



IED DETECTION AND NEUTRALIZATION SYSTEM

#ElectronicWarfare



SIMULTANEOUS DETECTION AND NEUTRALIZATION CAPABILITIES
TRANSITION INTO ADVANCED TECHNOLOGIES (NLJD & HPDM)
DISTINCTIVE SOLUTION FOR ROUTE CLEARANCE OPERATIONS
EXCEPTIONAL JAMMING FEATURES
REMOTE CONTROL OPTION



aselsan

IED DETECTION AND NEUTRALIZATION SYSTEM

EJDERHA uses new generation technologies developed to detect and neutralize improvised explosive devices (IEDs) containing semiconductor circuits components from a safe distance.

Active Detection System with its Non-Linear Junction Detector (NLJD) technology, IEDs with electronic circuits hidden in areas such as roadside, culvert, etc. are detected remotely. The presence of devices is detected at an early stage, minimizing risks in the operational area.

HPEM system with Narrowband High-Power Microwave technology, IEDs with electronic circuits are neutralized from a safe distance. Additionally, as an extra precaution against RF-controlled IEDs, the RF Jamming Subsystem blocks the triggering signals of RF-controlled explosives.

The System enables fast, effective and safe mission execution in routes with IED risk. The System, which can be integrated into Tactical Wheeled / Tracked Armored Vehicles, can be controlled both manned and unmanned (with remote control) and all subsystems can be operated together or independently according to user preference.

System Features

- High Power Electromagnetics (HPEM) Sub-System
- Detection (NLJD) Sub-System
- RCIED Jammer Sub-System
- Central Control Unit (User Interface)
- Tactical Armored Wheeled/Tracked Vehicle
- Remote Control Devices

High Power Electromagnetics Sub-System

- Generating Narrow-Band HPEM Waves
- Suppressing, Resetting, Neutralizing or Pre-activating IEDs with Semiconductor Circuit Components
- Adjustable Pulse Duration and Pulse Repetition Frequency (PRF) Depending on Operational Needs
- Fixed – Angle Narrow Beam or Broad Scanning Operational Scenarios

Detection (NLJD) Sub-System

- Generating High Power NLJD Signals
- Detecting Electronic Devices and IEDs Containing Semiconductor Circuit Components via Highly Sensitive Receiver Unit
- Using advanced algorithms and extensive database in order to decrease the probability of false detection
- Scanning the Frequencies in the Environment and Selecting the most Suitable Operating Frequency
- Locating the Threats Positions on Sectoral Basis

Remote Controlled IED Jammer Sub-System

- Software defined Jammer System (Programmable according to Tactical & Threats Requirements)
- DDS based FPGA Controlled Swept Jamming Type
- Suitable for Interworking Operation

Central Control Unit

- User Friendly MMI Software
- Camera Assisted Real-Time Display
- Advanced Built-in-Test (BIT) and Event Logging

