

# 3M Launches Active Optical Cable for SFP+ Applications

First-of-its-kind cable assembly designed for reaches up to 100 meters

Designers of high-performance computing systems, data centers and other ultra-high-throughput networks have a new interconnect option for SFP+ applications. 3M now offers the low-power, high-speed [Active Optical Cable \(AOC\) Assembly for SFP+ Applications](#). It is the first known cable assembly of its kind available on the market that is designed for reaches up to 100 meters. The direct-attach, bi-directional AOC assembly supports speeds of more than 10 Gbps per channel over OM 2+ bend-insensitive fiber. It can be used to connect high-performance switches, servers and storage.

The AOC assembly consumes less power than the typical SFP+ interconnect solutions – active copper cable assemblies or active optical pluggable transceivers. The light-engine technology in the 3M AOC assembly allows the cable assembly to operate typically at 240mW per end, helping to save energy costs and minimize heat dissipation. The cable assembly incorporates 850nm VCSEL technology, which has a proven track record of high reliability.

"The 3M architecture for SFP+ applications eliminates the traditional TOSA/ROSA found in pluggable transceivers and allows for direct attachment of the fiber to the light engine," said Jeff Bullion, marketing manager, Electronic Solutions Division. "The 3M AOC architecture provides a lower cost solution by eliminating components, lowering the risk of optical contamination and reducing the power required to implement an active SFP+ solution. Now, network designers and installers have a cost-effective, lower-power, highly reliable single solution for lengths up to 100 meters."

The AOC assembly from 3M eliminates many of the issues associated with other widely used interconnect options. It is lighter and more routable than conventional passive and active copper solutions, allowing more air flow and consuming less space. The optical interface is integrated into the cable assembly, lowering power use and virtually eliminating the risk of optical contamination associated with pluggable transceiver modules.

The SFP+ AOC from 3M is compliant with the SFF-8431 Rev4.1 SFP+ specification and supports the 10GB Ethernet and 4GFC and 8GFC Fibre Channel specifications. The cable assembly is backed by 3M's two-year active optical warranty and is available from 3M's Authorized Channel partners and resellers, including [Colfax Direct](#). The cable assembly meets FCC Class B, CE Emissions and Immunity requirements and are \*RoHS 2011/65/EU compliant. Learn more about [3M Active Optical Cables](#).

## About 3M Electronic Solution Division – Interconnect

3M Electronic Solutions Division's Interconnect business offers a variety of innovative connectors, cables and cable assemblies, embedded capacitance materials and Textool brand test and burn-in sockets for component engineers and designers in the electronics industry. For more information about 3M's Interconnect solutions, visit: <http://www.3Mconnectors.com>. Information about 3M Company is available [online](#).

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3MMedia contact: Laurel Chesky, 512-984-7708 | [chesky@mmm.com](mailto:chesky@mmm.com) or For all other inquiries: <http://www.3m.com/MediaContact>

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