Photonic Interconnect Solutions

Unlock the huge bandwidth of miniaturized opto-electronic technologies to dramatically reduce size, weight, and ruggedness of mission-critical interconnect systems

Glenair leverages its extensive portfolio of military and aerospace interconnect products to bring you ruggedized opto-electronic solutions, converting signals between the electrical domain and the fiber domain. These opto-electronic products are designed for harsh military/aerospace system and subsystem environments and will operate reliably over very wide temperature ranges and high shock and vibration conditions; they have been optimized to minimize size, weight and power and offer electrical-to-fiber conversion for Ethernet, video, signal aggregation and high-speed digital signals.

Glenair also offers integration of electronics or opto-electronics into rugged connector packages and cable assemblies per specific customer requirements. We offer rapid response in-house electrical/PCB design, and mechanical connector/backshell engineering from our vertically intergrated factory. Our product portfolio is constantly evolving. Please contact Glenair for the latest developments, or custom solutions.

ADVANTAGES OF GLENAIR OPTO-ELECTRONICS

- Reduced size, weight, and power consumption
- Leverages the virtues of fiber optics: EMI immunity, network security, increased transmission distance
- Advanced management and control features
- High shock and vibration to support mil/aero applications
- Wide operating temperature range: -40°C to +85°C and beyond
- Designed IAW military and aviation requirements: MIL-STD-883, MIL-STD-461, DO-160 and others
RUGGEDIZED
Photonic interconnect solutions
contacts · connector modules · transceivers · SMPTE video · media converters · aggregators

SMALL FORM-FACTOR 10 GBPS HARSH-ENVIRONMENT PHOTONIC CONTACTS AND CONNECTORS

Transmitter and receiver contacts for use in ARINC 600 and D38999 avionics connectors
Size #8 cavity adapter kit for 1.25mm ARINC 801
Size #8 cavity adapter kit for ELIO® 2.5mm termini
2.5mm ELIO® Compatible D38999 Series III type

RUGGEDIZED 10 GBPS PCB-MOUNT PHOTONIC TRANSCIEVERS, TRANSMITTERS AND RECEIVERS

Shielded and radiation-tolerant PCB-mount transceivers
Dual transceivers, quad transmitters and quad receivers
RF-over-fiber for SATCOM and RF distribution systems
40 Gbps parallel optical transceiver

COPPER-TO-FIBER MEDIA CONVERTERS FOR ETHERNET AND VIDEO

Lightning-strike protected ARINC 801 F/O to D38999-type media converter
GFOCA fiber optic Ethernet media converter
DVI media converter

COPPER-TO-FIBER MEDIA CONVERTERS FOR SIGNAL AGGREGATION

Small form-factor low-speed signal aggregator
High-speed signal aggregator (cutaway view)
High-speed signal aggregator