

## **AGIL Fence**

Perimeter Intrusion Detection System (PIDS)





Based on advanced FBG sensors, designed and developed to overcome the perennial issues of poor detection, high false alarm rate and lack of pinpointing capability.



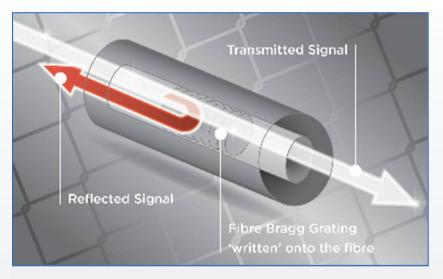
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#### AGIL Fence – Key Technologies

## **Next Generation, Fibre Optics Sensors**

- FBG Sensors embedded in a fibre optic cable, in an array
- Highly sensitive optical strain sensor
- Paired with Advanced Signal Processing Algorithms for false alarm control

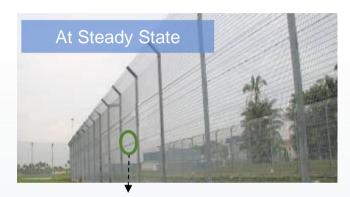


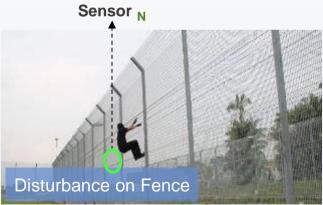
**Designed and developed by ST Engineering** 

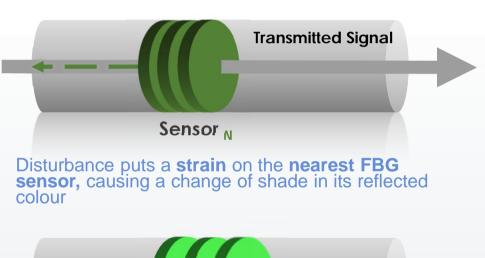


#### AGIL Fence - Key Technologies

### How does it work?









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#### AGIL Fence - Key Technologies

## High deployment compatibility to barriers









## **Higher probability of detection**

- Able to detect silent intrusions (e.g. ladder climbs, fence cuts, etc.)
- Ability to detect and differentiate multiple intrusions
- Proven in every field trial participated
- Higher resilient to defeat







#### **Low NAR**

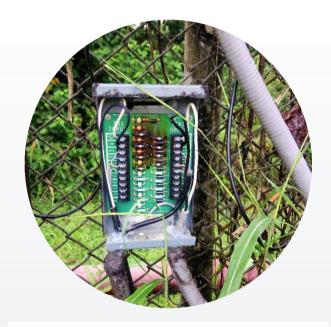
- Proprietary signal processing algorithm intelligently discriminates against nuisance alarm alerts
- Automatically and dynamically adapts to changes in environment
- Customisable sensor settings







## **Excellent reliability**



Example of a microphonic PIDS that is susceptible to lightning strike.

- Immune to EMI, RFI, lightning
- Intrinsically safe

No fear of lightning strikes; Such incidents result in burnt circuits

- cutting off perimeter security ops



### **Resilient to defeat**

- Detection when cable is cut
- Controlled impact on cable cut; only that channel is affected
- For affected channel, remaining part of cable continues to work

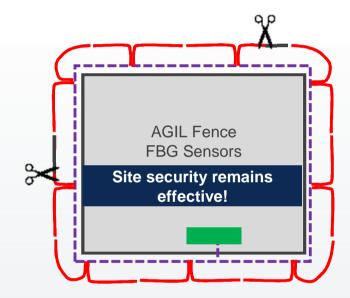




## **Smart architecture for perimeters**

For a 3,000 m site, when a cable cut takes place anywhere along the perimeter, maximum affected length is 300 m.

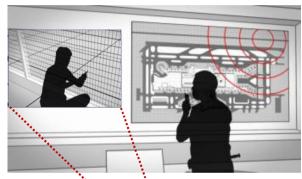
This means, 2,700 m of the perimeter security is still <u>live</u> and <u>effective</u>



As each channel is independent, downed areas are controlled and kept minimal.



## **True pin-pointing intrusion**





- Able to pinpoint intrusion down to ± 3 m, unlike zone-based PIDS
- Allows fast and accurate responses by security forces, especially important for large installations
- Works hand-in-hand with CCTV to verify alarms and monitor intrusions
- Integration-ready with drone systems



#### AGIL Fence - Core Capabilities

## Integration with surveillance & security platforms



#### **iPAMS**

Deployment-ready alarm management software, customisable for various sizes of sites.



Ready to integrate to existing VMS/ISMS/PSIM.



Industry
Certifications,
Validations &
References

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AGIL Fence - Industry Certifications, Validations & References

## **Approved: Centre for the Protection of National Infrastructure**

- 8-month trial at Wales RAF Valley, among the windiest places on earth.
- Ideal performance of zero false alarms per day with > 99% detection.
- AGIL Fence was verified for its system's reliability, detection performance, automatic and dynamic false and nuisance alarm controls.

Since 2016, AGIL Fence PIDS has been included in CPNI's Catalogue of Security Equipment, a selection of equipment approved to protect critical national infrastructure and assets.



#### **AgilFence**

Category: Detection and Tracking Systems Sub Category: Barrier Mounted Detection

#### Description

The AgilFence PIDS barrier-mounted uses Fibre Bragg Grating (FBG) sensors on single-mode single-core optical fibre and intelligent signal processing technique to detect intrusion event via fence climb or fence cut



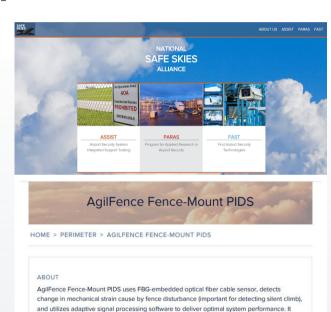


AGIL Fence - Industry Certifications, Validations & References

## Verified: Safe Skies Alliance; FAA supported

- Participated in the Safe Skies' Airport Security System Integrated Support Testing (ASSIST) intensive 9-month, all-season evaluation in an airport environment.
- AGIL Fence was verified for the system's ease of operation, installation, detection performance, automatic and dynamic false alarm control.

Completed in Sep 2018, AGIL Fence PIDS is currently listed in Safe Skies' Find Airport Security Technologies (FAST).



offers accurate and instantaneous detection, thus enabling a facility's security staff to

Perimeter, Fence Mounted, Perimeter Boundary, Fiber Optic

respond quickly and effectively

CATEGORIES



AGIL Fence - Industry Certifications, Validations & References

## Taking End-Users' Perimeter Security to Next Peak

# Over 125,800 m of perimeter protected

- Power Utilities
- Base Station
- Commercial Buildings
- Gated Communities

- International Airport
- High Security Facilities
- Security Ops Centres
- Transport Hubs



## Thank you