PSR-500 PERIMETER SURVEILLANCE RADAR SYSTEM

ALL-WEATHER, 24/7 PERIMETER PROTECTION

Reliable, low cost and field proven

The high-performance Collins Aerospace PSR-500 perimeter surveillance radar system strengthens your perimeter security. It tracks and records targets 24 hours a day – with radar that can detect intrusions even in the lowest-visibility weather, such as rain and fog. The system offers high-resolution accuracy and range in a compact form for ease of installation.

The system features Frequency Modulated Continuous Wave (FMCW) advanced radars and combines all functionalities required for perimeter surveillance. Its radars are adapted to the surveillance needs of many types of sites, thanks to their range and target behavior analysis algorithms. The algorithms also give the PSR-500 a very low false alarm rate.

Each PSR-500 system can connect with one or multiple cameras that are controlled by radar detections. This enables multi-target, highly accurate video visualization and recording in real time.

Deploy the PSR-500 to protect assets and lives – whether at airports, industrial/military sites or urban sites, both public and private.

KEY FEATURES AND BENEFITS

- Ease of installation and reduced maintenance with static antenna
- Rapid detection time
- Optimized false alarm rate and detection probability
- Size, weight, power and cost advantages
- Low radiated power poses no health risks
- Connects to any IP transmission system
- Low probability of intercept
- High accuracy for range, speed and azimuth
- Extended detection range up to 500 meters for human detection
- Multi-target capability
- Flexible interoperability (GPS synchronized)
- Connection to video management/ recording system
- High resolution (high bandwidth)

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PSR-500 server
System real-time management

- Manages multiple PSR-500 radars status and intrusion alerts

- Manages multiple PSR-500 camera control software programs (if available)*

- Server redundancy capability for critical deployment

- Web server module, providing interface with external client (e.g., hypervisor)

PSR-500 viewer (optional)

- Provides real-time intrusion alerts, visual and aural

- Continuously records events (intrusions, system status, etc.)

- Multiple viewer deployability

PSR-500 investigator (optional)

- Enables replay of recorded events

- Enables analysis and system performance optimization

PSR-500 camera control software (optional)

- Multi-target camera control based on PSR-500 alerts

- Open Network Video Interface Forum (ONVIF) compatible

- Video Management System (VMS) compatible

TECHNICAL FEATURES

PSR-500 radars – sensor unit

Power over Ethernet (PoE)	48 V
Consumption	8 W
Size	370 mm (l) x 150 mm (w) x 53 mm (h)
Weight	1.5 kg
Frequency	C band
Waveforms	FMCW
Transmitted power	25 mW
Temperature	-20° C to 55° C operating
Covering	Up to 90° az; 35° el
Detection range	500 m (humans); 900 m (vehicles)
Output format	Gigabit Ethernet (UDP packets)
Data rate	72 Mb/s
CE marking	Yes
RoHS	Yes

PSR-500 radars – processing unit

Output format	Gigabit Ethernet (TCP/IP)
Output protocol	Collins proprietary
Data rate	<10 Ko/s (Wi-Fi® compatible)
Refresh rate	3 Hz

PSR-500 SOFTWARE SUITE

PSR-500 installer
Support system deployment phase

- Supports and optimizes multiple PSR-500 radar installations

- Defines alerting and exclusion zones

- Generates installation report to support on-site deployment teams

Hydroelectric dam

Railway station

Nuclear power plant

*Minimum required quantity: one PSR-500 server/50 PSR-500 radars

Specifications subject to change without notice. This product is under license with ITNI in France.

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