

10G SFP+ Active Optical Cable 300m

SLSS-10AOC-XX



Overview

SFP+ Active Optical Cables are direct-attach fiber assemblies with SFP+ connectors. They are suitable for very short distances and offer a cost-effective way to connect within racks and across adjacent racks. Sourcelight SFP+ Active Optical Cables's length is up to 300 meters on OM3 MMF.

Features

- ◆ Electrical interface compliant to SFF-8431
- ◆ Hot Pluggable
- ◆ 850nm VCSEL transmitter, PIN photo-detector receiver
- ◆ Up to 300m on OM3 MMF
- ◆ Operating case temperature: 0 to 70°C
- ◆ All-metal housing for superior EMI performance
- ◆ RoHS compliant (lead free)

Applications

- ◆ 10 Gigabit Ethernet
- ◆ 4G and 8G Fibre Channel Applications
- ◆ 1x InfiniBand QDR, DDR, SDR
- ◆ High-performance computing clusters
- ◆ Servers, switches, storage and host card adapters

Ordering information

Part Number	Product Description
SLSS-10AOC-XX	SFP+ 10Gbps, Active Optical Cable, 300m on OM3 MMF, 0°C ~ +70°C
XX: 01~300,	1~300 Length in meters. (OM3 fiber is available)

Datasheet
SFP+ AOC Specifications

Parameter	Description
Module Form Factor	SFP+ (Supports SFF8431/SFF8432/SFF8472)
Protocols Supported	InfiniBand, Ethernet, Fiber Channel
Channel Data Rate	Rate 1 to 10.3125Gbps
BER	$<10^{-12}$
Operating Case Temperature	0 to + 70°C
Storage Temperature	-20 to + 85°C
Supply Voltage	3.3V
Supply current	230mA per end typical
Management Interface Serial	I ² C (Supports SFF8472)

Optical characteristics

The following optical characteristics are defined over the Recommended Operating Environment unless otherwise specified.

Parameter	Symbol	Min.	Typical	Max	Unit	Notes
Transmitter						
Center Wavelength	λ_t	840	850	860	nm	
RMS spectral width	P _m	-	-	Note 1	nm	
Average Optical Power	P _{avg}	-6.5	-	-1	dBm	2
Extinction Ratio	ER	3.5	-	-	dB	3
Transmitter Dispersion Penalty	TDP	-	-	3.9	dB	
Relative Intensity Noise	R _{in}	-	-	-128	dB/Hz	12dB reflection
Optical Return Loss Tolerance		-	-	12	dB	
Receiver						
Center Wavelength	λ_r	840	850	860	nm	
Receiver Sensitivity	P _{sens}	-	-	-11.1	dBm	4
Stressed Sensitivity in OMA		-	-	-7.5	dBm	4
Los function	Los	-30	-	-12	dBm	
Overload	P _{in}	-	-	-1.0	dBm	4
Receiver Reflectance		-	-	-12	dB	

Note:

- Trade-offs are available between spectral width, center wavelength and minimum OMA, as shown in table 6.
- The optical power is launched into MMF
- Measured with a PRBS 2³¹-1 test pattern @10.3125Gbps
- Measured with a PRBS 2³¹-1 test pattern @10.3125Gbps, BER $\leq 10^{-12}$.

Mechanical Dimensions

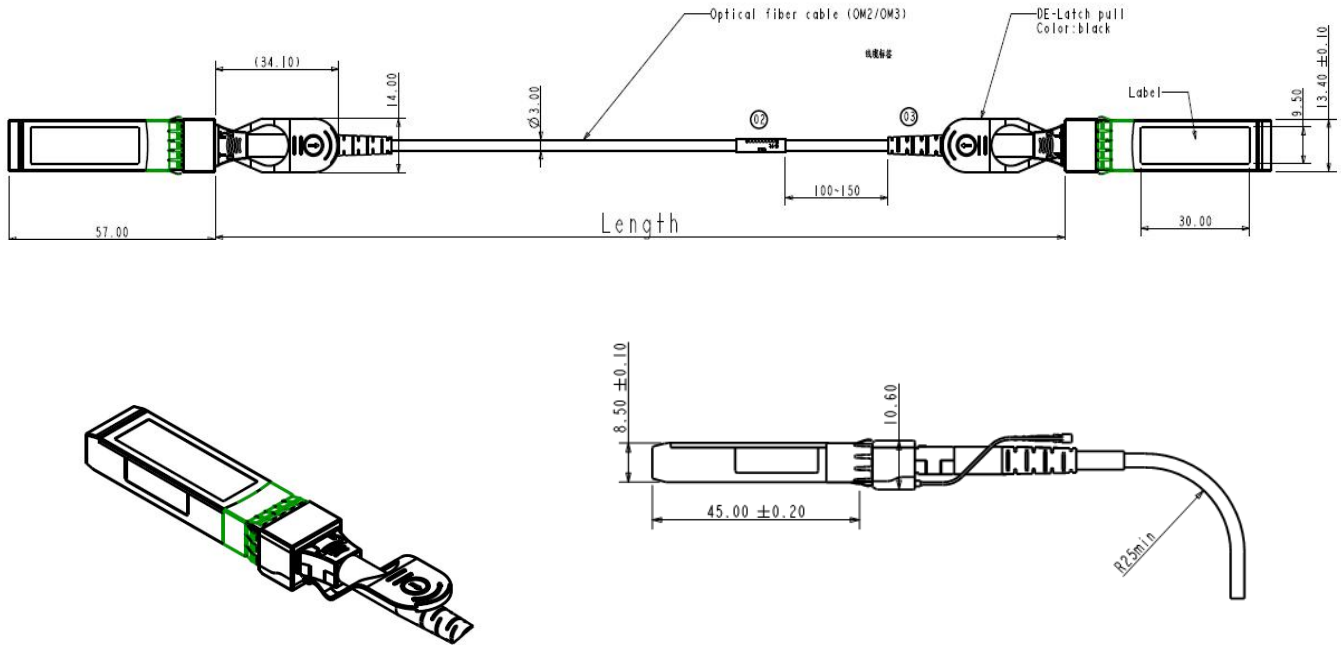


Figure1. Mechanical Specifications

References

1. Electrical interface compliant to SFF-8431
2. 850nm VCSEL transmitter, PIN photo-detector receiver
3. All-metal housing for superior EMI performance

Shenzhen Sourcelight Technology Co., Ltd

Sourcelight Technology reserves the right to make changes to or discontinue any optical link product or service identified in this document without notice in order to improve design and/or performance. If you have any question regarding this specification sheet, please contact our sales representative or send email to sales@sourcelight.com.cn