

## Key Highlights:

- Type: 40G Active Optical Cable
- Compatibility: Multi-Vendor MSA Compatible
- Media Type: Multi-Mode Fiber
- Tx/Rx: 850nm
- Max. Distance: 100 m
- Data Rate: 2.125-41.2 Gbps
- Temperature: Standard 0°-70°C
- Low Power Consumption: 1.5W (Typical)



## 40G Active Optical Cable: 40G-AOC-QSFP

### Product Description:

40G-AOC-QSFP is Multi-Vendor MSA Compatible 40G Active Optical Cable, operating over multi-mode optical cable. 40G Active optical cable is direct-attach assembly with MSA (Multi-Source Agreement) compatible QSFP+ connectors. 40G Active optical cable uses 4 x 850nm VCSEL transmitters and 4 x PIN photo-detector receivers operating over 4 parallel data lanes of OM3 MMF cable with distance up to 300m. 40G Active optical cable support 2.125-41.2 Gbps multi-rate communication and such applications as 40G Ethernet (41.25Gbps) | 10G Ethernet (10.31Gbps) | 10G Fiber Channel (10.52 Gbps) | 8G Fiber Channel (8.5 Gbps) | 4G Fiber Channel (4.25 Gbps) | 2G Fiber Channel (2.125 Gbps) | 4x InfiniBand QDR(32Gbps) | 4x InfiniBand DDR (16Gbps) | 4x InfiniBand SDR (8Gbps). Most popular applications of 40G Active Optical Cables are cost effective close range interconnections within equipment room of telecom operators or data centers, interconnecting LAN or SAN applications with speeds up to 40G.

40G Active Optical Cable is CE/RoHS certified and it is Compliant with product safety standards. 40G-AOC-QSFP is fully compliant to QSFP+ Multi Source Agreement SFF-8436. Consequently, it means that module is compatible with 80% of networking equipment, where is not implemented a special algorithm for protection against third party modules. However – we can provide 40G Active Optical Cable with custom-encoded firmware in order to make it work almost in any equipment and we can support encoding of each end to support different vendor equipment, allowing using Active Optical Cable as cross-platform interconnection medium. We will be glad to hear Your requirements and our sales team will check all relevant details with You during ordering procedure. Our focus is providing top quality service, we are performing serious quality checks before delivery of our products.



## Product Specification:

| Parameter               | Value   |
|-------------------------|---|
| Media Type:             | Multi-Mode Fiber (MMF)  |
| DAC Cable Type:         | OM3   |
| TX Wavelength:          | 850nm   |
| RX Wavelength:          | 850nm   |
| Transmitter Type:       | VCSEL Laser   |
| Receiver Type:          | PIN Photodiode  |
| Maximum Distance:       | 1m   2m   3m   5m   7m   10m   15m   20m   30m   40m   50m   70m   100m   |
| Supported Data Rate:    | 2.125-41.2 Gbps   |
| Supported Applications: | 40G Ethernet (41.25Gbps)   10G Ethernet (10.31Gbps)   10G Fiber Channel (10.52 Gbps)   8G Fiber Channel (8.5 Gbps)   4G Fiber Channel (4.25 Gbps)   2G Fiber Channel (2.125 Gbps)   4 x InfiniBand QDR(32Gbps)   4x InfiniBand DDR (16Gbps)   4x InfiniBand SDR (8Gbps) |
| DDM/DOM:                | Supported   |
| Connectors:             | QSFP  |
| Temperature Range:      | Standard 0°-70°C  |
| Power:                  | +3.3V single power supply   |
| Power Consumption:      | 1.5W (Typical)  |
| MTBF value at 35 °C:    | 1'000'000 Hours.  |
| Compliance:             | QSFP+ MSA   SFF-8436   IEEE P802.3ba   QDR InfiniBand   ROHS   CE   |

## Supported Versions:

| PN             | Description  |
|----------------|--|
| 40G-AOC-QSFP-1 | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 1m, MMF, OM3, DDM/DOM supported, Temp. 0-70C) |
| 40G-AOC-QSFP-2 | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 2m, MMF, OM3, DDM/DOM supported, Temp. 0-70C) |
| 40G-AOC-QSFP-3 | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 3m, MMF, OM3, DDM/DOM supported, Temp. 0-70C) |
| 40G-AOC-QSFP-5 | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 5m, MMF, OM3, DDM/DOM supported, Temp. 0-70C) |



| PN               | Description  |
|------------------|--|
| 40G-AOC-QSFP-7   | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 7m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)   |
| 40G-AOC-QSFP-10  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 10m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-15  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 15m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-20  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 20m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-30  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 30m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-40  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 40m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-50  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 50m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-70  | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 70m, MMF, OM3, DDM/DOM supported, Temp. 0-70C)  |
| 40G-AOC-QSFP-100 | Multi-Vendor Compatible 40G QSFP to QSFP Active Optical Cable (2.125-41.2 Gbps, Max. 100m, MMF, OM3, DDM/DOM supported, Temp. 0-70C) |

## Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more than 50 vendor brands in data and telecom communications industry:

**MS** - General MSA  
**AD** - ADVA  
**AL** - Alcatel-Lucent  
**AR** - Arista  
**AV** - Avaya  
**BR** - Brocade  
**CN** - Ciena  
**CI** - Cisco  
**DL** - Dell & Force10  
**DK** - D-Link  
**EM** - EMC2  
**ET** - Enterasys

**ER** - Ericsson  
**EX** - Extreme Networks  
**F5** - F5 Networks  
**FO** - Fortinet  
**FU** - Fujitsu  
**H3** - H3C  
**HI** - Hirschmann  
**HP\*** - HP Networking  
**HS\*** - HP Storage  
**HU** - Huawei  
**IB** - IBM  
**IF** - Infinera

**IN** - Intel  
**JU** - Juniper Networks  
**LI** - Linksys  
**ML** - Mellanox  
**ME** - Meraki (Cisco)  
**MT** - MikroTik  
**MO** - Moxa  
**MR** - MRV  
**NG** - Netgear  
**NS** - NSN  
**PA** - Palo Alto Network  
**QL** - Qlogic

**RD** - RAD  
**RU** - Ruijie Networks  
**SM** - Supermicro  
**SY** - Synology  
**TC** - Telco Systems  
**TP** - TP-LINK  
**TN** - Trendnet  
**WG** - WatchGuard  
**ZT** - ZTE  
**XX** - Other

## Warranty:

EDGE Optic's provides a limited **warranty for sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.

