

AirBorn FOCuS Rugged Active Optical Cables >

Optimized for mission-critical reliability and flexibility, AirBorn Fiber Optic Copper Solution (FOCuS) Active Optical Cables are expertly engineered for aerospace, defense and space environments, supporting both copper and fiber solutions. These cable assemblies integrate a space-rated optical transceiver directly into the connector housing and deliver up to 14Gbps per lane with superior electromagnetic interference (EMI) protection and substantial weight savings. Factory pre-terminated and environmentally sealed, AirBorn FOCuS Active Optical Cables enable hassle-free installation and long-term durability, even under the harshest conditions.



ADVANTAGES AND FEATURES

Saves PCB space and reduces design complexity

These cables eliminate the need for added board-level transceivers since they are built into the connector, overcoming space constraints and design limitations.

Reduces the risk of data loss or system failure

Optical signal transmission provides inherent immunity to EMI, which is crucial for sensitive and data-intensive systems; environmental sealing helps protect from moisture, dust and outgassing contamination.

Supports weight reduction and enhances space efficiency

These cables are significantly lighter and smaller than traditional copper cable bundles.

Simplifies installation for time and cost savings

Factory pre-terminated cables with a fully mated indicator and robust housing help ensure correct, reliable installation with minimal training or special tools.

Withstands vibration levels exceeding 85 g-force for spaceflight and military qualification

Launch-ready and vibration-resistant, these cables are ideal for space and defense applications.

Maintains stable performance for ruggedized use in military, aerospace and industrial environments

Metal backshells, multiple points of contact and robust materials provide exceptional reliability.

Meets NASA EEE-INST-002 standards

Radiation-hardened and outgassing-compliant, these cables are suitable for space-rated applications in extreme environments.

Enables design flexibility

To overcome design constraints, AirBorn FOCuS technology is available on AirBorn verSI High-Density Connector or AirBorn MicroSI High-Speed Micro-D Connector platforms and is adaptable to the following products: AirBorn M Series MIL-DTL-83513 Micro-D Connectors, AirBorn N Series MIL-DTL-32139 Nano-D Connectors and hybrid assemblies. Vertical board-mount, right-angle, I/O panel and cable-to-cable options are also offered.

MARKETS AND APPLICATIONS

Aerospace

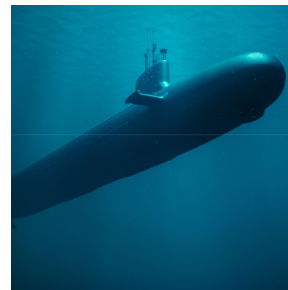
Airframes
Helicopters
Launch vehicles
Satellites

Defense

Missile systems
Submarines



Helicopters



Submarines

www.molex.com