

# Active Optical Cables

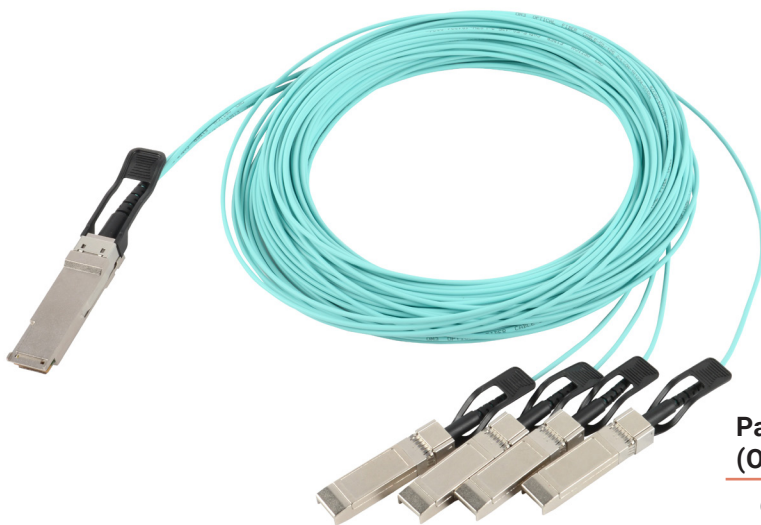
## 100G QSFP28 Breakout

### Regional Availability - Global

Siemon 100G QSFP28 to 4x SFP28 Breakout 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 and ensure more secure installations.

These 100G QSFP28 to 4x SFP28 Breakout assemblies are capable of transmitting data up to 4 x 25 Gb/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.

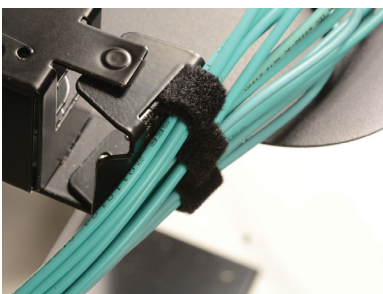
Typical AOC applications include point-to-point connections within data centers, high performance computing and storage racks. The versatile connections can be rack-to-rack within the same or another row, and their hot swappable and high-density design allows use within a wide range of top-of-rack and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



### Standards Compliance

- QSFP28 MSA
- SFP28 MSA
- SFF8431 Electrical
- SFF8432 Mechanical
- IEEE P802.3bm
- 4 x 25GBASE-SR
- RoHS/REACH compliant
- CML Compatible Electrical I/O
- CAUI-4
- TUV/UL certified

Part Number (OFNP)	Part Number (LSZH/OFNR)	Length
Q4S28F-Y00.5B13	Q4S28F-V00.5B13	0.5m (1.64 ft.)
Q4S28F-Y01.0B13	Q4S28F-V01.0B13	1.0m (3.28 ft.)
Q4S28F-Y01.5B13	Q4S28F-V01.5B13	1.5m (4.92 ft.)
Q4S28F-Y02.0B13	Q4S28F-V02.0B13	2.0m (6.56 ft.)
Q4S28F-Y03.0B13	Q4S28F-V03.0B13	3.0m (9.87 ft.)
Q4S28F-Y05.0B13	Q4S28F-V05.0B13	5.0m (16.40 ft.)
Q4S28F-Y07.0B13	Q4S28F-V07.0B13	7.0m (22.97 in.)
Q4S28F-Y10.0B13	Q4S28F-V10.0B13	10.0m (32.80 ft.)
Q4S28F-Y15.0B13	Q4S28F-V15.0B13	15.0m (49.21 ft.)
Q4S28F-Y20.0B13	Q4S28F-V20.0B13	20.0m (65.62 ft.)
Q4S28F-Y25.0B13	Q4S28F-V25.0B13	25.0m (82.02 ft.)
Q4S28F-Y30.0B13	Q4S28F-V30.0B13	30.0m (98.43 ft.)
Q4S28F-Y40.0B13	Q4S28F-V40.0B13	40.0m (131.23 ft.)
Q4S28F-Y50.0B13	Q4S28F-V50.0B13	50.0m (164.04 ft.)
Q4S28F-X0100B13	Q4S28F-T0100B13	100.0m (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
Module Supply Voltage	0.0V	4.0V
Storage Temperature	-40°C (-40°F)	85°C (185°F)
Relative Humidity - Storage	0%	85%
Relative Humidity - Operating	0%	85%

## Mechanical Specifications

Minimum Bend Radius	20 × OD mm (without tension) 10 × OD mm (with max tension)
Cable Diameter (OD)	3.0mm ± 0.20
Fiber Type	OM3 multimode

## 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	SFP28 220 mA (typical per end) QSFP28 510 mA (typical)
Maximum Power Consumption Per End	SFP28 0.8W (max per end) QSFP28 1.9W (max)
Covered in Channel Parameters	Covered in Channel Parameters

## Channel Parameters

Channels	4 Lanes, bi-directional
Data Rate per Channel	25.78 Gbp/s (max)
Operating Wavelength	850nm

## Receiver Electrical Interface

Rx Data Differential Output Voltage	300 to 900 mV (800 mV typical)
Rx Data Differential Output Impedance	100Ω (typical)

## Transmitter Electrical Interface

Tx Data Differential Input Voltage	300mV to 900mV
Tx Data Differential Input Impedance	100Ω (typical)

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