SAPAN™
ACTIVE/REACTIVE CONVOY PROTECTION SYSTEM
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SAPAN™ Active/Reactive Convoy Protection System is designed to protect convoys, against Radio Frequency (RF) Controlled Improvised Explosive Devices (RCIEDs), by jamming the communication between these devices and threats.

The system can be used within convoys and tactic fields. The system also provides the prevention of enemy communication during the missions executed in residential and indoor areas through effective jamming capability.

SAPAN™ Active/Reactive Convoy Protection System has the ability to quickly survey the frequency spectrum and react immediately on the active signals. Hardware and the software algorithms are developed in such a way that any inevitable delay and all processing periods are minimized/optimized within the system.

Ultrafast wideband tuners and DDS-based, FPGA-controlled exciters are utilized. The effectiveness range for SAPAN™ Active/Reactive Convoy Protection System is much greater than any active jammer with the same output power. To achieve an equivalent effectiveness range of SAPAN™, an active jammer has to radiate almost 1000 times more RF power.

The system design and the sub-units of the system (Power Amplifiers, Antennas, Receivers, Digital Frequency Synthesizer etc.) are indigenously developed by ASELSAN.

The performance of SAPAN™ Active/Reactive Convoy Protection System has been proven on the field and SAPAN™ is ready for demonstration any time.

**Basic Features**

- Wide Spectrum Coverage (Configured in accordance with customer requirements)
- Hybrid Jamming Application (Active and/or Reactive)
- Jamming with 100% Coverage in Time
- Outstanding Effectiveness Range (An active jammer has to radiate almost 1000 times more RF power to achieve the same performance of SAPAN™)
- Acquire Trigger Signals via Ultrafast Wideband Tuners and immediately react on them by DDS-Based FPGA-Controlled Exciters
- Threat-Optimized Jamming Signal
- Fully Programmable State-of-the-Art Digital Frequency Synthesizer
- Continuous Operation on Vehicle Alternator
- Compatible with the ICNIRP (International Commission on Non-Ionizing Radiation Protection) Standard for Human Health Considerations
- Field Proven Performance

**Programmability and User Interface Features**

- Computer-Controlled Modular System Architecture
- Fully Monitored and Controlled with the Rugged Laptop
- Built-In Test Feature
- Logging Threat Data (optionally, with GPS Mapping)
- Post Mission Data Analysis via Analysis Software
- Recording of the Time and Vehicle Location Information at the Time of Signal Detection

**Environmental Conditions**

- Rugged Design
- Operating Temperature Range: -30°C - +50°C
- Storage Temperature Range: -40°C - +60°C
- MIL-STD 810 Compliant (Humidity, Rain, Shock and Vibration)