

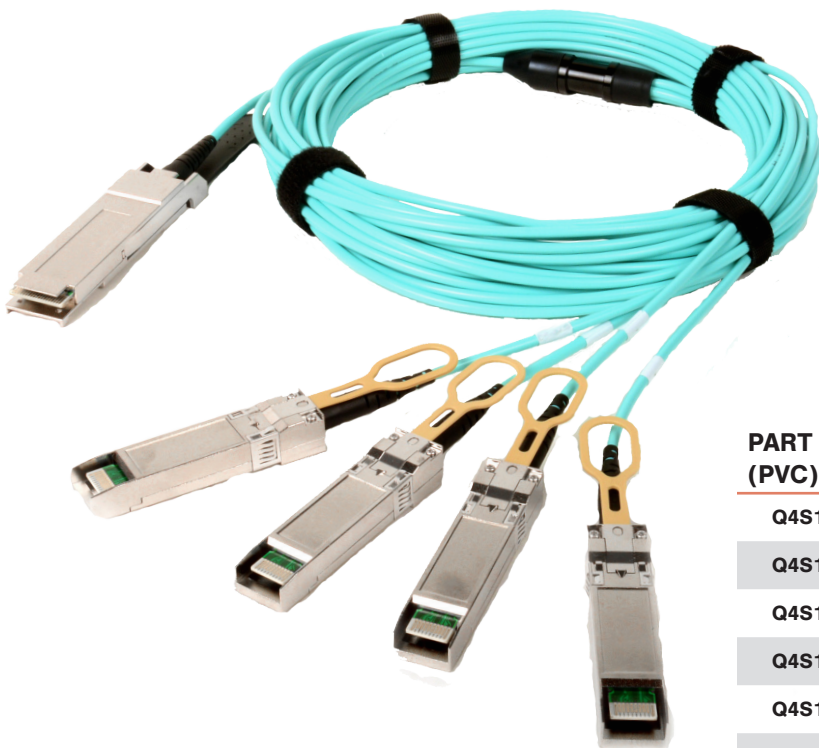
Active Optical Cables

QSFP+ 40G Breakout

Siemon 40G QSFP+ to 4x SFP+ Breakout Active Optical Cable (AOC) assemblies offer a highly reliable and cost-effective alternative to transceiver assemblies available in lengths ranging from 0.5M to 100M, 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 and ensures more secure installations.

These 40G QSFP+ to 4x SFP+ Breakout assemblies are capable of transmitting data up to 4 x 10Gb/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 I2C 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.



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

STANDARDS COMPLIANCE

- QSFP+ MSA
- SFP+ MSA
- SFF8431 Electrical
- SFF8432 Mechanical
- IEEE P802.3bm
- 100GBASE-SR4
- RoHS

PART NUMBER (PVC)	PART NUMBER (LS0H)	LENGTH
Q4S10F-Y00.5M13	Q4S10F-V00.5M13	0.5m (1.64 ft.)
Q4S10F-Y01.0M13	Q4S10F-V01.0M13	1.0m (3.28 ft.)
Q4S10F-Y01.5M13	Q4S10F-V01.5M13	1.5m (4.92 ft.)
Q4S10F-Y02.0M13	Q4S10F-V02.0M13	2.0m (6.56 ft.)
Q4S10F-Y03.0M13	Q4S10F-V03.0M13	3.0m (9.87 ft.)
Q4S10F-Y05.0M13	Q4S10F-V05.0M13	5.0m (16.40 ft.)
Q4S10F-Y07.0M13	Q4S10F-V07.0M13	7.0m (22.97 ft.)
Q4S10F-Y10.0M13	Q4S10F-V10.0M13	10m (32.80 ft.)
Q4S10F-Y15.0M13	Q4S10F-V15.0M13	15m (49.21 ft.)
Q4S10F-Y20.0M13	Q4S10F-V20.0M13	20m (65.62 ft.)
Q4210F-Y25.0M13	Q4S10F-V25.0M13	25m (82.02 ft.)
Q4210F-Y30.0M13	Q4S10F-V30.0M13	30m (98.43 ft.)
Q4210F-Y40.0M13	Q4S10F-V40.0M13	40m (131.23 ft.)
Q4210F-Y50.0M13	Q4S10F-V50.0M13	50m (164.04 ft.)
Q4S10F-Y0100M13	Q4S10F-V0100M13	100m (328.08 ft.)

Product Information

ABSOLUTE MAXIMUM RATINGS

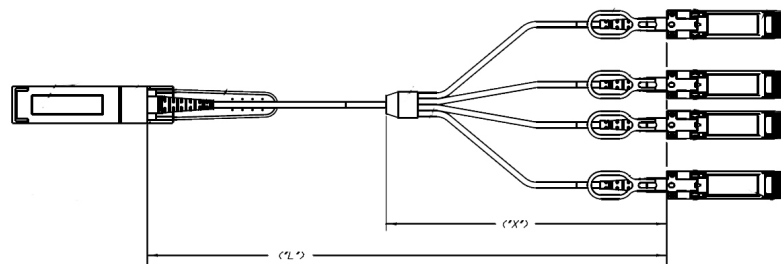
	MIN	MAX
Module Supply Voltage	0.5V	3.6V
Storage Temperature	-40°C (-40°F)	100°C (212°F)
Relative Humidity - Storage	0%	95%
Relative Humidity - Operating	0%	85%

ELECTRICAL SPECIFICATIONS

Module Supply Voltage	3.14V to 3.46V (3.3V typical)
Case Operating Temperature	-5°C (23°F) to 70°C (158°F) 25°C (77°F) (typical)
Single Module Supply Current	300mA max.
Maximum Power Consumption Per End	1.04W
Bit Rate Per Channel	10.3125 Gb/s

RECEIVER ELECTRICAL INTERFACE

Rx Data Differential Output Voltage (SFP+)	300mV to 850mV
Rx Data Differential Output Voltage (QSFP+)	500/-mV typical
Rx Data Differential Output Impedance	90Ω to 110Ω (100Ω typical)
LOS Assert Voltage	2V to $V_{CC}+0.3$
LOS De-assert Voltage	0.3V to 0.4V



MECHANICAL SPECIFICATIONS

Minimum Bend Radius	30mm
Cable Diameter	3.0mm ± 0.15
Fiber Type	OM3 multimode

TRANSMITTER ELECTRICAL INTERFACE

Tx Data Differential Input Voltage (SFP+)	200mV to 1000mV
Tx Data Differential Input Voltage (QSFP+)	200mV to 1600mV
Tx Data Differential Input Impedance	90Ω to 110Ω (100Ω typical)
Transmitter Disable Voltage	2V to $V_{CC}+0.3$
Transmitter Enable Voltage	0.3V to 0.8V

CHANNEL PARAMETERS

Channels	4 Lanes, bi-directional
Data Rate	10.3125 Gb/s channel max
Operating Wavelength	850nm

OVERALL DIMENSIONS

L	X
0.5m	0.4m
1.0m	0.67m
1.5m	1.00m
2.0m	1.33m
3.0m	2.00m
5.0m and above	3.00m

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