

SAC²S SECURITY AREA COMMAND AND CONTROL SYSTEM

SAC²S is an innovative integrated security enabled command and control system. Robust high-end security devices and secure technologies combined with extreme manageability offer next-gen area security and protection, advanced control over assets and personnel and immediate and accurate command of operations. SAC²S is designed to be a powerful weapon of Armed Forces for shielding any military facility from threats of any kind.

SUBSYSTEMS

PERIMETER INTRUSION DETECTION SYSTEM (P-IDS)

Cable Sensors, Infrared detectors, Fence Vibration Sensors, Radar and Thermal cameras provide multilayered perimeter intrusion detection. P-IDS deters, detects, assesses, categorizes, and tracks possible intrusion attempts of the overall or internal zone's perimeters, in a proactive manner. It creates actual and virtual fence lines providing advanced warning and threat assessment whenever a line or area is intruded.

INDOOR INTRUSION DETECTION SYSTEM (I-IDS)

I-IDS is an additional security layer consisting of sensors such as Motion Detector, Acoustic, Fire Detection and Magnetic Contacts. The efficiency of I-IDS in detecting intrusions enhances the overall system's capability of securing buildings and/or rooms of high interest and risk at the inner of the facility.

ACCESS CONTROL SYSTEM (ACS)

ACS includes databases, procedures and rules for restricting or allowing entrance or exit to and from the facility and detecting contraband items. It manages several types of credentials such as pin-codes, biometrics and car licenses providing entrance control at the facility gates, at buildings and offices meeting the most demanding security needs.

RADAR/CCTV DETECTION & SURVEILLANCE SYSTEM (RCDSS)

Fast scanning, adjustable filtering and operation in all weather and night conditions augment the radar's capability of reliable intrusion detection and tracking of a variety of targets (person, vehicle etc) throughout the whole facility. PTZ & FIXED, THERMAL & VISUAL Cameras with advanced lenses and ruggedized enclosures provide both sensing and surveillance to the system.

RADAR VIDEO SURVEILLANCE (RVS)

RVS is built on top of RCDSS using automated camera control to point PTZ cameras to the precise position defined by the radar scanning, providing an automated detection and tracking system. All data concerning the intrusion are displayed at the C&C center in a GIS representation providing complete situation awareness, while the mobile Emergency Teams are receiving continuous information for the intrusion progress and location.

COMMAND & CONTROL CENTER (C&C)

In C&C, state of the art infrastructure collects all data and supports the system integration (server rooms), while wall screens display all intrusion events providing to the operators an overall view of the facility (operator room).

EMERGENCY RESPONSE TEAM (ERT)

Handheld PDAs, portable night vision thermal cameras, mobile access control devices and mobile modems provide the means for direct neutralization and contingency planning of any given intrusion situation. Secure wireless response force communication between the ERTs and the Command Center ensures the direct data delivering of the intrusion location and progress and the prompt intervention of ERTs.



I-IDS



P-IDS



ACS

SAC²S IN CONTROL

KEY-FEATURES

- ADDRESSING ALL SECURITY OPERATIONS.
- SCALABLE, EXTENDIBLE AND RELIABLE.
- SOPHISTICATED AND MODERN.
- AUTOMATED AND DISTRIBUTED.
- FULLY INTEGRATED.

