Fiber Optic Harnesses and Complex Optical Systems

Radiall offers a mix of Physical Contact, MT ferrule and Expanded Beam interfaces to meet customers’ requirements for optimal performance, reliability and ease of installation.
Full cable assembly and harness capabilities
• From design to delivery of high-end optical systems
• Wide range of Mil-Aero grade fiber optic cables, termini and connectors including optical multipin rectangular and circular connectors
• Synergy with D-Lightsys® active optical devices fully qualified for harsh environments
• Hermetic connectors
• Hybrid harnesses mixing optical and electrical signals
• Backshells and fiber management and accessories
• Field kits, test & maintenance solutions and customized training
• Manufactured and fully tested in AS9100 assembly lines

Harsh environment FO connectivity
At Radiall, we can terminate, assemble and test the most popular optical interfaces with PC, UPC and APC polishing processes
• Ruggedized Fiber Optic contacts: LuxCis® ARINC 801/EN4639 with its large range of rectangular (EPX®, EN644 connectors, QM, QuickFusio™, NSX/ARINC 600 connectors) and circular connectors, (MIL-DTL-38999 type, LxC-R®) and ABS1379/EN4531 contact
• High density MT based interconnects for harsh environments: C-MTitan™ and Q-MTitan™
• Various Expanded Beam solutions: Tactical EB cable assemblies MIL-DTL-83526, EB-LuxCis®, EB contacts
• Simplex and duplex ruggedized LC, SC and ST connectors

End-to-End Solution Provide
With over 40 years’ of experience in manufacturing Fiber Optic solutions, Radiall delivers high quality harnesses and complex optical systems including D-Lightsys® active devices, ruggedized Fiber Optic interconnect solutions and multipin connectors.

Radiall’s broad range of reliable and robust Fiber Optic products feature cutting edge technology in order to support harsh and demanding environments.

The Fiber Optic portfolio is based on complementary optical technologies: Physical Contact (PC), including best in class LuxCis® ARINC 801, High Density MT ferrule and Expanded Beam (EB) technology.

- PC connectors align and bring the 2 precision and polished fiber ends into intimate contact to minimize signal losses and provide the best optical performance.
- MT ferrules align 12 fibers or more in a 7x8x3mm package for very dense connectivity. Radiall’s ruggedized solution incorporates the MT ferrule for high speed communication in stringent applications.
- EB connectors utilize lenses to collimate and refocus the light from one fiber to the other. The key benefit is that there is no contact between the optical surfaces, which reduces potential damage to the termini. Additionally, the signal becomes expanded and makes the connection less sensitive to contamination, which leads to a simplified cleaning process.

To provide local support to customers and provide superior service, Radiall has qualified AS9100 certified manufacturing lines and strategically placed design centers across the globe to enable direct interaction between our engineers and our customers.

Radiall is your partner for your optical links with optimal performance and ease of installation.