



# Glenair®

## Composite Thermoplastic Connectors and Accessories

*Plus Composite Enclosures, Conduit Systems,  
Braided Shielding, Assembly Tools and More!*

United States ■ United Kingdom ■ Germany ■ France ■ Nordic ■ Italy ■ Spain ■ Japan

## Four Reasons to Choose Composites for Your Next Interconnect Application



*Glenair's composite interconnect components are manufactured from high-grade engineering thermoplastics for the toughest application environments. Specifically geared for high-performance air, sea, land and space applications, Glenair's line of composite connectors and backshells are ideally suited for systems which require electromagnetic compatibility, reliable environmental protection and long-term durability. Here's why:*

**Corrosion Resistance:** One of the most appealing attributes of composites is their unlimited corrosion resistance as compared to conventional metal materials. Aluminum interconnect components, for example, are subject to galvanic coupling which causes the material to be "sacrificed" to its cadmium/nickel plating. Since high-temperature composite plastic is not sacrificial to plating, finished products last longer, require less maintenance and so directly reduce the overall cost of ownership of the interconnect system.

**Vibration Dampening:** Unlike metals, polymer plastics are less subject to harmonic resonance due to their lighter weight and inherent attenuating properties. Which means threaded components made from these materials are far less likely to vibrate loose when subjected to prolonged periods of vibration and shock. Again, reduced maintenance and reduced cost of ownership are the major benefits realized by systems built from vibration dampening composite thermoplastics.

**Weight Reduction:** Composites offer increased strength at lighter weights. Weight savings for composites over aluminum are approximately 40% (depending on component design). Savings versus other materials are even more pronounced: up to 80% for stainless steel and brass. Composite materials directly reduce aircraft empty weights and increase fuel fractions—resulting in smaller, lower-cost aircraft that use less fuel to perform a given mission.

**Durability:** Glenair's line of composite thermoplastic interconnect components are cleverly designed to avoid many of the durability problems associated with conductive plated parts. Through the use of selective plating—which limits easy-to-scratch plated surfaces to the protected portions of the part—Glenair has effectively eliminated superficial damage to coupling nuts, saddle bars and box exteriors. The parts are free from visible wear-and-tear problems that forces premature replacement of backshells, connectors, box assemblies and other EMC interconnect components.