

# CUSTOMIZED RUGGED PCS FOR MISSION-CRITICAL AIRCRAFT SYSTEMS

## Challenge

The Turkish military requires an upgrade to its onboard computing systems for military aircraft to improve real-time responsiveness in mission-critical operations. The solution needed to be compatible with Air Transport Rack (ATR) mounting standards, support military-grade circular power connectors, and include a GPU card for accelerated computing. This enhancement would enable faster data processing, allowing pilots to quickly receive actionable insights and coordinate efficiently with commanders through real-time, data-driven decisions.

## Solution

SP Integration demonstrated its adaptability and commitment to customization by supplying a rugged PC designed for military applications. The system was equipped with a military-grade circular power connector and included reserved power capacity for GPU integration, enabling it to support intensive computing workloads. This solution was tailored to meet the client's specific operational requirements, ensuring high performance, reliability, and scalability in demanding environments.



## Requirements

- Intel 12th Gen desktop CPU (energy efficient model)
- 128GB DDR5 RAM
- RTX A2000, 6GB GDDR6 VRAM PCIe
- AC100 with military circular connector

## Benefits

- **Rugged PC Design**  
Durable, military-grade rugged PC built to withstand harsh operational environments
- **Military-Grade Circular Power Connector**  
Integrated circular power connector to meet military standards for reliable power delivery
- **Reserved Power for GPU Integration**  
Equipped with dedicated power capacity to support high-performance GPU cards for intensive computing needs

