

Ready for NEXT generation

LEONI SFP+ assemblies

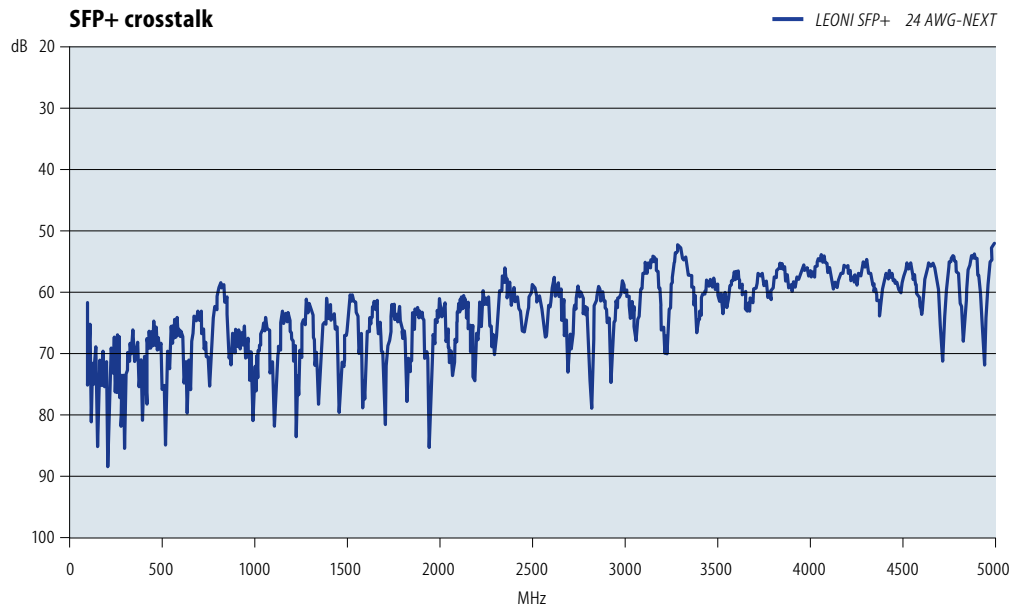
- Industry leading NEXT and insertion loss performance
- Supporting 10 Gb/s over 7 m (23 ft)
- Excellent EMI-screening
- Strain relief of minimum 250 N
- Connector designed for one-hand operation

The LEONI SFP+ cable assemblies are designed for the next-generation Small Form Factor Pluggable plus (SFP+) I/O interconnect, which minimises size, cost-, and power of network ports used in high density data center and high performance computing environments. The LEONI assemblies have proven to offer significant price performance, size and flexibility benefits compared to fiber optics and meet and exceed the specifications under development in the Small Form Factor Committee (SFF) including Annex E: SFF-8431 SFP+ Direct Attach Cable Specifications "10GSFP+Cu". Network protocols such as 10 Gb/s Ethernet, 8.5 Gb/s Fibre Channel and 10 Gb/s Fibre Channel are all supported with the SFP+ copper assemblies.

The unique SFP+ plug design's key feature is a completely EMI optimised die cast housing with no open and/or emitting areas. For the safety and functionality the EMI spring fingers are firmly attached to the back shells. The innovative release mechanism incorporates an easy removal pull release. The inner and outer crimp rings provide electro-mechanical robustness with 360 degree braid and shield contact and superior cable retention performance and elimination of conductor pistoning. Signal integrity testing is validated after extensive cable flexure.

At frequencies in the GHz range, the manufacturing processes and the cable materials become the dominant performance factors. There are no short cuts. LEONI has made the investments in equipment and material sciences to offer the next generation products today. The LEONI SFP+ cable assemblies are constructed utilising *ParaLink* cables and the advanced LEONI SFP+ plug design terminated in an automated assembly process. Optimal cable assembly transmission performance is achieved by controlling the cable and connector paddle card design tolerances, incorporating automated laser stripping and computer controlled soldering as well as in-process monitoring and testing. The LEONIZELL dielectric technology enables the cable's outer dimension to be reduced to a diameter of 3.5 mm (0.138 in) for the 32 AWG assembly, enabling optimum flexure performance over a small bending radius, while maintaining up to a 10 percent lower insertion loss than the industry average. All cable assemblies are available with an outer jacket of either halogen or lead-free proprietary elastomer, which is certified according to UL 13 CL2 in compliance with CSA FT4.

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LEONI ParaLink SFP+ cable assembly NEXT performance

Due to its low loss and exceptional crosstalk performance – nominally 60 dB over the required bandwidth – LEONI’s SFP+ cable assemblies meet and exceed the specifications in the SFF Annex E. SFF-8431 SFP+ Direct Attach Cable Specification.