

March 25th, 2025

Quantum Systems Unveils Vector AI sUAS at AUSA Global Force in the U.S.

AI-Driven, Tactical eVTOL sUAS Defines New Standard in ISR Operations for Maneuver Forces

HUNTSVILLE, Ala., USA, March 25th, 2025 –Quantum Systems, a leader in electric vertical take-off and landing (eVTOL) aerial intelligence solutions, today unveiled Vector AI – the next-generation, AI-powered, extended-endurance tactical sUAS – at AUSA Global Force Symposium & Exposition 2025.

Designed for frontline forces operating in dynamic and contested environments, Vector AI supports advanced intelligence, surveillance, and reconnaissance (ISR) capabilities with autonomous mission execution, superior electronic warfare (EW) resilience, and real-time AI-driven situational awareness. These capabilities ensure warfighters maintain a decisive intelligence advantage in high-tempo operations.

"This platform is designed to meet the evolving needs of allied forces for software defined defense. It delivers advanced ISR capabilities in the most challenging battlespaces. Its interoperability and seamless battlefield integration provide a decisive advantage to forward-deployed military units and operational superiority during complex missions," said Sven Kruck, Co-CEO at Quantum-Systems GmbH.

"Vector has already proven itself in global military operations, and this latest iteration builds upon those battlefield insights to deliver the most capable mid-range eVTOL sUAS available today," said Dave Sharpin, CEO of Quantum-Systems Inc. "With extended endurance, AI-driven mission autonomy, and modular, MOSA-compliant design Vector AI provides unmatched flexibility and adaptability for modern military forces operating in dynamic and contested environments."

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Vector AI: Built for the Fight

Designed for maneuver forces conducting reconnaissance, surveillance, and target acquisition (RSTA) missions, Vector AI introduces significant advancements over previous generation sUAS:

- **Hardened Against GPS and Communications Denial – Visual Inertial Odometry (VIO) and Silvus Technologies’ Spectrum Dominance capabilities** equips users with resilient navigation and command and control in contested environments, strengthening operational resilience and mission success even in GPS and communications-denied areas.
- **Mission-Adaptable with Modular Payload Integration – MOSA (Modular Open Systems Approach) compatible,** the enhanced Ethernet-based, open-architecture payload bay seamlessly integrates third-party ISR, SIGINT, and EW sensors, enabling rapid mission customization and future-ready scalability.
- **Autonomous AI-driven ISR – Dual onboard NVIDIA Jetson Orin processors** enable real-time object recognition, automated target tracking, and adaptive mission execution, reducing operator workload and increasing mission effectiveness.
- **Seamless Multi-Domain Interoperability – Vector AI is fully compatible with ATAK (Android Tactical Assault Kit), Cursor-on-Target (CoT), and leading battlefield management systems (BMS),** ensuring real-time situational awareness and coordinated targeting across joint and coalition forces.
- **Extended Endurance for Greater Time on Station – A redesigned eVTOL power system and advanced energy management** enable over three hours of continuous flight, ensuring longer ISR coverage with fewer system swaps, keeping operators focused on the mission.

Built for rapid deployment and sustained operations in austere environments, Vector AI delivers AI-powered ISR at the tactical edge. Its compact, lightweight airframe facilitates ease of transport and deployment, while its enhanced autonomy enables warfighters to focus on the mission—not the system.

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AUSA Global Force Debut & Demonstration

Vector AI will be showcased at the Quantum Systems booth #735 at AUSA Global Force Symposium & Exposition 2025 in Huntsville, Alabama, where attendees can explore how Vector AI and Quantum Systems' interoperable Family of Systems are redefining tactical ISR for the modern warfighter.

About Quantum Systems

Quantum Systems is at the forefront of AI-powered aerial robotics, developing a family of smart systems that go far beyond traditional drones. Our advanced electric vertical take-off and landing (eVTOL) small Unmanned Aerial Systems (sUAS), combined with our Drone Port solution, are designed to deliver automated actionable aerial intelligence. Built on a foundation of in-house software and AI, our systems transform aerial data into critical insights, empowering decision-making across security, defense and public safety, as well as for the commercial, industrial and GIS sectors.

Featuring cutting-edge technology like edge computing and real-time AI-driven data processing, Quantum Systems enables operators to make informed decisions with unmatched speed and precision. Our solutions bring aerial intelligence to your fingertips, automating the entire process—from deployment to data analysis.

Founded in 2015 and headquartered at Special Airport Oberpfaffenhofen near Munich, Quantum Systems operates globally with locations in the United States, Australia and Ukraine. Our German-engineered technology is trusted worldwide, paving the way for a new era of data-driven solutions.

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