Staying Ahead of Today’s Borderless Threats

The rise of complex and unpredictable intrusions, incidents and threats in critical infrastructure, air space and waters make it critical for public safety agencies to constantly stay ahead of potential attacks, and collaborate effectively across multiple agencies at various levels.

Our comprehensive suite of public safety and security solutions leverage the latest technologies to provide seamless and secure communications, smart and optimised operations, and fast and adequate responses to emergencies and incidents.

Drawing from the expertise of our multidisciplinary teams and in-depth technical know-how, we equip governments and agencies with integrated security solutions to anticipate, combat and defeat threats, often before they happen.

Securing the future with AGIL™

Through the eyes of the buildings, sensing of coastal waters and the surveillance of the airspace, we are obsessed with a deep sense of purpose to effect pre-emptive, actionable outcomes to provide a peace of mind.

Our unique products and solutioning approach, AGIL, acts as the heart of our conscious innovation. For every product designed, for every solution engineered and for every command and control centre integrated, we constantly ask and challenge if each is incisive, inventive and intuitive to help solve real-world problems.

With emerging technology and experiential thinking, we have effected over 100 large-scale security projects across over 22 countries and cities. To name a few, Singapore, Jakarta, Bangkok, Beijing, Hong Kong, New Delhi, Dubai, Columbia and Brazil.
Addressing the Challenges in Air, Sea and Land

AVIATION

• Secure the airport perimeter and facilities, and prevent airspace intrusions and flight disruptions
• Optimise Air Traffic Control and Airport Operations to achieve faster turnaround time and reduce delays whilst increasing passenger satisfaction
• Adopt Analytics, Machine Learning, Artificial Intelligence and Biometrics to enhance operations performance and intelligence

MARITIME

• Increase maritime coastal vigilance with real-time monitoring and smart analytics to track small targets and protect maritime resources
• Provide advance warning on suspicious vessels to counter illegal activities in the open sea and better prepare against piracy, trafficking and illegal immigration
• Anticipate potential safety incidents through vessel tracking and anti-collision warnings to safeguard the shipping channels and coastal waters

CRITICAL INFRASTRUCTURE

• Protect critical city infrastructure against terrorist attacks and prevent the disruption of essential services such as power and water supply
• Optimise communication and collaboration between multiple agencies to improve response and recovery to safety and security incidents
• Enhance security posture of critical infrastructure protection through adoption of biometrics and data analytics without putting undue strain on resources and users
With Air Traffic volumes doubling every 10 to 15 years, airports are facing increased pressure to optimise terminal and airside capacity.

Increasing passenger traffic and limited airport resources necessitate the need to work with innovative technology to enable optimised end-to-end operational capability. Investing in digital technology will enable smarter, data-driven airports to improve passengers’ experiences and deliver operational efficiencies.

**AIRPORT OPERATIONS**

Airport Operations Centre System (AOCS)
Strategic and tactical planning to enable Airport Collaborative Decision Making (A-CDM).

Airport Analytics
Real-time data-driven views of airport operations and in-depth analysis of current and historical data to predict future and unknown events, optimising operational performance and passenger flows.

**MASTER SYSTEM INTEGRATION**

Delivers fully tailored solutions from construction to commissioning and ongoing operations for brownfield and greenfield airport projects. From integrating Airport Management, Passenger Processing, Information and Communications Technology, Security on a common network infrastructure to management and monitoring through the AOCS platform.
FACILITY SECURITY SOLUTIONS

Perimeter Intrusion Detection System (PIDS)
Secures the airport’s perimeter with full fibre optics sensors that can differentiate an intrusion from a nuisance alarm, ensuring accurate and reliable intrusion detection.

Next Gen Biometrics Platform
Streamlines multi-modal biometrics & authentication processing time and facilitates a secured and seamless border clearance process, reduces operation costs and creates effective human capital with an automated platform.

Personnel & Asset Tracker (PAT)
Provides instantaneous monitoring and location tracking in real-time, allowing effective geofencing management in restricted airport premises.

GNSS Anti-Jam Antenna
An integrated anti-jam antenna system which can cancel Global Navigation Satellite System (GNSS) interference sources to deliver accurate positioning, navigation and timing (PNT) information, essential for aviation services and safe aircraft take-off and landing.

SIMULATION & TRAINING

Virtual Aerodrome Laboratory
Next generation immersive training facilities for flight operations, airport security and crisis management that enable trainees to acquire practical skills in a safe and secure environment.

Airside Driving Simulator
Provides a realistic virtual environment that trains, familiarises drivers with airport rules, and evaluates their proficiency in airside roads, aprons, manoeuvring areas and the runway. Scenario-based assessments to qualify drivers, improve safety awareness, and reduce accidents and risks.

Air Traffic Control Simulator
Fully scalable, 3D high fidelity simulator solution for air traffic controller to develop the practical skills required for day-to-day operations and emergency management.

