



QuickFusio™ 10Gb/s

QUICKFUSIO™ 10Gb/s - FASTER CONNECTION

To respond to the growing demand in civil aerospace for faster digital networks, Radiall developed a 10 Gb/s offer. Combining high data rates with the benefits of a miniature connector, Radiall's QuickFusio™ 10 Gb/s is the perfect solution for cabin IFE, flight management systems and avionic networks.



Radiall's QuickFusio™ Ethernet range now includes an innovative 10 Gb/s solution, which provides outstanding signal integrity performance while minimizing cross-talk side effects.

QuickFusio™ 10 Gb/s meets cat6A requirements and offers excellent high frequency and digital performance. Capitalizing on its expertise and ability to innovate, Radiall specifically designed a new insert, which provides efficient EMI shielding between the pair of cables. The numerous simulations and tests conducted proved QuickFusio™ 10 Gb/s to effectively minimize cross-talk. The optimized design and unique features of QuickFusio™ 10 Gb/s prevents perturbation from the environment, ensures reliability and maintains signal integrity.

To meet all the requirements of Ethernet applications, Radiall integrated high speed data link technology into one of its most innovative connectors. This lightweight, miniature solution combines high performance with competitive costs and features The Radiall Touch - one finger mating-in a snap!



Features & Benefits

- 10 Gb/s Ethernet
- Cat6A performance
- Excellent signal integrity
- Lightweight
- Miniature connector
- Simple wiring
- Competitive cost

Applications

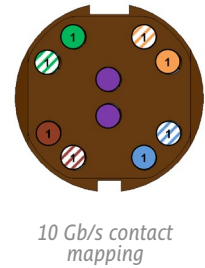
- Avionic networks
- Cabin management systems
- Digital video systems
- Flight management systems
- In-flight entertainment (IFE) systems

Configurations

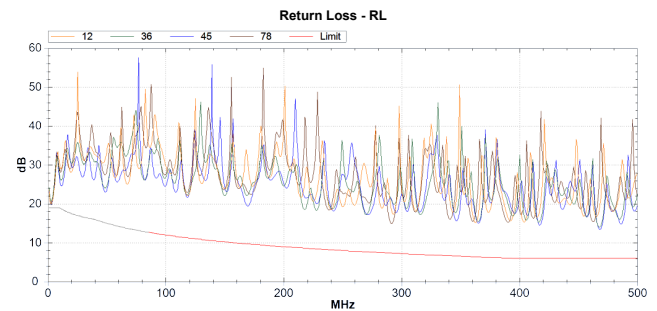
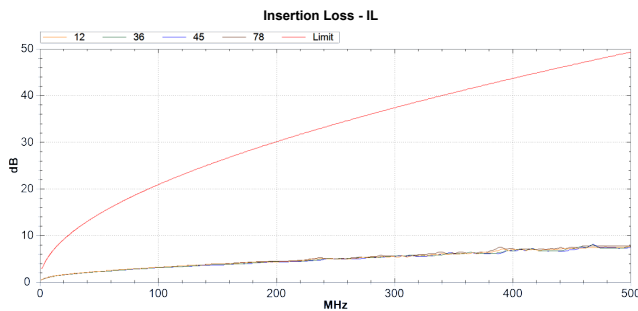
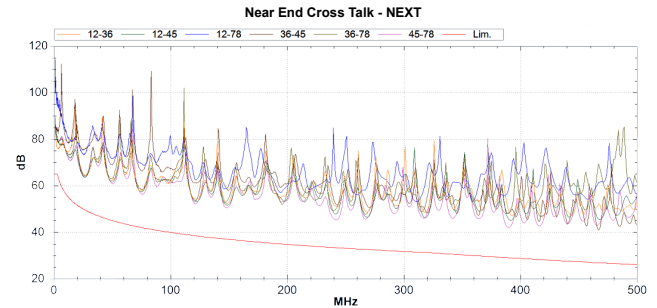
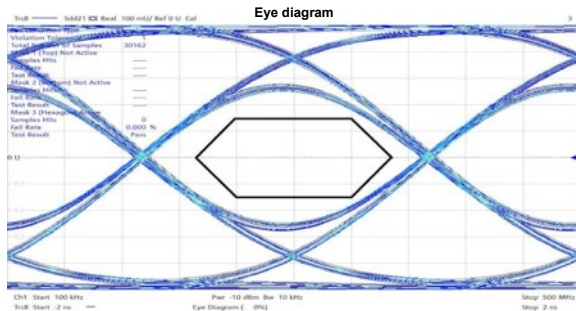
- QuickFusio™ banding platform
- Dedicated insert:
 - 8 cavities for HSDL cable and 2 spare cavities
 - #23 contacts Single Ethernet cable

Test Protocol and Data Transmission Characteristics

Based on ARINC specification 800 part 4, a 13.8 m harness with 6 QuickFusio™ connections and Gore Ethernet cable RCN9047-26 was tested.



To achieve the channel cat6A performance level following TIA568 C.2 specification, a specific insert layout configuration was developed which preserves the signal integrity while minimizing cross talk, insertion loss and return loss effects.



QuickFusio™ Series

Materials and Finishes	
Shell	High grade thermoplastic, nickel plated
Insert retention clip	Beryllium copper
Contacts	Copper alloy, gold over nickel
Inserts	High grade thermoplastic with metallic retention clips
Slide lock (plug)	High grade thermoplastic
Mounting plate (receptacle)	Stainless steel

