both perimeter and building walls.

Optical fiber cable can also be deployed on wall toppers such as barbed or razor wire to ensure full site detection capability. Our advanced signal processing minimises nuisance alarms caused by environmental background noise.

## COVERT BURIED INTRUSION DETECTION

Direct buried optical fiber cable can be deployed to protect perimeters where there is no physical delineation. With the ability to detect intruders before they enter site whilst remaining covert buried detection has a number of significant advantages over other technologies.

With the ability to distinguish between multiple intruders and vehicles the buried intrusion detection solution is a fast to deploy, low cost but highly resilient solution and is suitable for all soil types, it is especially suitable for protecting extended borders.

## PERIMETER TYPES



**Chain Link Fence**



**Mesh Fence**



**Palisade Fence**

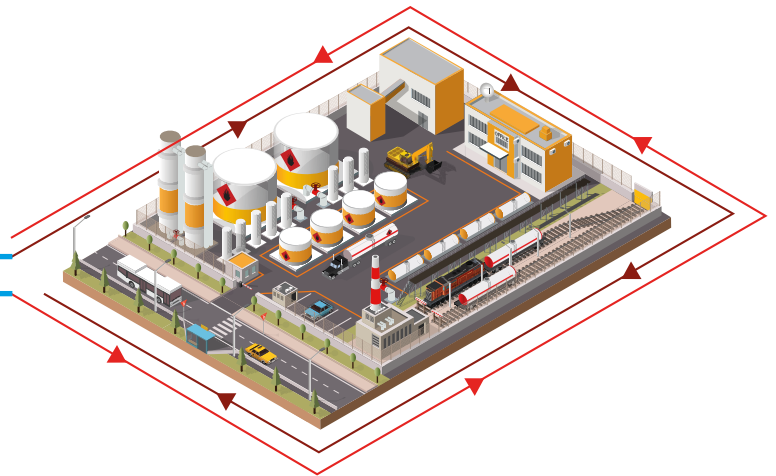


**Covert Buried**

## CUT RESILIENCE



**Horizon Detection Unit**



Fiber optic cable perimeter intrusion detection offers a simple to install solution that has no requirements for power in the field which reduces the over all cost of ownership.

With fan free technology, no moving parts and utilising high reliability telecoms components this equates to high percentage uptime ensuring years of reliable detection capability.

With a location accuracy of intrusion events to  $\pm 5m$  it enables the ability to rapidly react to any perceived threat.

## WHY CHOOSE FIBER OPTIC TECHNOLOGY?

### Reliability

Advanced signal processing technology across configurable zones enables fast and accurate identification of the specific location of an event.

### Whole Life Cost

Overall reduced cost of installation and maintenance compared with alternative technology.

### Cut Resilience

Resistance to sabotage allows uninterrupted detection, even if the cable is cut or damaged.



