

Advanced RF Sensing Technology for Special Operations Forces (SOF)

Mission-critical counter-UAS support for global SOF operations

Find the threat before the threat finds you. AI-enabled autonomy and uncrewed systems are transforming warfare, enabling persistent surveillance, rapid targeting, and increased pressure on dispersed forces. Low-cost drones compress decision timelines, compromise concealment, and threaten small units and forward-operating sites—often evolving faster than acquisition cycles can adapt. As force-protection demands grow, SOF require counter-UAS capabilities that go beyond detection. Existing systems often lack the portability, low signature, and integration needed for SOF, driving urgent demand for modular, adaptable solutions that enhance situational awareness, accelerate decisions, and preserve small-unit survivability and operational freedom in UAS-saturated environments.



9,000

Drones deployed by Ukraine per day in late 2025

3 seconds

Between detection of an incoming drone and impact

> 60%

Estimated battlefield casualties caused by drones in the Ukraine War

Hidden Level delivers a turnkey counter-UAS sensing solution that provides SOF a complete picture of low-altitude airspace activity through passive radar, RF detection, and direction-finding. The system detects cooperative and uncooperative drones and identifies operator locations **without emitting signals that could compromise unit signature.** Designed for vehicle-mounted and fixed-site use, Hidden Level delivers persistent coverage for forward-operating sites and maneuver elements, even in low-bandwidth environments. Its open architecture integrates easily with existing SOF systems and supports secure information sharing with allies, partners, and interagency organizations to strengthen deterrence and shared situational awareness.

- **Mission-effective performance:** High-accuracy detection with minimal false alarms integrates into SOF workflows to support timely, confident operational decisions.
- **Combined and joint interoperability:** Enables coordinated awareness and response across U.S. forces, coalition partners, and joint task forces through open, interoperable integration.
- **Scales with evolving threats:** Modular, adaptable architecture supports complementary capabilities and expanded coverage as UAS tactics and SOCOM CUAS mission sets change.
- **Mission assurance at the tactical edge:** Identifies UAS activity that could compromise concealment, timing, or maneuver, preserving freedom of action during sensitive and time-critical operations.

Mission-Ready Capabilities

Advanced Passive RF & Radar Sensing

Integrated multi-static passive radar, RF sensing, and direction finding detect and track Group I-III UAS—including RF-emitting and RF-silent targets—without relying on active emissions in contested environments.

Long-Range, Multi-Domain Detection

Provides detection and tracking of airborne and surface targets out to 35 km, supporting early warning, base security, maneuver operations, and EW planning through RF characterization.

Mission-Ready Deployment Configurations

Vehicle-mounted and fixed-site configurations support forward-operating sites, maneuver elements, and mission-support locations without dependence on conventional air-defense infrastructure.

Intelligence Support & RF Characterization

Aggregated sensor data enables pattern-of-life analysis and RF environment characterization to assess adversary UAS behavior and inform operational planning.

Interoperable Data & Open Architecture

Open, non-proprietary architecture integrates with SOF systems—including TAK—using standardized data formats, APIs, and secure communications.

Rugged and Reliable

TRL 9 and MIL-STD tested for reliable operation in austere and operationally demanding environments.

Digital AESA Technology

Advanced interference suppression supports operations in high-interference environments, while flexible beamforming adapts to evolving mission demands.

CASE STUDY:

US Army FoCUS Program



The U.S. Army deployed Hidden Level's passive sensing capabilities as a **primary detection layer** for counter-UAS and ISR missions across multiple platforms, including **HMMWV, Hilux, GMV, and S-MET**. Following operational testing and combat evaluation, the system delivered reliable detection of **Group I UAS and larger aerial and surface targets** without emitting signals that could compromise force signature.

Key Operational Capabilities & Impact

- **Coordinated EW and ISR Operations** Enabled synchronized missions through a shared, passive sensing layer that supports detection and cueing.
- **Precision Tracking of Air and Surface Targets** Delivered reliable tracking to improve situational awareness and operational control.
- **Seamless Autonomous Integration** Integrated smoothly with autonomous and remotely operated platforms, supporting manned-unmanned teaming.
- **Proven Operational Resilience** Reliable performance across harsh conditions and demanding operational profiles.


FIELD-TESTED AND TRUSTED IN THE MOST DEMANDING SETTINGS



NASA



Hidden Level

Hidden Level is the world's leading RF intelligent platform, delivering mission-defined hardware and software solutions that combine passive sensing, persistent data, and applied intelligence to help customers and partners address complex safety and security challenges across air, ground, sea, and space. Designed and manufactured in the USA. 

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