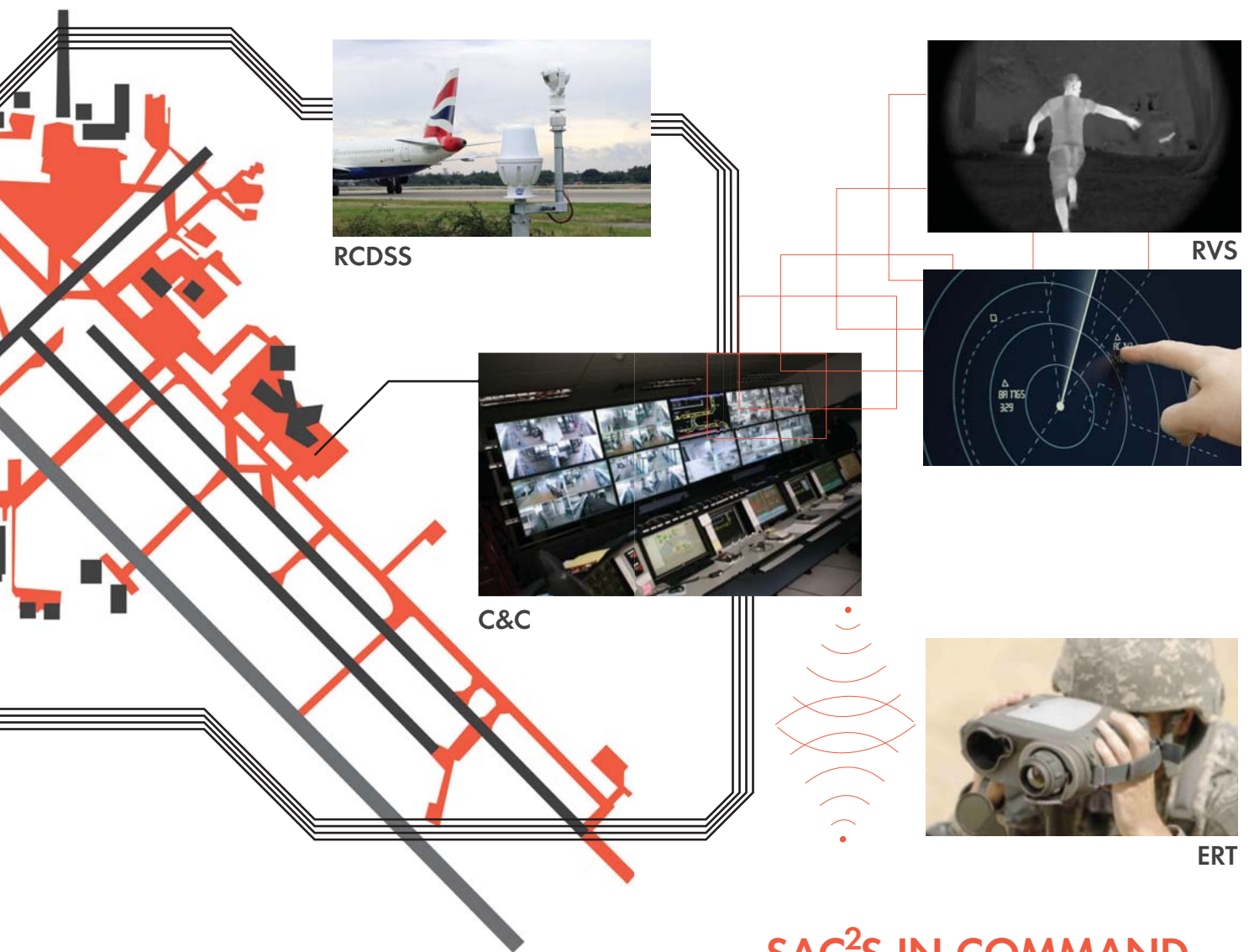
PRINCIPLES

Sensing, Surveillance and Access Control, the three main operational principles of security systems, are applied by complementary devices, in a multilayer onion-like strategy that is supported by a robust and redundant integrated information system.

INTRUSION SENSING

The sensing needs, are fully served in a reliable way by the installation of perimeter and indoor Intrusion Detection Systems (P-IDS and I-IDS) combined with the Access Control System (ACS).

Actual and/or virtual fences are created at the perimeter and the inner vital areas (areas of high interest and/or risk) deterring and assuming any possible intrusion attempt. Once any fence is compromised an alarm is triggered and the event is automatically displayed at the C&C room defining the position, severity and characteristics of the intrusion. More in-depth protection is provided by the indoor IDS, which produces an alarm whenever a building or office is violated or an invalid entrance attempt is observed. ACS inhibits the unauthorized entrance of personnel or visitors to the facility (gates) and to buildings and/or rooms.



RCDS

RVS

C&C

ERT

INTRUSION SURVEILLANCE

The Radar Video Surveillance (RVS) system monitors open space enabling the detection and tracking of any moving object, person or vehicle at the inner area. RVS provides complete situation awareness by displaying a birds-eye view of the area with an overlay of all sensors. Once an alarm is produced, RVS undertakes to direct the cameras to the precise position for detecting and tracking efficiently and in real time the intruder within the area. Data concerning the intrusion position and progress are displayed at the command room and sent to the mobile Emergency Response Teams (ERT) enabling their prompt intervention.

ACCESS CONTROL

ACS provides an in depth entrance control of personnel and visitors restricting the entrance or exit at the facility. Unauthorized entrance attempt is immediately detected and followed by an alarm production. ACS answers the question "who is where" providing an overall personnel and visitor management. Items like weapons, metals or abandoned luggage are considered as contraband items and are detected via metal detectors, package search or explosive detectors.

INTEGRATION IN THE COMMAND CENTER

In the C&C Center, the heart of the system, lie powerful machines that collect the distributed information produced by the devices. This information is filtered and processed by the integration and management software through advanced algorithms and parameterized rules to be presented clearly.

SAC²S IN COMMAND

ALERT

Any intrusion attempt and generally any change of the system initial state will produce an event that will be displayed at the Command Room Screen. The event is accompanied with appropriate evaluation comments. The system manages low threat events automatically or triggers a precaution alarm.

The perimeter IDS and the RVS give an accurate location of the intrusion attempt while the mobile Emergency Response Teams (ERT) receive instructions wireless from the system and/or the operator for handling the intrusion attempt in the most efficient way.

ACS restricts the unauthorized entrance or exit at the facility or at buildings. Invalid answers to questions like "who is where" or "what he holds" produce an event or alarm and the ERTs undertake to identify the person or the contraband items via mobile access control identification devices.

REACTION

The ERTs are actually considered being the precaution and the real action principle consisting of personnel in continuous readiness and responsible to react immediately to any incident occurs in the area. The ERT equipment includes night vision goggles for identifying an object or person in dark night and mobile workstations with a GIS representation for receiving/transmitting data in a secure wireless way from/to the Command & Control Center.

PHYSICAL
DISASTER

TERRORISM

SABOTAGE

ESPIONAGE

MILITARY
THREAT

THEFT



INDEPENDENT SECURE NETWORK

- Available 24/7/365
- Fully Redundant
- High Signal Security
- Multiple Fast Fiber Optic Rings
- Greatly increased bandwidth and capacity
- Immune to noise and radio-frequency interference
- Gigabyte Ethernet Technology
- Durable in harsh environments
- Resistant to temperature variations

EXTREME WIRELESS AREA COVERAGE

- Advanced Certified Encryption
- Cryptographic Algorithms
- Tunneling Protocols
- Dual Band Points
- Low Cost Extensibility

INDEPENDENT POWER DISTRIBUTION AND GENERATION

- Available 24/7/365
- Fully Redundant
- Long and Middle range UPS
- Independent and Autonomous
- Remote Controlled
- Reliable Health Monitoring
- Accurate Problem Location
- Isolation of Damage

RUGGEDIZED CONSTRUCTION AND COMPONENTS

- All Weather and Illumination
- Protected against powerful water jet
- Resistant to temperature variations
- Resistant to corrosion
- Robust
- IP66 Certificate
- Sealed against dust

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