



Mobilicom and Aitech introduce SA Compute PRO-AT, part of the SA Compute PRO line of secured autonomy computers. SA Compute PRO-AT integrates advanced cybersecurity with military and aviation grade mission computing, protecting systems through real-time threat detection, intrusion prevention, and secure data management.

Designed for Group 2 and Group 3 drones, UGVs, and USVs, it combines AI-driven processing with MIL-STD-810 and IP65 ruggedization to ensure performance in harsh environments. FACE compliance supports aviation integration.

SA Compute PRO-AT reduces integration burden and delivers a complete, turnkey solution for defense organizations requiring secure, resilient, and mission-ready computing.

HIGHLIGHTS

- **Advanced, Proactive Cybersecurity**
- **Real-Time Threat Detection & Response**
- **High-Performance AI-Driven Processing**
- **Ruggedized, All-Weather Resilience**

KEY BENEFITS

Proactive Threat Detection & Response

Automated alerts and AI-driven monitoring identify and neutralize cyber threats in real time.

Enhanced System Integrity

Secure configurations, process monitoring, and application control prevent unauthorized access, malware, and system tampering.

Mission Continuity

Cybersecurity measures promote operational stability even in contested environments.

Streamlined Compliance & Insights

Automated security logs and auditing capabilities streamline regulatory compliance and provide actionable insights.

Optimized AI-Driven Performance

High-speed processing accelerates real-time analytics and rapid decision-making.

Aviation-Grade Reliability

Military and aviation-grade compliance with MIL-STD-810 ruggedization, shock resistance, and temperature tolerance for extreme conditions.



WHAT IS SECURED AUTONOMY?

Mobilicom's Secured Autonomy framework protects uncrewed systems across three pillars: Secured Autonomous Platforms, Secured Autonomous Fleets, and Secured Communications & EW Protection. Together, these pillars deliver end-to-end resilience for drones and robotics.

The SA Compute PRO line falls under the Secure Platforms pillar, combining advanced cybersecurity with AI-based mission computing. Developed with leading partners, it ranges from rugged, military grade systems to modular, standards-based designs with UAS certifications—delivering secure, resilient, and mission-ready autonomy. Visit securedautonomy.com to learn more.

KEY FEATURES

Stateful Firewall: Controls and restricts network traffic to allow only authorized communications.

Application Control: Restricts system operations to trusted applications, preventing the execution of malicious or unauthorized software.

Hardened OS Security: Implements advanced security configurations to minimize vulnerabilities, enhancing resistance against cyberattacks.

Threat Detection: Continuously monitors for unauthorized access, detecting and mitigating cyber threats in real time.

Threat Response: Leverages AI algorithms to identify and respond to evolving cyber threats, supporting secure autonomous system operations.

Real-Time Activity Monitoring: Provides continuous oversight of system processes to detect anomalies and ensure secure operations.

Audit & Compliance Logging: Maintains detailed, tamper-resistant logs for regulatory compliance, forensic analysis, and security audits.

AI-Driven Processing Power: Delivers high-performance data analysis for rapid decision-making in mission-critical environments.

High-Speed, Secure Data Handling: Supports fast, efficient data processing while maintaining strong security protocols to protect against breaches.

Military-Grade Engineering: Designed to withstand extreme environmental conditions, including shock, vibration, and dust/water exposure (MIL-STD-810-rated).