ROBOTICS & AUTOMATION

A range of solutions for Airside and Landside operations including autonomous solutions for Passengers, Cargo and Aircraft Towing in addition to security robots and follow me wheelchairs.
**Perimeter Intrusion Detection System (PIDS)**
Secures the airport perimeter with high detection rate and pinpoint accuracy, ensuring efficient day-to-day operations.

**Next Gen Biometrics Platform**
Facilitates a secured and seamless border clearance process.

**GNSS Anti-Jam Antenna**
Safeguards against Global Navigation Satellite System (GNSS) interference.

**Airport Analytics**
Provides real-time data-driven views of airport operations and in-depth analysis of current and historical data to predict future and unknown events.

**Airport Operations Centre System (AOCS)**
Centralised airport management platform to support information sharing and collaboration between multiple stakeholders.
**Master System Integration**
Delivers fully tailored solutions from construction to commissioning and ongoing operations for brownfield and greenfield projects.

**Virtual Aerodrone Laboratory**
Next generation immersive training facilities for flight operations, airport security and crisis management.

**Air Traffic Control Simulator**
Provides an immersive 3D environment for air traffic controllers to develop the practical skills for daily operations and emergency scenario management.

**Airside Driving Simulator**
Provides a virtual airside environment for airside driver training to enable driving proficiency before being allowed on the airside.

**Personnel & Asset Tracker (PAT)**
Geofencing management of all personnel and vehicles.

**Virtual Aerodrone Laboratory**
Maritime terrorism, piracy and other trans-boundary maritime crimes are becoming increasingly sophisticated. The need to ensure effective security at sea and quick response to disaster relief is more important than ever.

Through the use of emerging technologies with actionable intelligence, the maritime and coastal agencies and ports can seamlessly connect, manage and respond with enhanced situational awareness.

VESSEL TRAFFIC & PORT MANAGEMENT

Vessel Traffic Management System (VTMS)
Leverages data analytics and geospatial services to provide comprehensive real-time maritime situation awareness beyond territorial waters. Allows emergency rescue to be performed with predictive tools and enhances port and border protection through smart analytics to detect anomalies for early resolution.

Port Operations Centre
A Centralised Port Operations Control System that monitors the performance of Port Operations within the Terminal in real-time, leading to improved container port operations. Port operators can now quickly identify operational inefficiencies and swiftly resolve them.

Unified Communications System (UCS)
Integrates ship-to-shore and shore-to-shore maritime and offshore communications, on a single platform by enabling seamless interoperability between disparate communications systems. Its IP based system optimises operational efficiency and enhances situational awareness for port and vessel operators and maritime control centres.

Port Facility Security Consultancy
Customised audits, drills and exercises to ensure adherence to mandatory IMO International Ship and Port Facility Security Codes (ISPS).
MARITIME & COASTAL SURVEILLANCE

Perimeter Intrusion Detection System (PIDS)
Secures the port perimeter with advanced fibre sensor technology and intelligent signal processing, to provide instantaneous and pinpoint intrusion detection, while maintaining low nuisance alarm.

Coastal Surveillance System (CSS)
Enhances coastal security through our proprietary Track-Before-Detect algorithm to expose potential threats in heavy maritime traffic, enabling quick decision making and intervention.

Maritime Situational Awareness System (MSAS)
Offers far-reaching range of situational awareness, surveillance capabilities and information sharing between the command and control centre and mobile assets to allow authorities to make informed and timely decisions.

Maritime Collision Detection System (MCDS)
24/7 360° spatial awareness for safe navigation, detecting any potential collision hazards with automatic alerts when threat is presented.

Maritime Anti-Piracy System (MAPS)
Provides early warning of suspicious vessels through tracking maintainability and advanced analytics of ship courses, speed and movement patterns.

Thermal Imaging System
Covers a wide Field of View (up to 360°) for thermal imaging, and a wide area coverage with a high re-visit rate for persistent surveillance 24/7, providing near real-time situational awareness and monitoring of targeted area.

GNSS Anti-Jam Antenna
An integrated anti-jam antenna system which can cancel Global Navigation Satellite System (GNSS) interference sources to deliver accurate positioning, navigation and timing (PNT) information, for vessels’ navigation safety and dynamic positioning application.

VENUS Unmanned Surface Vehicle (USV)
Fully autonomous, the VENUS is capable of high speed interdiction and execution of complex non-linear coastal patrol, providing real-time updates and imagery in maritime policing operations. Its highly customisable platform facilitates the integration of multi-mission modules for different missions.
Thermal Imaging System
Provides 24/7 wide area surveillance with auto target detection, tracking and alert capability.

Coastal Surveillance System (CSS)
Detects illegal activities and achieves excellent track maintainability in challenging and cluttered environments.

Maritime Situational Awareness System (MSAS)
Integrated solution for border security and control with intuitive GUI.

Vessel Traffic Management System (VTMS)
Leverages data analytics and geospatial services to provide comprehensive real-time maritime situation awareness beyond territorial waters.

