800G Active Optical Cable from Finland



Overview

800G OSFP Active Optical Cable Datasheet OSFP-800G-AOC01 are designed to meet FCC Class B limits. 800G OSFP Active Optical Cable (AOC) 1m 2m 3m up Offering.

Key Takeaways

800G Active Optical Cables deliver ultra-high-speed, low-latency, and energy-efficient connectivity for modern data centers, HPC clusters, and AI/ML environments.

Key Specifications and Performance

Bandwidth and Channels: 800G AOCs provide an aggregate 800 Gb/s bandwidth over eight 100 Gb/s or four 200 Gb/s parallel lanes, depending on the form factor (OSFP or QSFP112) and technology used, such as PAM4 VCSEL transmitters and DSPs for signal optimization (Fibrecross, ATOP). Reach: Distances range from 1 meter up to 100 meters over OM4/OM5 multimode fiber, suitable for top-of-rack to spine connections, AI clusters, and high-performance computing nodes. Latency and Power: These cables offer ultra-low latency and controlled power consumption, typically under 5–15 W per cable, depending on the manufacturer and deployment density, which helps reduce cooling and energy costs in high-density racks.

Form Factors: Available in OSFP-Finned, QSFP112, and QSFP-DD configurations, supporting efficient thermal management and high-density deployments. Diagnostics: Built-in I²C digital diagnostics monitor optical power, temperature, voltage, and SNR in real time, enhancing reliability and proactive maintenance.

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Compatibility and Applications

Networking Standards: Compliant with OSFP MSA, QSFP112, and IEEE 802. 3ck standards, ensuring interoperability with modern Ethernet and InfiniBand networks. Hardware Support: Fully compatible with NVIDIA/Mellanox ConnectX NICs (ConnectX-5, ConnectX-6, ConnectX-7) and switches like NVIDIA Quantum and Spectrum, making them ideal for cloud, supercomputing, and AI/ML clusters.

Use Cases: Optimized for spine-leaf fabrics, GPU-to-GPU aggregation, AI/ML clusters, and HPC environments, providing line-rate data transfer even under peak loads. Advantages Over DACsLonger Reach: AOCs support longer distances than direct attach copper (DAC) cables, typically up to 100 meters, while maintaining low latency. Flexibility and Airflow: Lighter and more flexible than DACs, improving airflow and reducing rack congestion.

Energy Efficiency: Lower power consumption compared to high-power DAC alternatives, especially in dense deployments.

Sourcing in Finland

While the web results do not list Finland-specific distributors, global suppliers like Fibrecross, ATOP, Volex, and AICPLight often ship internationally. For procurement in Finland, you can: Contact authorized distributors or resellers of these brands in Europe. Reach out to local data center hardware suppliers who carry high-speed optical interconnects.

Check European e-commerce platforms specializing in networking and HPC components. 800G AOCs from these suppliers can be configured for custom lengths, form factors, and connector types to match your data center topology and performance requirements.

Article Content

800G OSFP Active Optical Cable (AOC) 1m 2m 3m up

Offering an impressive data transfer rate of up to 800G, this cable is ideal for applications such as cloud computing, artificial intelligence, and big data

Active Copper Cable

Active Copper Cable Volex''s OSFP 800G active copper cable features 8 transmitting and 8 receiving 100. bps PAM-4 channels. The cable assembly meets OSFP 800G MSA and IEEE 802. 3ck

800G OSFP & QSFP-DD Active Optical Cables (AOC)

The ultra-low latency and high throughput of our 800G Active Optical Cables make it perfect for AI/ML clusters, GPU-to-GPU aggregation, and HPC

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Customized 800G OSFP Finned Top Active Optical Cable

The 800G OSFP Active Optical Cable is designed for 800 Gigabit Ethernet links over OM4 multimode fibre. This cable is compliant with IEEE 802.3bs, OSFP Rev 5.0, SFF-8679, and CMIS Rev 4.0.

OSFP-800G-ACxxx Datasheet | FS

FS''s OSFP 800G active copper cable is designed to meet the next-gen data center needs and is a cost effective alternative to the high-power consumption active optical cable.

Active Optical Cable 800G OSFP-Finned to OSFP-Finned 1~100m

The Active Optical Cable 800G OSFP-Finned to OSFP-Finned is designed to deliver high-speed, short- to mid-reach optical connectivity for next-generation data center environments.

800G Active Optical Cable

800G Active Optical Cable Jabil Photonic 800G Active Optical Cable provides optimized solutions for interconnections inside datacenter at 800Gb/s up to 50m. Product is available in OSFP form to

800G Active Optical Cables (AOCs) – Vitex Direct LLC

Industry-leading 800G Active Optical Cables for hyperscale and AI computing clusters. Available in OSFP and QSFP-DD form factors, these cables deliver massive bandwidth density with the simplicity

800G AOC Active Optical Cable | OSFP & QSFP-DD | 3–100m

800G active optical cables for short-reach data center and AI cluster interconnects. Available in OSFP and QSFP-DD form factors, covering 3–100m at 850nm with MPO-16 connector. Engineered for low

800G Transceiver Compatibility for NVIDIA Platforms

Many 800G deployments use copper and active cables for short intra-rack links where optical transceivers are unnecessary or cost-prohibitive. There

1.6T/800G InfiniBand XDR Transceivers/DACs In

NADDOD offers 1.6T/800G InfiniBand XDR solutions, which combine transceivers with cables. The transceiver portfolio includes 1.6T 2xDR4 and 2xFR4 OSFP224

Data Center Transceivers & Cables

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Arista offers a broad portfolio of high performance optical transceivers and copper cables for datacenter and campus networks, with speeds ranging from 1G to 800G, and reach from 1m to 80km+. Arista

Advanced Optical Modules Market in Indonesia | Report

Indonesia''s advanced optical modules market operates at the intersection of global electronics supply chains and the country''s accelerating digital infrastructure push. The product

HTF DWDM equipment,OTN Solution,QSFP28 OSFP

MPO-LC Breakout Cable Direct Attach Twinax Cables (DACs) 100G 40G DAC 400G 200G DAC 25G 10G DAC 800G DAC Active Optical Cables (AOCs) 100G 40G

5 Trends Driving Fibre Optic Deployment in 2026 – Wray Castle

2026 Fibre Deployment Trends Shaping the Market Fibre optic deployment in 2026 is being driven first by a major policy and funding wave that is finally turning plans into active construction.

800G Direct Attach Cables & Active Optical Cables

Discover BlueOptics 800G AOC and DAC Cables BlueOptics offers premium 800G Active Optical Cables (AOC) and Direct Attach Copper (DAC) cables, specifically designed for QSFP-DD (Quad

What Are 800G Active Optical Cables? | Fibrecross

800G Active Optical Cables from Fibrecross. Explore 800G QSFP-DD AOC cables and 800G OSFP AOC cables designed for next-gen data centers, AI, HPC

Optical Communications Market Size, Share, and Industry Trends

Optical Communications Market Trends and Innovations Optical communications architecture is migrating from discrete component assemblies toward monolithic silicon photonics platforms, with

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This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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