

USMC Terrestrial Collection Systems – Ground Sensors Remote Surveillance Imager (TCS-GS RSI)

Aries Defense, a division of Sigma Defense, delivers mission-proven tactical surveillance and networking solutions that provide real-time situational awareness to Marines operating at the tactical edge. Selected by the U.S. Marine Corps in August 2023, Aries supports the Terrestrial Collection Systems Ground Sensors (TCS-GS) program of record as part of the Remote Surveillance Imager (RSI) capability set. This represents the most significant modernization of Marine Corps reconnaissance and surveillance in more than 20 years. The program replaces legacy MSIDS with networked, low-latency sensor capabilities built for distributed operations. After more than three years of testing and operational fielding, Aries was validated for persistent ISR, seamless integration, and reliable performance in contested environments, earning a DPAS DO-A7 priority rating.



“The RTK proved invaluable in training and real-world operations...allowing recon teams to maintain a COP, extend security, and preserve force without additional manpower.”

— USMC recon team

The Aries Defense Solution

The Aries TCS-GS RSI deliverable is a complete, deployable Recon Team Kit (RTK) designed to improve surveillance, force protection, and decision-making speed. It includes the **R50™ Recon® V OverWatch™ Kit** and **CheckPoints™**, along with the FLIR Recon® V sensor and all deployment accessories.

R50 Recon V OverWatch Kit

R50 integrates Aries Defense’s OverWatch system with the Teledyne FLIR Recon V thermal binocular to deliver long-range, networked ISR for Marines operating in austere and contested environments. Designed for dismounted teams and fixed observation posts, R50 extends surveillance beyond line

of sight, enabling commanders to detect, identify, and share threats faster while maintaining low bandwidth use and EMCON discipline.

- **Networked Reconnaissance:** Transforms Recon V into a shared ISR asset across Tactical Assault Kit (TAK) and Mission Command Host (MCH).
- **Multi-Network Resilience:** Automatically routes FMV and metadata over MANET, SATCOM, LTE, or laser links.
- **Low-Bandwidth Optimization:** Preserves performance in degraded and denied environments.
- **Flexible Deployment:** Backpackable or mountable for persistent surveillance at the tactical edge.

CheckPoints — 360° Force Protection

CheckPoints is a compact, dual-camera surveillance system designed to enhance force protection by giving Marines instant blind-side and rear-flank visibility without adding manpower. Integrated directly into ATAK, it delivers continuous situational awareness through live video, automated alerts, and silent cues, allowing units to maintain 360° security while staying focused on the mission.

- **360° Force Protection:** Dual visible and thermal feeds provide blind-side and rear security.
- **Silent Alerting:** Motion detection with vibration alerts maintains EMCON and operator focus.
- **Plug-and-Play Deployment:** Automatically connects to tactical radios and networks with no configuration.
- **Manpower Efficiency:** Replaces the need for an additional Marine dedicated to rear security.



Contact Us

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