Glenair CostSaver Composite EMI/RFI Junction Boxes Design Guide - Step One

Step One: Specification of a Junction Box Assembly Begins with the Selection of the Right Size Box—Both in Terms of the Internal Volume and the External Package Size.

lenair's CostSaver Composite Junction
Boxes are ideally suited for use in harsh
environments where weight savings
and resistance to electromagnetic interference,
corrosive fluids, high temperatures, shock and
vibration are critical requirements.

Compared to aluminum, brass or steel boxes, Glenair's "CostSavers" provide equal or improved RFI/EMI protection, with considerable savings in corrosion-related maintenance.

Glenair boxes are outfitted with captive stainless steel cover screws for additional long-term corrosion resistance.

In retrofit applications, select the most efficient size to fit the existing electronics package. More than one box can sometimes be used efficiently if the electronics package can be split between two or more boxes. For new application designs, please consult the factory for advice on maximizing the use of internal package space.



Small Three-Legged Box (Series 140-106)

The latest box design from Glenair is ideally suited for reduced package-size junction box applications such as LED lighting, switches and other single component applications. Designed to accommodate a 3.5 inch internal mounting plate, the three-legged box is currently in use in a wide range of US Navy applications. Three sides of the hexagonal box, as well as the lid, can accommodate bulkhead fittings. Materials and performance ratings are identical to the other boxes in the Glenair composite box line.

Multi-Port Split Shell Box Series

Glenair now produces two configurations of multi-port split shell composite thermoplastic junction boxes, our 140-200 octagonal design box and our 140-203 twelve port rectangular box. Both designs are equipped with 316L stainless steel fasteners for corrosion resistance. The split-shell design affords easy access for maintenance or access to stored cable loops.



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Glenair CostSaver Rectangular Composite EMI/RFI Junction Boxes **Design Guide - Step One**



Ultra-Miniature Junction Box (Series 140-074)

Glenair's smallest and lightest box and is designed for non-environmental module-to-chassis applications using MTC connectors. Cover snaps in place without the use of fasteners.





Mini Junction Box (Series 140-100)

Typically used in controlled (non-environmental) applications (such as instrument cases) or as a junction box for miniature connectors.

Small Junction Box (Series 140-101)

Designed for use in harsh environmental applications (shipboard weather deck, up-mast, etc.) which require EMI/RFI protection and resistance to vibration and shock.





Medium Junction Box (Series 140-102)

Used in high-performance military and commercial applications as a terminal block enclosure, interconnect junction box or instrument case. Size is suitable for larger shell size connectors and fittings.

Large Junction Box (Series 140-103)

This large volume box is geared for cable storage and for use in large electrical and optical interconnect junctions. Top and side surface area accommodate large numbers of circular and rectangular connectors and fittings.





Small Low-Profile Junction Box (Series 140-104)

Ideal for use in limited size and space applications, this composite box is geared for fiber optics and other miniaturized interconnect components. The box has been used extensively in high-performance air and space retrofit applications

Medium Low-Profile Junction Box (Series 140-105)

This low-profile box is geared for tight spaces, such as under-seat cockpit and in-flight-entertainment systems. The box features three (optional) internal dividers for increased isolation of radiated EMI.





Jumbo Junction Box (Series 140-107)

This extra large box is geared for terminal junctions as well as integration of large pieces of electronic and electrical equipment.

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