Unified Communications System (UCS)
Seamless and interoperable ship-to-shore and shore-to-shore communications for port and vessel operators, and control centres.

Port Operations Centre
Centralised Port Operations Control System
VENUS Unmanned Surface Vehicle (USV)
Fully autonomous USV provides a highly customisable platform for multiple missions without risking lives.

TeLEOS-1
Near-equatorial orbit Earth observation satellite.

Perimeter Intrusion Detection System (PIDS)
Delivers holistic surveillance surrounding sensitive installations alongside the port, using a series of advanced fibre optics sensors.

Maritime Anti-Piracy System (MAPS)
Track-Before-Detect algorithm detects and provides early warning of suspicious vessels.

GNSS Anti-Jam Antenna
Protects Global Navigation Satellite System (GNSS) for critical services against jamming.

Maritime Collision Detection System (MCDS)
Automatically triggers alerts to crew for any potential collision risks.

Perimeter Intrusion Detection System
Delivers holistic surveillance surrounding sensitive installations alongside the port, using a series of advanced fibre optics sensors.
Attacks on a single critical infrastructure can go far beyond the direct target and reverberate long after, causing damage, loss and even dire consequences to the city and its citizens.

Instrumented integration and deployment of cutting-edge technologies such as data analytics, Internet-of-Things and wearables, will provide proactive security management and enable robust emergency response and crisis management.

**INCIDENT MANAGEMENT**

**Emergency Response System**
Comprises a fully integrated Command & Control System, Computer-Aided Dispatch, Contact & Video Management, Crime & Criminal Recording and Hazmat Incident Management suite of solutions. Allows governments, agencies and first responders to respond quicker and smarter to threats.

**Mobile Command and Communications Vehicles (MCCV)**
Built for all-weather, all-terrain operations and customisable for different requirements to address the command, control and communications needs of homeland security and emergency situations. The MCCV enables quick deployment with shelter and expandable working space, and provides clear voice, data and video communications on the move.

**SIMULATION & TRAINING**

**Incident Response Interactive Simulation (IRIS)**
Delivers experiential and scenario-based VR simulation to train frontline and operations centre officers to respond effectively during emergencies.

Realistic simulation-based training with multiple iterations and post-exercise reviews ensure the high performance of emergency responders when the need arises.
FACILITY SECURITY SOLUTIONS

**Unified Communications System (UCS)**
Provides integrated communications between disparate systems and devices to enhance situational awareness and provide quick response for multi-agency operations. Its future-proof communications services enable seamless interoperability between agencies.

**Identity Management Platform (IDMP)**
360° identity surveillance of humans and vehicles. Enabler of real-time strategic security intelligence, control and planning; streamlines long-term operational and financial cost with centralised security efforts.

**Physical Security Information Management (PSIM)**
Resource monitoring and dispatch platform that integrates multiple security applications, devices and information systems to one comprehensive user interface, empowering personnel to identify and resolve situations.

**Personnel & Asset Tracker (PAT)**
Provides instantaneous monitoring and location tracking in real-time, allowing effective geofencing management in hazardous or restricted zones within facilities.

**GNSS Anti-Jam Antenna**
Safeguards Global Navigation Satellite System (GNSS) receiver used for critical infrastructures such as Power Grid, Telecommunication network against GNSS interference.

**GNSS Resilient Time Source**
Mitigates disruption to Global Navigation Satellite System (GNSS) timing signal due to jamming & spoofing, and assure continuous availability of this signal for network time synchronisation in Critical Infrastructure.

**Perimeter Intrusion Detection System (PIDS)**
Secure high-value assets with advanced fibre sensor technology and intelligent signal processing, while complying to the stringent requirements of critical infrastructures.

**Smart Glasses Platform-as-a-Service**
Using Smart Glasses, it is a Platform-as-a-Service with embedded biometric capabilities which can streamline work processes and enables automated, non-intrusive identification.
Incident Response Interactive Simulation (IRIS)
Harnesses immersive VR for frontline officers to experience and hone decision-making skills when handling public safety incidents.

Mobile Command and Communications Vehicles (MCCV)
Built for all-weather, all-terrain operations and customisable for different requirements to address the command, control and communications needs of homeland security and emergency situations.

Identity Management Platform
360° real-time strategic security intelligence, control and planning.

Emergency Response System
Enables governments, agencies and first responders to respond quicker and smarter to threats, protects and prepare citizens through emergency response management, intelligence and analysis, and communication and collaboration.
GNSS Anti-Jam Antenna & GNSS Resilient Time Source
Assured PNT information essential for continuous operation of Critical Infrastructure.

Unified Communications System (UCS)
Integrates all communications needs on a single platform regardless of radio frequencies, networks, systems and devices, to meet various operational requirements.

Personnel & Asset Tracker (PAT)
Allows users to have an overview of personnel and vehicles sent on missions.

Perimeter Intrusion Detection System (PIDS)
Secures the critical facility perimeter with pinpoint accuracy and high detection probability with low nuisance alarm.