OptaSense®

A QINETIQ company

OptaSense Delivers Advanced Perimeter Security for VIP and Leisure Properties

Bespoke, covert and sophisticated intrusion detection and assessment

High Benchmarking for Discerning Clientele

The criticality of an asset is quantified from the value placed on it by its owner. Security technology adoption and implementation is developed from that measure of criticality, as well as the threat profile assessed for the asset and its potential consequences. When an owner requires protection at private estates or privately-owned exclusive group properties, OptaSense has repeatedly met the challenge with on-site consultancy, tailored system designs and exceptional installation.

Whether newly constructed or retro-fitted to replace a legacy technology, our sales, engineering and program teams work with the end client and/or partners in pre-planning, design, product delivery, installation, calibration and commissioning with meticulous effort.

Painstaking Process for Solution Development and Deployment

Threat assessments for VIP assets include identifying potential "bad actors" and instantly alerting to any unauthorized activities around the perimeter. OptaSense's Distributed Acoustic Sensing (DAS) system listens and "feels" for characteristic energies in proximity to a fiber-optic strand deployed around a critical asset. Our Perimeter Intrusion Detection System (PIDS) solution has the capability to filter environmental noise and accurately identify human, land, air and water vehicle movement. Furthermore, the system will detect and classify on activities that are attributed with stealth surveillance and physical security breaches. These alarms are displayed on our user interface (UI) with an easy integration to video management platforms.

While each site is unique, our attention to detail is consistent. OptaSense uses a military-grade combination of advanced analytics with artificial intelligence software alongside on-site calibration and fine-tuning engineering services. A site survey is conducted to inspect and discuss distinctive features and threats and to assist in final design of the threat profile, fiber layout and integration into any third-party system. Upon system delivery, our engineers work together with the operators and security managers to complete a Site Acceptance Test (SAT) over several days. During this period real-world intrusion scenarios are played out for calibration and training purposes.

Following the successful evaluation period with remote and in person fine tuning of the OptaSense intrusion detection system facilities managers and executive protection groups give final sign off for a fully commissioned system.

The solution's tailored capabilities, high reliable performance combined with our consultative development , deployment and continued support services are the primary drivers for VIP clients.

Delivered Value and Ongoing Support

Once commissioned, our VIP clients have taken a big step towards automating their perimeter for intrusion detection and assessment. Inbound vehicle, human footsteps, fence interaction and jumping detection and classification provides operators and patrolling guards advanced warning with actionable information. Response is faster and more appropriate. Additionally, the streamlined integration to cameras and video management platforms lowers overall security Nuisance Alarm Rates (NARs).

Patterns of life activities such as personnel and small motorized vehicle tracking periodically are available. Advanced rules on single alarms from fence and buried (hybrid) portions in the same sections allow for jumping the fence activities producing medium and critical threat alarm types. VIP clients see extremely high value along perimeter sections that border public access to monitor for surveillance and loitering.

Requirements:
- Custom-designed solution with engineering and threat profile support
- Fence, buried and hybrid install with multi-path detection zones
- Return visits for calibration and fine-tuning
- Integration support

Solution:
- OptaSense DAS Hardware:
    - OLA-2.1-5000 Interrogator Unit
    - Processing Unit
    - Control Unit with OptaSense operating system

Value Delivered:
- Early detection and exact location of intruder alarms
- Efficiencies in technology integration for quick manned incident response
- Medium and Critical Threat Alarms
- Patterns of life data acquisition

Moreover, OptaSense provides customized, long term support options for all customers by providing packages that combine both technical support and services management focused on system uptime, maintainability and life of asset.

To learn more about our perimeter security solution, visit www.optasense.com/security.

Benefits to the Client

- Dedicated delivery team
- On-site training
- Continuous monitoring with a 5-meter (15-foot) resolution
- Multiple channel zone grouping
- SMS and Email alarm notification
- Ease of integration to video, C2, UAS, access control and other platforms
- Cut Resilient/Failure Tolerant Architecture
- Short perimeter or long linear applications
- Email notification with Google Maps™ location of an event or incident
- Improved overall site personnel safety
- Minimal maintenance – Remote support
- Buried system robust against topographical and environmental challenges
- Reduced patrol frequencies
- Integration into existing fiber of legacy system
- 24 / 7 autonomous monitoring with no operational intervention

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