# Active Optical Cables 10G SFP+

#### Regional Availability - Global

Siemon 10G SFP+ 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 10G SFP+ assemblies are capable of transmitting data up to 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 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**

- SFP+ MSA
- · SFF8431 Electrical
- · SFF8432 Mechanical
- · RoHS/REACH compliant
- TUV/UL certified

(OFNP)	(LSZH/OFNR)	Length
S1S10F-Y00.5B13	S1S10F-V00.5B13	0.5m (1.64 ft.)
S1S10F-Y01.0B13	S1S10F-V01.0B13	1.0m (3.28 ft.)
S1S10F-Y01.5B13	S1S10F-V01.5B13	1.5m (4.92 ft.)
S1S10F-Y02.0B13	S1S10F-V02.0B13	2.0m (6.56 ft.)
S1S10F-Y03.0B13	S1S10F-V03.0B13	3.0m (9.87 ft.)
S1S10F-Y05.0B13	S1S10F-V05.0B13	5.0m (16.40 ft.)
S1S10F-Y07.0B13	S1S10F-V07.0B13	7.0m (22.97 ft.)
S1S10F-Y10.0B13	S1S10F-V10.0B13	10m (32.80 ft.)
S1S10F-Y15.0B13	S1S10F-V15.0B13	15m (49.21 ft.)
S1S10F-Y20.0B13	S1S10F-V20.0B13	20m (65.62 ft.)
S1S10F-Y25.0B13	S1S10F-V25.0B13	25m (82.02 ft.)
S1S10F-Y30.0B13	S1S10F-V30.0B13	30m (98.43 ft.)
S1S10F-Y40.0B13	S1S10F-V40.0B13	40m (131.23 ft.)
S1S10F-Y50.0B13	S1S10F-V50.0B13	50m (164.04 ft.)
S1S10F-Y0100B13	S1S10F-V0100B13	100m (328.08 ft.)

Part Number



**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 (3.30V typical)
Case Operating Temperature	0°C (32°F) to 70°C (158°F) 25°C (77°F) (typical)
Single Module Supply Current	50mA (typical)
Maximum Power Consumption Per End	0.25W

#### **Channel Parameters**

Channels	1 Lane, 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	90Ω to 110Ω (100Ω typical)
LOS Assert Voltage	2v to V <sub>ccT</sub> +0.3
LOS De-assert Voltage	0.3V to 0.4V

#### **Transmitter Electrical Interface**

Tx Data Differntial Input Voltage	200mV to 1600mV
Tx Data Differential Input Impedance	100Ω (typical)
Transmitter Disable Voltage	2V to V <sub>cct</sub> +0.3
Transmitter Enable Voltage	0.3V to 0.8V









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