

## 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

## 1. 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 <sup>-12</sup>
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 <sup>2</sup> C (Supports SFF8472)

## 2. Optical Characteristics

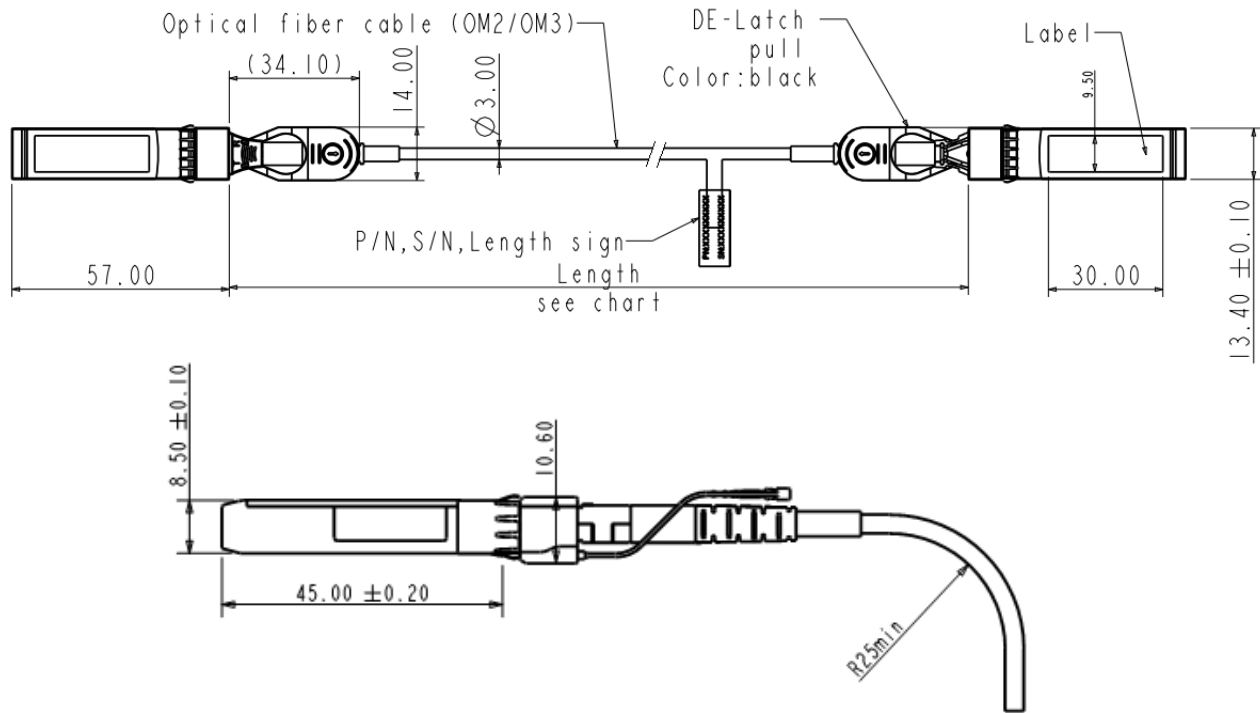
The following optical characteristics are defined over the Recommended Operating Environment unless otherwise specified.

Parameter	Symbol	Min.	Typical	Max	Unit	Notes
<b>Transmitter</b>						
Center Wavelength	$\lambda_t$	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	
<b>Receiver</b>						
Center Wavelength	$\lambda_r$	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:

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

### 3. Mechanical Diagram



**Note:** External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

## 4. Ordering Information

Our 10GBase SFP+ Multi-vendor active optical cables come in varying lengths and OEM connection options. To build the perfect fit for you, please view how to create your part number below.

Example:

For a **Brocade** to **Cisco** AOC measuring the length of **1m**, the part number would be as follows: SFP10G-**BRCS**-AOC-**1M**.

Please note that OEM abbreviations should be listed in alphabetical order.

Sample	OEM	OEM Abbreviations	Length <L>
<b>SFP10G-XXXX-AOC-&lt;L&gt;M</b>	Arista	AN	1m
	Brocade	BR	3m
	Cisco	CS	5m
	Dell	DF	7m
	Intel	IN	10m
	Juniper	JN	12m
	Mellanox	MX	15m
	MSA	MS	20m
	-	-	25m

## 5. Contact Information

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