Introducing Active Optical Cabling for High-Speed Interconnectivity

Active Optical Cables (AOCs) are highly affordable fiber cables that feature embedded SFP or QSFP transceivers, making them the preferred alternative to modular transceiver solutions in high-bandwidth networking applications.

Black Box Active Optical Cables transmit data hundreds of meters, offer high bandwidths, and do not suffer from electrical interference. They provide premium, error-free performance for data, storage, and high-performance computing (HPC) interconnectivity. They are 100 percent compatible with Cisco and MSA-compliant network equipment, allowing you to make connections amongst your switches, routers, and servers.

Black Box Active Optical Cables are the ideal solution for point-to-point, intrarack, and rack-to-rack connections of 10/25/40/100G Ethernet equipment.

Applications
• Hyperscale data centers
• Enterprise data centers
• Edge networks
• Telecom closets
• High-performance computing (HPC)
• Fibre Channel
• Storage

Benefits and Features

Minimize the Cost of Optics
AOCs are a very cost-efficient alternative to modular transceiver solutions, providing premium performance at a significantly lower price.

100 Percent Cisco Compatible and MSA Compliant
Our AOCs are 100 percent compatible with Cisco network equipment, allowing you to make connections amongst your Cisco switches, routers, and servers. They are also fully compliant with non-Cisco hardware that does not require proprietary connectivity.

Efficient Design Saves on Power
AOCs consume significantly less power than modular transceiver solutions. In addition, their thin and lightweight profile takes up less space, which improves airflow and reduces cooling costs.

Optimal Performance
Active Optical Cables utilize VCSEL technology over 850-nm OM3 multimode fiber, which allows them to support the bandwidth demands of Ethernet applications up to 100G.

Minimal EMI profile
Fiber optic's superior resistance to EMI/RFI ensures data integrity with no signal downtime or interruption. These cables are also well suited to prevent data tapping.

Connection Diagram

Perfect for Point-to-Point, Intrarack, and Rack-to-Rack Connections