CYBERSECURITY SPECIFICATIONS

| | |
|------------------------------------|---|
| <p>Host Security</p> | <p>Real-Time Reporting</p> <ul style="list-style-type: none"> • Real-Time System security health reporting with secured API <p>Platform Integrity</p> <ul style="list-style-type: none"> • Prevents modification of files indicated by the OEM <p>Secured Logger</p> <ul style="list-style-type: none"> • Embedded Logging Module with dedicated self-protection <p>Threat Detection and Response</p> <ul style="list-style-type: none"> • Detects Deviation from a security policy and allows autonomous response when event happens <p>File System Encryption</p> <ul style="list-style-type: none"> • Sensitive data encrypted to secure against tampering and access <p>Process Monitoring</p> <ul style="list-style-type: none"> • Monitors processes, detects anomalies, and ensures corrective actions promptly <p>System Hardening</p> <ul style="list-style-type: none"> • Enhances operating system resilience by reducing vulnerabilities against attacks <p>Root Access Monitoring</p> <ul style="list-style-type: none"> • Monitors root access to prevent unauthorized system changes |
| <p>Network Security</p> | <p>Stateful Firewall</p> <ul style="list-style-type: none"> • Precisely controls network traffic, allowing only authorized communications <p>Intrusion Detection and Prevention</p> <ul style="list-style-type: none"> • Detects threats early, enacts countermeasures to prevent exploitation <p>Secure Communication Protocols</p> <ul style="list-style-type: none"> • Enforces secure protocols, protecting in-transit data from tampering <p>Protocol Enforcement</p> <ul style="list-style-type: none"> • Filters enforce protocol rules, eliminating attacks from manipulated protocols |
| <p>Application Security</p> | <p>Application Behavior Enforcement</p> <ul style="list-style-type: none"> • Restricts application behavior, blocking attacks manipulating system operations <p>Behavior Monitoring</p> <ul style="list-style-type: none"> • Monitors application behavior, detects deviations, and identifies breaches <p>Application Shield</p> <ul style="list-style-type: none"> • Secure OEM Applications from malicious attacks |

MISSION COMPUTING SPECIFICATIONS

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|----------------------------------|---|---|---|
| <p>Processing</p> | <p>System-on-Module</p> <ul style="list-style-type: none"> NVIDIA Jetson Xavier™ NX (Jetson AGX Xavier & AGX Orin option) <p>GPU</p> <ul style="list-style-type: none"> Cores: 384 CUDA cores, 48 Tensor cores Performance: 21 TOPS INT8 <p>CPU</p> <ul style="list-style-type: none"> 6-core ARM v8.2 (NVIDIA Carmel) <p>Deep Learning Acceleration</p> <ul style="list-style-type: none"> Two NVIDIA NVDLA engines | <p>Environmental Ruggedization</p> | <p>Temperature</p> <ul style="list-style-type: none"> Operating: -25°C to 55°C Storage: -40°C to 80°C <p>Ingress Protection</p> <ul style="list-style-type: none"> IP65 <p>Humidity</p> <ul style="list-style-type: none"> 5-95% non-condensing <p>Sealing</p> <ul style="list-style-type: none"> All-weather IP65 dust and water resistant <p>Grade</p> <ul style="list-style-type: none"> Ruggedized per MIL-STD-810 |
| <p>Memory and Storage</p> | <p>RAM</p> <ul style="list-style-type: none"> 8 GB LPDDR4x @ 51.2 GB/s <p>Storage Options</p> <ul style="list-style-type: none"> NVMe SSD, 16 GB eMMC, optional Micro SD card | <p>Video and Graphics</p> | <p>Video Capture</p> <ul style="list-style-type: none"> SDI (SD/HD), Composite (8 channels) <p>Hardware Video Processing</p> <ul style="list-style-type: none"> H.264/H.265 encoder/decoder |
| <p>Power</p> | <p>Power Modes</p> <ul style="list-style-type: none"> 10W, 15W (default) <p>Power Supply</p> <ul style="list-style-type: none"> 11-34 VDC, reverse polarity protection | <p>Standards Compliance</p> | <ul style="list-style-type: none"> NDA, MIL-STD-810H, MIL-STD-704, MIL-STD-461 |
| <p>Input/Output (I/O)</p> | <p>Ethernet</p> <ul style="list-style-type: none"> 1x Gigabit Ethernet <p>USB</p> <ul style="list-style-type: none"> 2x USB 3.0, 2x USB 2.0 <p>Display Interfaces</p> <ul style="list-style-type: none"> HDMI (1920x1080 @ 60p) <p>Serial Ports</p> <ul style="list-style-type: none"> 2x RS-232/422/485 (configurable) <p>CANbus</p> <ul style="list-style-type: none"> 1x CANbus <p>Discrete I/O</p> <ul style="list-style-type: none"> 3 x GPIO IN/OUT | <p>Dimensions (L x W x H)</p> <p>Weight</p> <p>Modular Design</p> <p>Open Standards Alignment</p> | <ul style="list-style-type: none"> 103.5 mm x 100 mm x 58 mm 600 g Up to 2 optional expansion modules FACE, SOSA, VITA |

