

10G SFP+ Active Optical Cable

Features:

Electrical interface compliant to SFF8431

Hot Pluggable

850nm VCSEL transmitter, PIN photodetector receiver

Up to 300m on OM3 MMF

Operating case temperature: 0 to 70°C

Allmetal housing for superior EMI performance

RoHS compliant

**Applications:**

10 Gigabit Ethernet

4G and 8G Fibre Channel Applications

1x InfiniBand QDR. DDR, SDR

Highperformance computing clusters

Servers, switches, storage and host card adapters

Description:

T-TECH SFP+ Active Optical Cables are directattach fiber assemblies with SFP+ connectors. They are suitable for very short distances and offer a costeffective way to connect within racks and across adjacent racks. T-TECH SFP+ Active Optical Cables's length is up to 300 meters on OM3 MMF.

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

Optical Characteristics:

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

	Symbol	Min	Typical	Max	Unit	Notes
Transmitter						
Center Wavelength	λ_t	840	850	860	Nm	
RMS spectral width	Pm				Nm	1
Average Optical Power	Pavg	6.5		1	dBm	2
Extinction Ratio	ER	3.5			dB	3
Transmitter Dispersion Penalty	TDP			3.9	dB	
Relative Intensity Noise	Rin			128	dB/Hz	12dB reflection
Optical Return Loss Tolerance				12	dB	
Receiver						
Center Wavelength	λ_r	840	850	860	nm	
Receiver Sensitivity	Psens			11.1	dBm	4
Stressed Sensitivity in OMA				7.5	dBm	4
Los function	Los	30		12	dBm	
Overload	Pin			1.0	dBm	4
Receiver Reflectance				12	dB	

Note:

- 1.Tradeoffs 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 $2^{31}-1$ test pattern @10.3125Gbps
- 4.Measured with a PRBS $2^{31}-1$ test pattern @10.3125Gbps,BER $\leq 10^{-12}$.

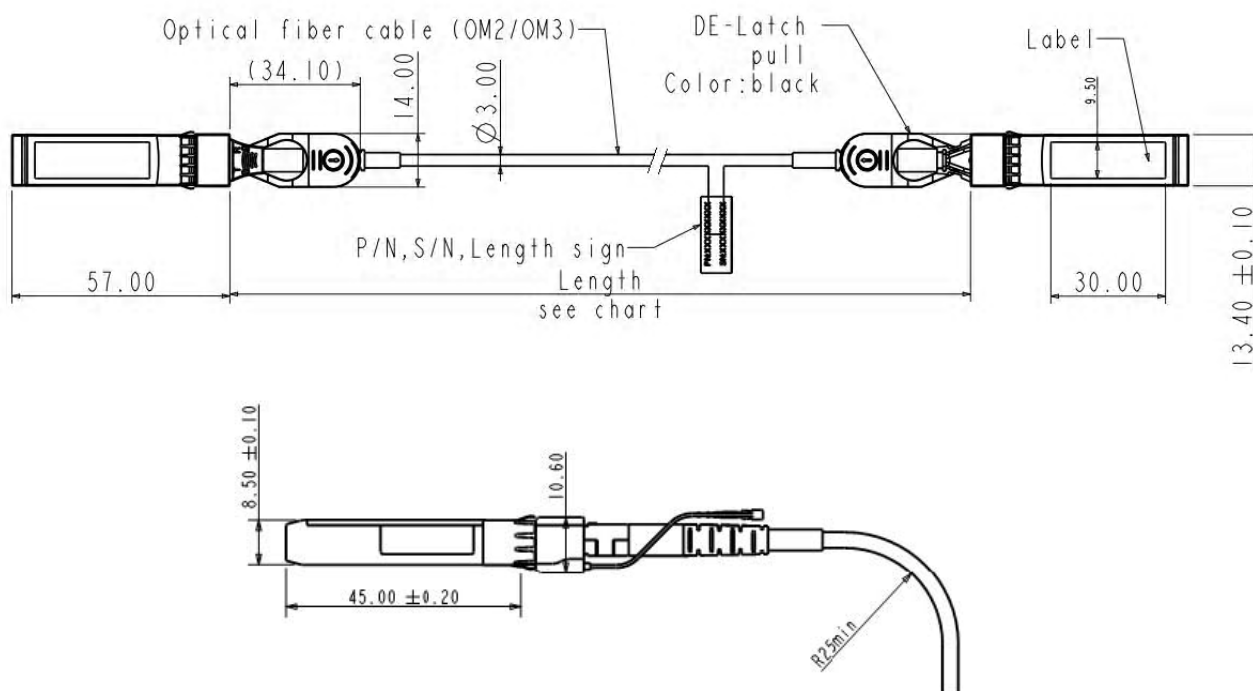


Figure1. Mechanical Specifications

Ordering information:

T-SFP+-AOC-1	1 meter 10G SFP+ Active Optical Cable
T-SFP+-AOC-1.5	1.5 meter 10G SFP+ Active Optical Cable
T-SFP+-AOC-2	2 meter 10G SFP+ Active Optical Cable
T-SFP+-AOC-3	3 meter 10G SFP+ Active Optical Cable
T-SFP+-AOC-5	5 meter 10G SFP+ Active Optical Cable
T-SFP+-AOC-7	7 meter 10G SFP+ Active Optical Cable
T-SFP+-AOC-SR	10G SFP+ Active Optical Cable up to 300m on OM3 MMF

Notice:

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