

# Active Optical Cables

## 40G QSFP+

### Regional Availability - Global

Siemon 40G QSFP+ Active Optical Cable (AOC) assemblies offer a highly reliable and cost-effective alternative to transceiver assemblies available in lengths ranging from 0.5 m to 100 m, beyond the range of Direct Attach Copper Cables (DAC). These high performance and low power consumption AOCs are Ethernet, InfiniBand and MSA compliant with a robust construction, including a high-strength pull tab latching system which reduces plug loss ensures and more secure installations.

These 40G QSFP+ assemblies are capable of transmitting data up to 40Gb/s, offering an easy installation with a flexible, multimode fiber cable. AOCs eliminate the interoperability issues of transceiver assemblies to achieve proper parameter optimization and are equipped with Digital Diagnostic Monitoring, allowing I<sup>2</sup>C (Inter-integrated circuit) real-time supervision of operating parameters and transmits warnings if those parameters exceed specification.

Typical AOC applications include point-to-point connections within data centers, high performance computing and storage racks. The versatile connections can be rack-to-rack within the same row or another row, and their hot swappable and high-density design allows use within a wide range of top-of-rack and other data center architectures.



### Standards Compliance

- QSFP+ MSA
- IEEE P802.3bm
- 40GBASE-SR4
- RoHS/REACH compliant
- CML Compatible Electrical I/O
- Infiniband
- TUV/UL certified

Part Number (OFNP)	Part Number (LSZH/OFNR)	Length
Q1Q10F-Y00.5B13	Q1Q10F-V00.5B13	0.5m (1.64 ft.)
Q1Q10F-Y01.0B13	Q1Q10F-V01.0B13	1.0m (3.28 ft.)
Q1Q10F-Y01.5B13	Q1Q10F-V01.5B13	1.5m (4.92 ft.)
Q1Q10F-Y02.0B13	Q1Q10F-V02.0B13	2.0m (6.56 ft.)
Q1Q10F-Y03.0B13	Q1Q10F-V03.0B13	3.0m (9.87 ft.)
Q1Q10F-Y05.0B13	Q1Q10F-V05.0B13	5.0m (16.40 ft.)
Q1Q10F-Y07.0B13	Q1Q10F-V07.0B13	7.0m (22.97 ft.)
Q1Q10F-Y10.0B13	Q1Q10F-V10.0B13	10m (32.80 ft.)
Q1Q10F-Y15.0B13	Q1Q10F-V15.0B13	15m (49.21 ft.)
Q1Q10F-Y20.0B13	Q1Q10F-V20.0B13	20m (65.62 ft.)
Q1Q10F-Y25.0B13	Q1Q10F-V25.0B13	25m (82.02 ft.)
Q1Q10F-Y30.0B13	Q1Q10F-V30.0B13	30m (98.43 ft.)
Q1Q10F-Y40.0B13	Q1Q10F-V40.0B13	40m (131.23 ft.)
Q1Q10F-Y50.0B13	Q1Q10F-V50.0B13	50m (164.04 ft.)
Q1Q10F-Y0100B13	Q1Q10F-V0100B13	100m (328.08 ft.)



### Small Diameter Bundles

AOC's thin diameter allow for smaller bundles which promotes better airflow.

# Product Information

Absolute Maximum Ratings		Min	Max	Mechanical Specifications	
Module Supply Voltage		0.0V	4.0V	Minimum Bend Radius	20 × OD mm (without tension) 10 × OD mm (with max tension)
Storage Temperature		-40°C (-40°F)	85°C	Cable Diameter (OD)	3.0mm ±0.20
Relative Humidity - Storage		0%	85%	Fiber Type	OM3 multimode
Relative Humidity - Operating		0%	85%		

## Electrical Specifications

Module Supply Voltage	3.13V to 3.47V (3.3V typical)
Case Operating Temperature	0°C (32°F) to 70°C (158°F) 25° C (77°F) (typical)
Single Module Supply Current	150mA typical
Maximum Power Consumption Per End	0.5W (max)

## Channel Parameters

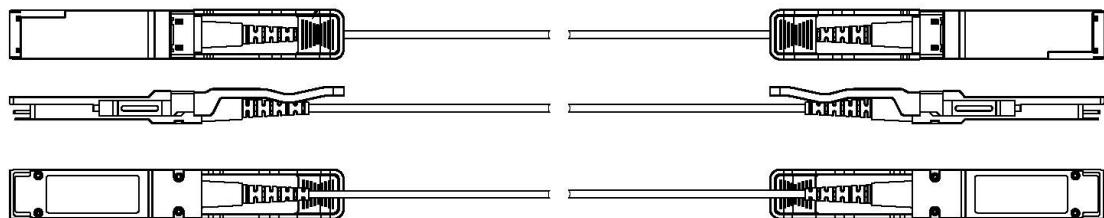
Channels	4 Lanes, bi-directional
Data Rate per Channel	10.3125 Gb/s (max)
Operating Wavelength	850nm

## Receiver Electrical Interface

Rx Data Differential Output Voltage	200mV to 1000mV
Rx Data Differential Output Impedance	100Ω (typical)

## Transmitter Electrical Interface

Tx Data Differential Input Voltage	200mV to 1600mV
Tx Data Differential Input Impedance	100Ω (typical)



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