OVER 2,000  
SYSTEMS

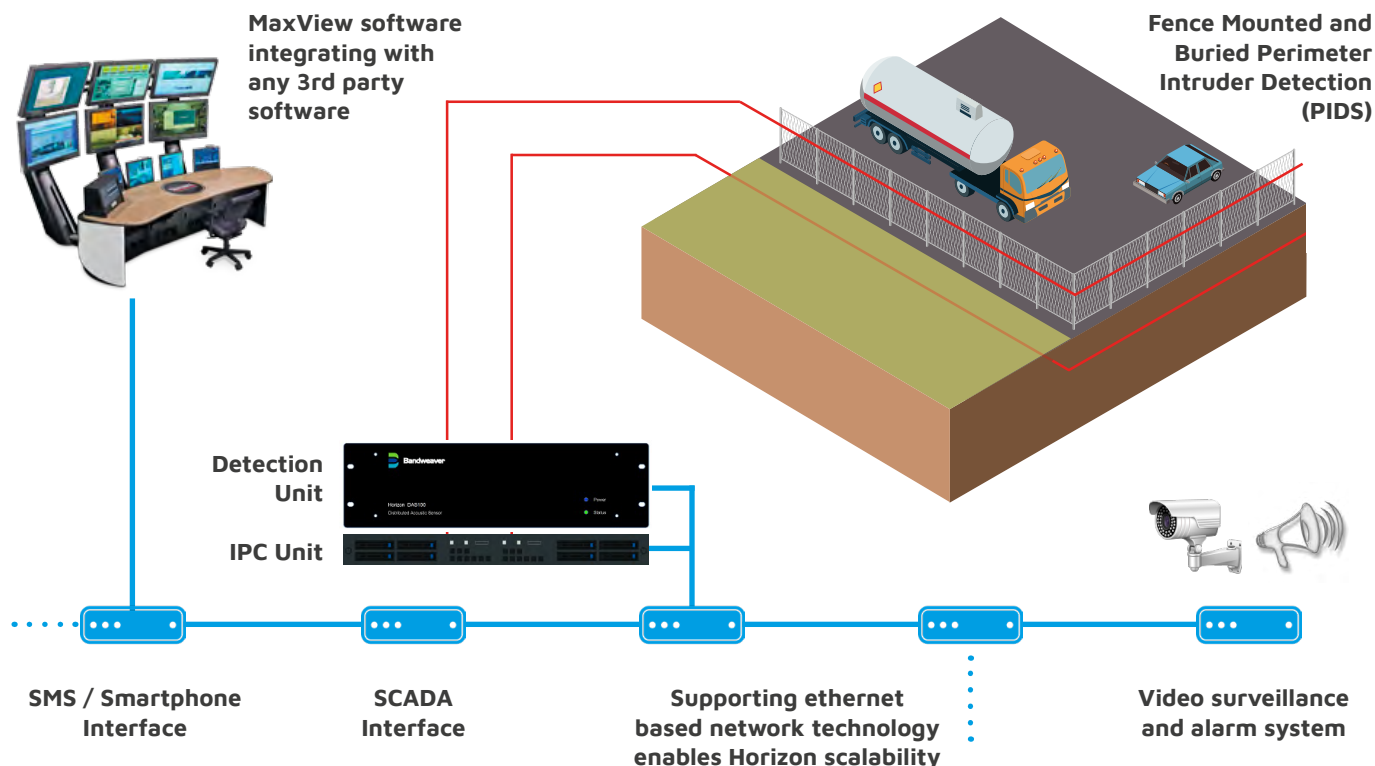


OVER 20,000KM  
OF CABLE



ACROSS SIX  
CONTINENTS





## SYSTEM ARCHITECTURE

Bandweaver's detection units have extremely flexible system architecture enabling multiple units to be networked together and integrated with Bandweaver's MaxView software or any 3rd party security management system.

With the loose coupling architecture of Bandweaver's MaxView it can integrate multiple systems across multiple sites with one coherent, customisable, easy to install user friendly interface.

## MAXVIEW SOFTWARE

MaxView's flexible architecture provides a complete solution which allows operators to integrate numerous subsystems across multiple sites ensuring a fast and appropriate response to an intrusion event.

### MAXVIEW KEY FUNCTIONS

#### Powerful Visualisation

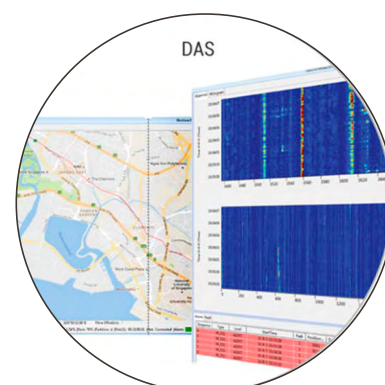
MaxView's easily configurable interface allows the user to design the user interfaces according to their operation's specific needs. Visualisation includes options such as 2D GIS mapping, bespoke schematic diagrams, overlay on site photo's/diagrams or interactive 3D modelling.

#### Data Management and Consolidation

MaxView's loose coupling architecture allows import data streams and feeds (3rd party sensors, CCTV, fire and intrusion alarm systems, access control, video feeds, etc) from multiple sites into one coherent centralised system.

#### Data Export to PSIM, VMS systems, SMS, etc

MaxView can output data to a wide variety of control systems. As standard MaxView can manage all of the most common standard communications protocols.





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