

# ROBUST & RUGGED INTERCONNECT SOLUTIONS FOR UAS

TAILORED INTERCONNECT SOLUTIONS  
FOR TIME-SENSITIVE AEROSPACE  
PRODUCT LAUNCH



## KEY HIGHLIGHTS

### COLLABORATION



Regular updates and communication were maintained to leverage the expertise of both teams, resulting in a tailored and effective solution.

### PERFORMANCE



Cable assembly was designed with a focus on low loss (EMI Protection), optimal weight management, and easy installation, addressing the critical needs of the UAS project.

### QUICK TURNAROUND



In-house team provided detailed drawings promptly, allowing for swift assembly, comprehensive testing, thorough documentation, resulting in a plug & play solution delivered on schedule.

## OVERVIEW

PIC Wire & Cable was approached by a leading OEM to develop a high-frequency interconnect solution for an Unmanned Aircraft System (UAS). This UAS, designed for reconnaissance and surveillance, provides critical intelligence information about enemy activities. Key features of the UAS include vertical takeoff and landing (VTOL) capabilities, contested logistics, on-the-move command and control, swappable payloads, unmatched endurance and useful load, multi-domain operations, and a modular open system.

## CHALLENGE

Create an interconnect solution that could meet stringent performance requirements in demanding aerospace environments while adhering to their tight product development

## SOLUTION

The PIC team quickly generated a custom drawing to meet the specified requirements:

- **Low Loss (EMI Protection):** Ensuring minimal signal interference for high-frequency transmission.
- **Weight Reduction:** Utilizing lightweight materials to enhance UAS performance.
- **Ease of Installation:** Designing for a flexible bend radius to simplify the installation process.

After obtaining design approval, skilled technicians meticulously crafted the cable assembly. Each cable underwent rigorous testing to ensure compliance with system specifications. Detailed documentation, including performance metrics, lot traceability and serialization were maintained through the process. The ready-to-install assemblies were delivered within the required timeline, facilitating seamless integration into the UAS.

This successful collaboration not only reinforces PIC's reputation for delivering high-quality & innovative solutions, but paved the way for future partnerships in aerospace and defense sectors.

## WHY CHOOSE US



“ WITH THEIR SWIFT DESIGN, CRAFTSMANSHIP, TESTING, AND DELIVERY I NEVER HAD TO WORRY ABOUT ANY DELAYS FROM PIC WIRE & CABLE ”