



Perimeter Intrusion Monitoring System (PIMS)

The Perimeter Intrusion Monitoring System or "PIMS" integrates traditional technologies used for asset protection, such as cameras, with ground surveillance radar technology. The addition of radar not only provides the benefit of persistent surveillance of large areas, but also includes other attributes such as all-weather, day/night performance. The PIMS solution provides geo-referenced intruder position reporting and -tracking that allows for automatic alarming, queuing of PTZ cameras and activation of deterrents thus enhancing security personnel's ability to respond timesously to threats.

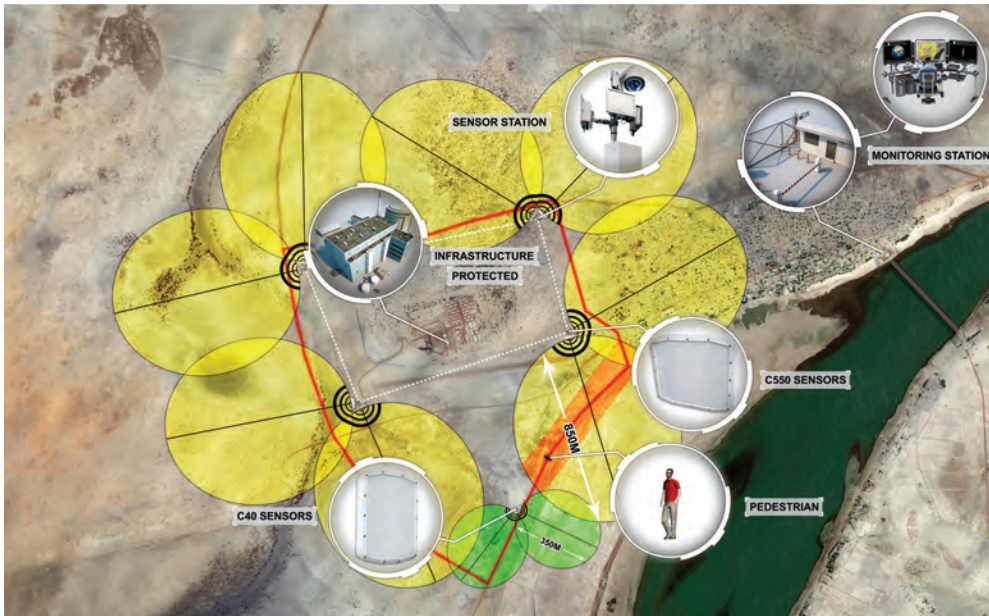
Attributes

- Application in perimeter or portal protection
- Persistent monitoring of intruder movement
- Reduction in required CCTV cameras compared to a non-PIMS solution
- Ability to interface to legacy security systems, including legacy static- and/or Pan-Tilt-Zoom CCTV cameras
- Scalable application through overlapped daisy-chaining of multiple sensors

Radar Sensor Characteristics

- Mast-mounted sector-based coverage
- Staring array without moving parts
- High performance in rain, mist, fog, snow, day and night
- Very low radiated power for safe operation
- Operates in temperatures: -30°C to +65°C

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PIMS integrates cameras, with ground surveillance radar technology

PIMS solutions configuration

PIMS solution offers

- Sensor to Control HMI Interface: Ethernet (including Power over Ethernet)
- Intruder Data
 - Real Time Tracks
 - GPS coordinates of tracks
- Sensor Status reporting
- Rugged / Waterproof: IP67 compliant

Options

- Solar powered mast mounted equipment (radars, cameras) operation
- Wi-Fi, Radio, GSM, satellite communication data interface
- Video and alarm log recording and playback
- 360° coverage using 3 to 4 sensors
- Remote activated acoustic deterrent devices
- Remote activated optronic deterrent devices

Operator Console Features

- Intuitive User Interface enables remote- and offsite monitoring
- Modes:
 - Admin mode: Setting of system configuration and operator freedom
 - Operator mode: Utilisation of PIMS and dedicated configuration (within freedom constraints)
 - * Designations to Pan-Tilt-Zoom cameras
 - Operational options to configure exclusion-, warning-, or prohibited zones
 - * Indication of zone-specific violations
- Display of intruder tracks within coverage sector per zone
- Display of integrated camera video (if applicable)
- Google based geographic satellite imagery layer aids operator in intruder location within zone
- Display sensors Built-In-Test status

Radar Sensor Characteristics

Commercial RF Sensor Family	C20B	C40B C40B-EXT	C550B C550B-EXT	C950B
Detection Range (Pedestrian Walking)*	150 m	350 m 550 m	850 m 1 050 m	1350 m
Detection Range (Vehicle)*	350 m	500 m 750m	1250 m 1500 m	2000 m
Coverage Area*	150 m x 175 m	350 m x 300 m 550 m x 450 m	850 m x 750 m 1,050 m x 850 m	1,350 m x 1,000 m
Weight	0.7 kg	0.7 kg	1.6 kg	2.3 kg
Effective Field of View (Horizontal)*	120°	90°	90°	90°
Effective Field of View (Vertical)*	20°	20°	20°	10°
Measurement Accuracy (Range)	1 m	3 m	3 m	4 m
Measurement Accuracy (Azimuth)	±3°	±3°	±3°	±3°

*Without Line of Sight restriction

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