

## RUGGED COMPUTING SOLUTIONS FOR **HIGH-ALTITUDE** AND EXTREME AEROSPACE ENVIRONMENTS

*Secure Solutions for Airborne Applications*

Aerospace operations demand reliable, high-performance technology capable of enduring extreme conditions. Our supplier Core Systems offers a range of rugged computing products designed to meet the critical requirements of aerospace environments, ensuring seamless operation at high altitudes, across temperature extremes and under intense vibration.

### **Key Products for Aerospace Applications**

**Application-Specific Designs**

#### **1U & 2U Rugged Rackmount Servers**

- **Compact and Durable:** Built with reinforced materials for vibration resistance.
- **Advanced Thermal Management:** Optimised airflow and cooling for high-altitude operations.
- **Customisable Configurations:** Tailored to mission-specific needs, including AI capabilities and edge computing.

#### **Rugged Displays and Panels**

- **High Brightness and Clarity:** Perfect for use in cockpits or control rooms.
- **Resistant to EMI and RFI:** Ensures clear communication in challenging electromagnetic environments.
- **Touchscreen Options:** Designed for easy interaction, even with gloves.

#### **Embedded Mission Computers**

- **Lightweight and Compact:** Ideal for UAVs and onboard systems.
- **Built for Extreme Temperatures:** Performs reliably from sub-zero to scorching conditions.
- **Real-Time Data Processing:** Supports critical decision-making in flight.

#### **Rugged Data Storage Solutions**

- **Secure and Reliable:** Protects sensitive aerospace data with advanced encryption.
- **Shockproof Design:** Ensures data integrity during rapid movement and turbulence.
- **Hot-Swappable Drives:** Enables fast and easy maintenance during operations.

## Find Your Solution for Aerospace Applications

Core delivers high-performance, customisable solutions designed to meet the rigorous demands of aerospace applications. With proven reliability trusted by top aerospace organisations, these products support mission-critical tasks with unwavering precision. End-to-end support ensures that from initial design to final integration, your technology performs flawlessly at every stage.

- **Tailored Solutions:** Each product is customisable to fit the specific needs of aerospace applications.
- **Proven Reliability:** Their products are trusted by aerospace organisations for mission-critical tasks.
- **End-to-End Support:** From design to integration, Core Systems ensures your technology performs at every step.

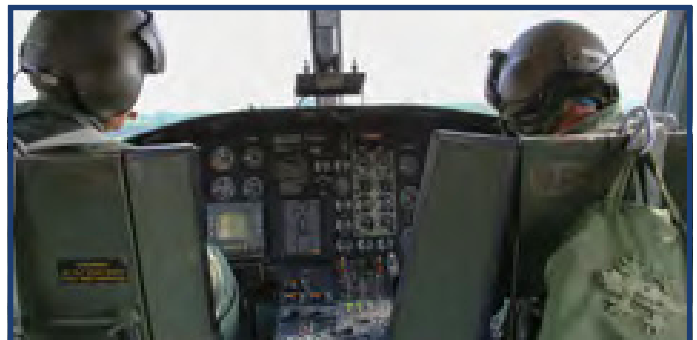
### Key Features

#### Modern Solutions You Can Trust



#### **MIL-SPEC Tested**

Systems designed to withstand temperature extremes, altitude changes and vibration, ensuring reliable operation.



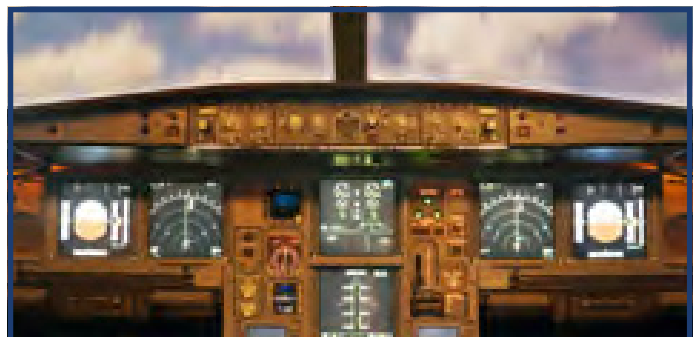
#### **SWaP-Optimised**

Core's solutions minimise size, weight, and power consumption while maximising capability and performance, perfect for UAVs and manned aircraft



#### **Real-Time Data**

Advanced computing systems that process and relay mission-critical data to pilots and crew in real time.



#### **EMI/EMC Shielding**

Electromagnetic interference (EMI) and compatibility (EMC) shielding to prevent cross-signal disruption in military avionics.

## Applications & Solutions

Let's Design a Solution That Fits Your Application



### Avionics Systems

Designed for navigation, communication and mission planning, these systems enable accurate flight operations and data integration.



### Airborne Surveillance

Integrate with radar and sensor technology for real-time battlefield intelligence.



### Mission Planning

Ensure seamless, secure communication between air, ground and naval forces during complex missions.



### Flying Data Centres

Their rugged computing nodes can quickly turn aircraft into an asset that can provide valuable real-time data back to base.



**Consult** — **Collaborate**  
**Create** — **Construct**  
**Design** — **Develop**  
**Invent** — **Innovate**  
**Supply** — **Support**



## About Us

Unitronix are an innovative engineering-capable distributor and manufacturer of rugged, embedded computing solutions for military, aerospace and high-end industrial applications. Our own innovative Rugged Embedded Nodes - REN are reusable, reconfigurable, recyclable, cutting carbon footprint and saving cost.



**DEFENCE | SPACE | AI | SIGNAL PROCESSING | TRUSTED EMBEDDED | C6-ISR/EW**

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