GATED COMMUNITY PROTECTED BY ADVANCED PIDS

Case study: Setia Eco Glades

INTRODUCTION

Surrounded by lush green trees and little traffic, the tranquillity that encompasses luxury residential estate Setia Eco Glade is one of the many reasons for its commercial success. Developed by S P Setia Berhad as a luxurious multi-million residential area, Setia Eco Glades not only aims to have premium lifestyle facilities, but also a world-class perimeter security system to match. The developer is constantly looking at ways to improve the security system in their gated and guarded development projects to keep ahead, and expected to have nothing short of the best security facilities for its residents.

CLIENT SITE INFORMATION

Perimeter length: 9,000 m

Type of perimeter: Welded-mesh fence

Height of fence: 3 m

Width of fence: 2.4 m

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CLIENT'S REQUIREMENTS

- **Safety and peace of mind for residents**
  One key priority is to ensure that residents can always feel safe in their own homes. Property crime rate is considerably high in Malaysia and Setia Eco Glades is a large compound to look after. Most perimeter protection systems in the market are unable to detect common forms of intrusion, such as fence climb with ladder assist or silent climbs by professionals, or attempts to tamper with the cable e.g. removal of cable ties to disable the PIDS. An ineffective system that is easily defeated will lead to higher rates of successful intrusions. Being a premium residential estate, Setia Eco Glades has to find a system that can prevent and respond to threats efficiently.

- **Low levels of false/nuisance alarms**
  Systems with frequent false alarms will tire out the security team and lead to a decrease in confidence towards the notifications. This can subsequently cause a reduced sense of urgency in responding to alarms, which will be dangerous when a real intrusion occurs. The selected PIDS system is expected to be equipped with an intelligent technology to filter out false alarms from real threats.

- **Maintenance works and accidental damage**
  The perimeters should still continue to secure the estate during maintenance or expansion works around the areas. Typical close-loop systems have limited flexibility and physical control; when the fences are being repaired or maintenance is taking place, it would lead to extensive PIDS system downtime. During this period, the perimeters will be the most vulnerable.

- **Flexibility and ease of integration**
  The system should be scalable to accommodate new amenities when required, with ease of integration to existing ISMS and CCTV network.

THE AGILFENCE SOLUTION

The AgilFence team spent months on-site to test out the system in real life at Setia Eco Glades' wide landscape to ensure its consistency in performance.

- **Pinpoint Accuracy for minimal response time**
  AgilFence PIDS can achieve pinpoint accuracy down to +/- 3.6 m compared to zone-based PIDS where the intruder's location is given in terms of zone number instead of an exact location. This is essential as the security guardhouse is expected to locate the intruder immediately when threat arises, for the safety of the residents. The system is also extremely resilient to defeat. In the event that the sensing cable is cut, there is immediate detection and only one channel will be affected. The rest of the system will remain in operation and still be able to detect tampering attempts. This ensures a round-the-clock overall estate security even during an attack.

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- **Sensor-by-sensor customisation promises extremely low false/ nuisance alarm**
  AgilFence PIDS's ability to customise its system sensor-by-sensor is one of the most sought-after capabilities. By constantly collecting and reading unique data at individual points of locations, the system is able to accurately differ signals and maintain low false and nuisance alarm rates while preserving > 95% detection rate of various relevant intrusion scenario.

- **Minimal servicing and easy repair**
  The sturdy armoured cable prevents damage from rodents and is also UV resistant. It is also intrinsically safe and immune to EMI, RFI, and lightning with no electronics on the field. In the unlikely event of a damage, the fibre optic cable can be spliced back and restored in less than an hour.

AgilFence PIDS is an open-loop system which continues working even during maintenance, as repair works only have to be done to one channel instead of requiring the entire to be down as in the case of most fibre-optic based PIDS. With a designed-to-last principle, very low maintenance is required for up to 10 years.

- **Fully open and scalable system architecture**
  The AgilFence PIDS can be integrated easily into the site's existing ISMS and CCTV network. The system comes in 16-ch, 8-ch, 4-ch and 1-ch, which means it is fully scalable for any site expansion in the future. For bigger sites, multiple sets of the 16-ch equipment can be stacked. This function provides better flexibility for Setia Eco Glades.

SUMMARY

S P Setia Berhad has since engaged ST Engineering Electronics' AgilFence PIDS to protect three of their gated community developments in Malaysia. The system's unique proprietary signal processing algorithm and ability to seamlessly integrate with PTZ CCTVs have been field-proven to give a consistently high probability of intrusion detection with the lowest false alarm rate in complex and challenging environments. The implementation of this advanced perimeter protection system was the crucial beginning of a holistic security system for the gated communities, so as to reduce the possibilities of property crime and ensure a higher quality of life for the residents.

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