



Critical Solutions
International



HMDS

HUSKY MOUNTED DETECTION SYSTEM

PREVENT. PROTECT. SAVE LIVES.

Photo: Sgt. Brent Powell, DVIDS

HMDS HUSKY MOUNTED DETECTION SYSTEM

Prevent. Protect. Save Lives.

The combat proven combination of the Husky vehicle with NIITEK's VISOR™ 2500 Ground Penetrating Radar (GPR) forms the US Army's HMDS and provides unprecedented performance in the automatic detection, recognition, and precision marking of buried explosive hazards. Based on proven breakthrough GPR technology, HMDS combines advanced real-time ATR algorithms, optional integrated metallic and non-metallic threat detection, automatic precision marking, and user-friendly software, all in a ruggedized, supportable, and affordable package.

FEATURES

- Breakthrough Probability of Detection (Pd) and False Alarm Rate (FAR) performance
- Automated sensor height control
- Intuitive controls/touchscreen display
- Same GPR technology as Future Combat Systems
- 3-D subsurface visualization
- Readily adaptable to other vehicles

BENEFITS

- High confidence countermine operations
- Maximized protection of operators
- Optimized performance on uneven terrain
- Rapid proficiency/ease of use
- Visualization of buried threats

PHYSICAL

Sensors

- Front-Mounted, NIITEK VISOR™ 2500 Ground Penetrating Radar, with 4 panel 3.2 meter array
- Optional See-Deep Metal Detector Array
 - ▶ EMI Coils 3 meter Wide Scan

GPR and MD Data Processing

- Automatic Target Recognition Algorithms

Processing and Control

- Duracor PC104 Based Computer
- Cab-Mounted Tablet Display with GUI

Navigation

- NGC LN-270 INS with GPS, SAASM Anti-Jamming Module and Starfire DGPS Module

Marking System

- Front-Mounted 4-Jet Marking Bar
- Center Body-Mounted 12-Jet Marking Bar

GPR Panel Positioning System

- Hydraulically-Controlled Deploy and Retract Modes with Damage Resistant Features

PERFORMANCE

Buried Explosive Hazard (BEH) Detection System

High Probability of Detection (Pd) and Low False Alarm Rate (FAR)

- Metallic Buried Threat Detection
- Non-Metallic Buried Threat Detection
- Real-time Detection
- User Selectable Detection Modes

Graphical User Interface

- Real-time GPR Sensor Imagery with 3-D Visualization Feature
- Detection Controls
- Sensor Positioning Controls
 - ▶ Deploy, Stow, Skyshot Calibration, and Manual Height
- System Status Monitors

Target Marking

- GPS Coordinates
- Physical Marking
 - ▶ Center body Mounted 12-Jet Spray Array (14cm resolution)
 - ▶ Front Mounted 4-Jet (1m resolution)

Advance Rates of up to 12 kph

Records Mission Data

- GPR Imagery, MD Data, Target Declarations, GPS Coordinates, Confidence Factors
- File Management
- Stores 100km of Scanned Data on Local Drive

After Action Review

- Post Analysis
- User Comments (Threat Verified, Neutralized, FA, other)

ABOUT CSI

Founded in 1999, Critical Solutions International (CSI) provides platforms that detect and mitigate evolving threats for security forces worldwide.



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DCD PROTECTED MOBILITY

This product is provided in collaboration with DCD Protected Mobility, CSI's trusted vehicle manufacturing partner.