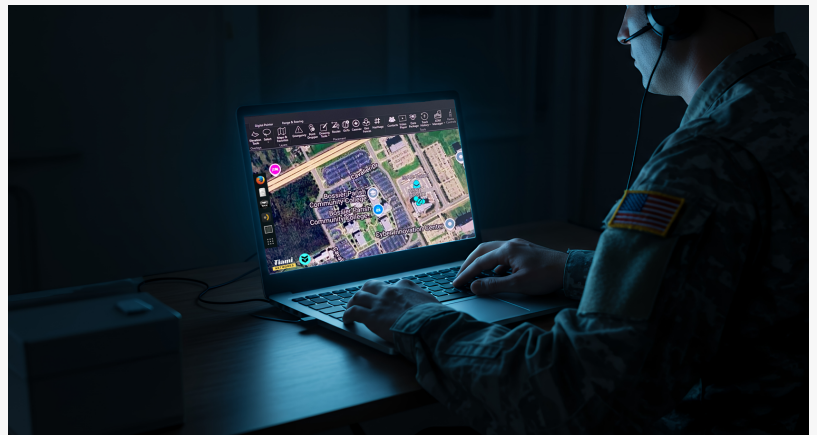


Tiami Networks and SEMPRES Partner to Deliver Real-Time AI Sensing for Drone Defense and Mission-Critical Awareness

Tiami and SEMPRES partner to deliver passive, AI-powered 5G radar for drone detection—zero emissions, zero infrastructure, built for contested environments.

SACRAMENTO, CA, UNITED STATES, July 16, 2025 /EINPresswire.com/ -- Tiami Networks, a cutting-edge developer of passive 5G radar and edge AI solutions, today announced a strategic partnership with SEMPRES, the company redefining mission-critical connectivity for defense, disaster response, and critical infrastructure.



A US soldier monitoring a laptop showing the combined Tiami & SEMPRES solution.

Together, the two companies are delivering an integrated system that uses secure, resilient 5G and real-time artificial intelligence to detect, track, and respond to drone threats, including small, fast, and low-flying Group 1 UAS, without relying on cameras, target emissions, or external connectivity.

“

By combining our PolyEdge sensor with SEMPRES's resilient 5G platform, we're enabling a new category of deployable ISAC capability – designed for fast-moving missions and complex airspace.”

Amitav Mukherjee

The combined solution fuses Tiami's 5G-based Integrated Sensing and Communications (ISAC) engine with SEMPRES's ruggedized 5G edge platform – turning ambient 5G signals into a silent radar net, capable of monitoring airspace and physical perimeters in real time. The result is a transportable, zero-infrastructure sensing and response system that can be rapidly deployed at forward bases, airfields, or critical infrastructure sites where traditional sensor networks fall short.

“Tiami was founded on the principle that the future of sensing is passive, edge-based, and

infrastructure-light,” said Amitav Mukherjee, CEO at Tiami Networks. “By combining our PolyEdge sensor with SEMPRES’s resilient 5G platform, we’re enabling a new category of deployable ISAC capability – designed for fast-moving missions and complex airspace.”

Tiami’s ISAC technology, demonstrated live in the vicinity of Fort Liberty, Fort Huachuca, Barksdale Air Force Base, and Tinker Air Force Base, leverages the 5G spectrum as a signal of opportunity – allowing for passive UAS tracking without emitting detectable signals. This stealth-mode capability makes the system ideal for contested and denied environments, where traditional radar or RF sensing can be spoofed or jammed.

“The Golden Dome depends on American technology that can sense and act faster than the threat,” said Rob Spalding, CEO of SEMPRES. “This partnership gives us just that: AI-powered detection at the edge, with zero reliance on fragile networks or cloud links. It’s built to survive and win in the fight.”

The Tiami–SEMPRES solution enables U.S. forces to:

- Detect and track Group 1–2 drones and other low-altitude aerial targets at up to 5 km range using ambient 5G signals
- Operate entirely passively, making detection nearly impossible by adversaries
- Visualize threats via TAK or web dashboards with Cursor-on-Target integration
- Deploy a layered defense architecture on a single platform: sensing, compute, 5G, and countermeasures – all fused at the edge

Built to run in austere, disconnected, and contested environments, the system supports an expanding set of missions: counter-UAS, base defense, ground surveillance, expeditionary operations, and critical infrastructure protection.

About Tiami Networks

Founded by seasoned professionals from industry leaders such as Ericsson, Verizon, Qualcomm, and Meta, Tiami Networks is a visionary startup based in California. With deep-rooted expertise in telecommunications, its team is dedicated to revolutionizing the global 5G landscape. Its mission is to transform the 5G system into the world’s largest distributed radar network, harnessing this technology for consumer and commercial applications. By integrating advanced AI and radar technology with 5G networks, Tiami Networks aims to create smarter, safer, and more efficient environments, enhancing connectivity and data analysis capabilities across various sectors. Our commitment to innovation positions us at the forefront of the next wave of technological advancements, poised to redefine the future of communication and environmental intelligence. Learn more at tiaminetworks.com.

About SEMPRES

SEMPRES delivers mission-critical connectivity with private 5G, high-performance edge compute, hybrid cloud, and a SATCOM gateway—all in one easy-to-operate, hard-to-destroy system.

Whether the mission requires a permanent network or one that's fully operational in 10 minutes, SEMPRESS ensures resilient, secure communication when it matters most. Deploy Anywhere. Operate Everywhere. Built to Survive. Learn more at sempress.ai.

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