

Glossary

Course: Electronic Security Systems

Automated Access Control System (AACS): Automated system that interfaces with locking mechanisms to momentarily permit access to a controlled area. It does this by unlocking doors, gates, or turnstiles after verifying entry credentials, such as a user's identification card. An AACS ensures that only authorized personnel can access a controlled area, which helps prevent unauthorized persons from entering it.

Balanced magnetic switch (BMS)/High security switch (HSS): Uses a magnetic field or mechanical contact to determine if an alarm signal is initiated.

Biometric device: Allows access after a person enters a specific biological characteristic, such as a fingerprint or retina scan, into the device.

Biometrics: Measurable physical characteristics or personal behavioral traits used to recognize the identity, or verify the claimed identity, of an individual.

Buried line sensors: Buried underground to detect intruder-induced ground motion.

Capacitance proximity sensors: Detect intrusions via a break in the electrical charge between earth ground wires and sensing wires.

Closed Circuit Television (CCTV): Closed circuit television is a security system with a camera that captures an image, converts it to a video signal, and transmits it to a monitoring station.

Coaxial strain-sensitive cable sensors: Detect mechanical vibrations and wire movement through an electric field.

Coded device: Allows a person to access a controlled area after entering a recognized code or PIN into the device.

Controlled Area: A controlled space extending upward and outward from a specified point. This area is typically designated by a commander or director, wherein sensitive information or operations occur and requires limitations of access.

Countermeasures: prevent adverse occurrences or reduce the impact of them, if they happen.

Credential device: Allows a person to enter a controlled area after swiping a recognized credential, such as a CAC, in or near the device.

Data Transmission Media (DTM): Allows for rapid and reliable data transmission and communication among ESS subsystems, from intrusion detection sensors, access control devices, and video components to display and assessment equipment.

Dual-technology sensors: Combine passive infrared and microwave technology and are effective as gap fillers and should be kept inside a protected area to avoid being compromised.

Electromechanical sensors: Use switches and coaxial strain-sensitive cable sensors to create an electric field that detects mechanical vibrations and movement of wire.

Electronic Security Systems (ESS): That part of physical security concerned with the safeguarding of personnel and property by use of electronic systems. These systems include, but are not limited to, intrusion detection systems (IDS), automated entry control systems (AECS), and video assessment systems.

Fence-associated sensors: Detect when an intruder cuts, climbs, or lifts a fence.

Fiber optic cable sensors: Used to detect digging and tunneling, good for use in securing pipelines, manholes, and entry portals.

Fiber optic strain-sensitive cable: Detects motion, vibration, and changes in pressure by detecting changes in interference between modes of light transmitted through the cable.

Glass break sensor: Detects glass breakage.

Infrared sensors: Project a beam between a sensor and a receiver.

Intrusion Detection System (IDS): A security system that is designed to detect a change in the environment and transmit some type of alarm notification.

Line-of-sight sensors: Detect intruders that cross the sensors' path in open areas.

Microwave sensors: Radiate a controlled pattern of microwave energy into the protected area.

PIR sensors: Used to detect heat signatures, or infrared emissions, from intruders

Ported coaxial cable sensors: Used in open areas and can be effective as part of a double fence system.

Premise Control Unit (PCU): The centralized device that receives changes in the environmental state from the intrusion detection equipment and transmits an alarm or trouble condition to the monitoring station.

Pressure sensors: Detect weight changes when an asset, such as a safe, is moved off of the sensor.

PTZ (Pan, Tilt, Zoom): A type of movable camera.

Request to Exit (REX): Life safety devices to allow people to exit from that space in the event of an emergency, such as panic bars, as well as locking mechanisms.

Risk: A measure of consequence of peril, hazard, or loss, which is incurred from a capable aggressor or the environment (the presence of a threat and unmitigated vulnerability).

Risk Management: Process and resultant risk of systematically identifying, assessing, and controlling risks. Commanders/Directors are required to identify critical assets and their subsequent protection requirements, including future expenditures required for the protection requirements.

Seismic sensors: Used against intruders walking, running, digging or operating vehicles or machinery near the detection zone.

Security-in-Depth: A determination by the senior agency official that a facility's security program consists of layered and complementary security controls sufficient to deter, detect, and document unauthorized entry and movement within the facility. Examples include the use of perimeter fences, employee and visitor access controls, use of an intrusion detection system, random guard patrols throughout the facility during non-working and working hours, and closed circuit video monitoring or other safeguards that mitigate the vulnerability of unalarmed storage areas and security storage cabinets during non-working hours.

Taut-wire sensors: Smooth or barbed wire that detect movement through parallel wires under tension.

Threat: The perceived imminence of intended aggression by a capable entity to harm a nation, a government or its instrumentalities, such as intelligence, programs, operations, people, installations, or facilities.

Time-domain reflectometry (TDR) systems: Send induced radio frequency signals down a cable attached to the fence fabric.

Vulnerability: A situation or circumstance, which left unchanged, may result in the degradation, loss of life, or damage to mission-essential resources.