



# Data-Sheet

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## QSFP-DD 400G AOC Active Optical Cable

# 400G QSFP-DD Active Optical Cable (AOC)

JTOPTICS® 400G QSFP-DD AOC (active optical cable) is a 400 Gb/s parallel active optical cable, which transmits parallel 8x50 Gb/s PAM4 signals over multi-mode fiber (MMF) cables up to 100m. It is compliant with QSFP-DD MSA and the CMIS 4.0. The 400G QSFP56-DD AOC cables supports eight electrical interface lanes, each of which operate in the data rate of 53.125G, with an overall aggregate bandwidth up to 425Gb/s. These modules of cables are designed to operate over multi-mode fiber systems using a nominal wavelength of 850nm. The electrical interface uses a 76 contact edge type connector. This active optical cable is compliant with IEEE 802.3cd, OIF-CEI-04.0, QSFP-DD MSA, and QSFP-DD-CMIS-rev4p0.



JTOPTICS® Active Optical Cable (AOC) cable assemblies are designed to meet data center, networking and high-performance computing application needs for a high-density cabling interconnect system, compatibility with major brands like Cisco, Juniper, Arista, Dell, HPE, Extreme, Brocade, Mellanox, H3C, Intel, IBM, Nokia, Zte, Ciena, Huawei, Ixia etc.

- Hot-pluggable QSFP-DD active optical cable assemblies
- 8x 50G PAM4 electrical interface
- 8x 50G PAM4 optical interface
- Data rate up to 53.125Gbps per channel.
- 8-channels 850nm VCSEL array and PIN photo-detector array
- Compliant with QSFP-DD MSA, CMIS and IEEE 802.3
- Low power dissipation
- Compliant with IEEE 802.3cd 200GBASE-SR4 and InfiniBand HDR/HDR100
- MMF cable with customizable length up to 70m (OM3) or 100m (OM4/OM5)
- 10W maximum power dissipation per 400G QSFP-DD SR8 module
- Commercial case operating temp. range
- Single 3.3V power supply
- Built-in digital diagnostic functionality
- RoHS compliant (lead free)

**3 Years Warranty**

<b>Name</b>	400GBASE-SR8 QSFP-DD to QSFP-DD Multimode AOC Cable
<b>Part Code</b>	JT-QSFPDD-400G-AOC-XX
<b>Connector - A</b>	QSFP-DD
<b>Connector - B</b>	QSFP-DD
<b>Cable Assembly Type</b>	Active Optical Cable
<b>Cable Type</b>	Multimode OM3/OM4/OM5
<b>Jacket Material</b>	PVC/OFNP
<b>Operating Temperature Range</b>	0 to 70°C (32 to 158°F)
<b>Protocols</b>	IEEE 802.3cd, OIF-CEI-04.0, QSFP-DD MSA, QSFP-DD-CMIS-rev4p0
<b>Max Data Rate</b>	400Gbps
<b>Application</b>	400G Ethernet IEEE 802.3cd 400GBASE-SR8 InfiniBand HDR/HDR100 Data Center Intra connection High-Performance Computing

## About JT

In the dynamic realm of technology and innovation, the emergence of Jayani Technologies Limited has been nothing short of a saga marked by ingenuity, resilience, and a steadfast commitment to excellence. Originating as Jayani Technologies LLP in 2011 in the vibrant city of Mumbai, India, the company has evolved into a trailblazer in its domain. This narrative unfolds against the backdrop of the company's expansion into Hong Kong, a strategic move signaling its intent to conquer new horizons.

Established in 2011, Jayani Technologies (JTOPTICS<sup>®</sup>) was conceived as a response to the evolving technological landscape, recognizing the need for cutting-edge solutions that marry innovation with reliability. The Mumbai headquarters became the crucible for the company's early endeavor, a melting pot of talent and vision that propelled Jayani Technologies into the forefront of its industry and emerged as a leading manufacturer and supplier of cutting-edge solutions in the fields of optical Fiber, data center, networking, and electric vehicle components.

From its inception, the company distinguished itself by its unwavering commitment to client satisfaction, a commitment that became the cornerstone of its success. Jayani Technologies quickly became synonymous with technological prowess and an unwavering dedication to delivering solutions that transcended conventional boundaries.

JTOPTICS<sup>®</sup> has developed and produced many active and passive interconnection and connectivity products suitable for different networks, aiming to become a one-stop device integration solution provider in the open optical network field, products include MPO Cables, AOC cable, passive DAC cable, optical transceivers, optical modules & subsystems, active & passive optical components, and high-density cabling products.

### **Vision**

Our vision is to be recognized by clients as trustful a trusted business partner whose mission is to help our clients by offering state-of-the-art products and services.

### **Mission**

Our mission is to catalyze the success of its clients by providing unparalleled technological solutions. The company envisions itself as a catalyst for positive change, aiming to reshape industries through innovation, integrity, and a relentless pursuit of excellence.

# Our Clients



**ciena**

**ADVA**<sup>™</sup>  
Optical Networking

**colt**

**CISCO**

**Coriant**

**MAVENIR**



**इसरो isro**

**JUNIPER**  
NETWORKS

**TEJAS**<sup>®</sup>  
NETWORKS

**भारत इलेक्ट्रॉनिक्स**  
**BHARAT ELECTRONICS**

**HITACHI**

**एनटीपीसी**  
**NTPC**

**TATA**

**LARSEN & TOUBRO**



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**JAYANI TECHNOLOGIES LLP**