

SFP-10GB-AOCXM-C
10GBASE-AOC SFP+ MMF
850NM, UP TO 10M



SFP-10GB-AOCXM-C

MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, Up to 10m)

Features

- Electrical interface compliant to SFF-8431
- Hot Pluggable
- Up to 10m Length
- 850nm VCSEL transmitter, PIN photo-detector receiver
- Operating case temperature: 0°C to 70°C
- All-metal housing for superior EMI performance
- RoHS compliant (lead free)



Product Description

This is an MSA compliant 10GBase-AOC SFP+ to SFP+ active optical cable that operates over multi-mode fiber with a maximum reach of 10.0m (32.8ft). At a wavelength of 850nm, it has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. This active optical cable is TAA (Trade Agreements Act) compliant, and is built to comply with MSA (Multi-Source Agreement) standards. We stand behind the quality of our products and proudly offer a limited lifetime warranty.

ProLabs' SFP+ active optical cables are RoHS compliant and lead free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products.



Regulatory Compliance

- ESD to the Electrical PINs: compatible with MIL-STD-883 Method 3015.
- ESD to the Duplex LC Receptacle: compatible with IEC 61000-4-2.
- Immunity compatible with IEC 61000-4-3.
- EMI compatible with FCC Part 15 Class B EN55022 Class B (CISPR 22B) VCCI Class B.
- Laser Eye Safety compatible with FDA 21CFR 1040.10 and 1040.11 EN60950, EN (IEC) 60825-1,2.
- RoHs compliant with 2002/95/EC 4.1&4.2 2005/747/EC.

Order Information

| Part Number | Description |
|-------------------|---|
| SFP-10GB-AOC1M-C | MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, 1m) |
| SFP-10GB-AOC2M-C | MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, 2m) |
| SFP-10GB-AOC3M-C | MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, 3m) |
| SFP-10GB-AOC5M-C | MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, 5m) |
| SFP-10GB-AOC7M-C | MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, 7m) |
| SFP-10GB-AOC10M-C | MSA and TAA Compliant 10GBase-AOC SFP+ Active Optical Cable (850nm, MMF, 10m) |

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°C to 70°C |
| Storage Temperature | -20 to + 85°C |
| Supply Voltage | 3.3V |
| Supply Current (typical) | 230mA per end |
| Management Interface Serial | I ² C (Supports SFF8472) |

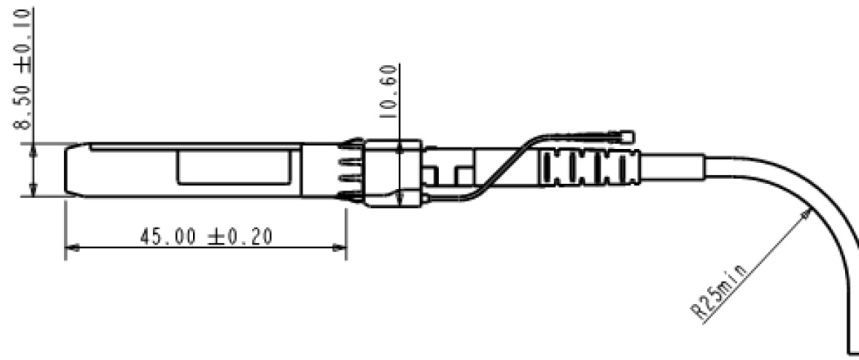
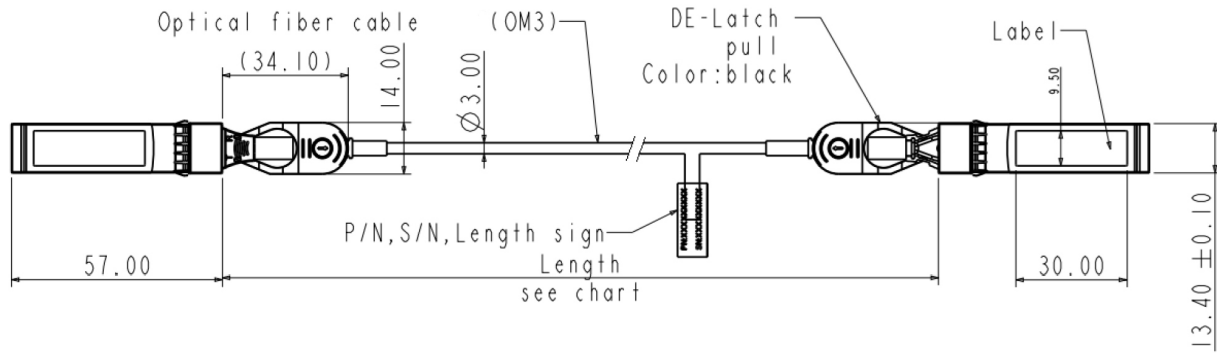
Optical Characteristics

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Notes |
|---------------------------------|-------------------|------|------|-------|-------|-------|
| Transmitter | | | | | | |
| Centre Wavelength | λ_C | 840 | 850 | 860 | nm | |
| RMS spectral width | $\Delta\lambda$ | | | | nm | 1 |
| Average launch power, each lane | P _{out} | -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 | 4 |
| Optical Return Loss Tolerance | | | | 12 | dB | |
| Receiver | | | | | | |
| Center Wavelength | λ_C | 840 | 850 | 860 | nm | |
| Receiver Sensitivity | P _{sens} | | | -11.1 | dBm | 5 |
| Stress Sensitivity in OMA | | | | -7.5 | dBm | 5 |
| Los function | Los | -30 | | -12 | dBm | |
| Overload | P _{in} | | | -1.0 | dBm | 5 |
| Receiver Reflectance | | | | -12 | dB | |

Note:

1. Tradeoffs are available between spectral width, center wavelength and minimum OMA.
2. The optical power is launched into MMF
3. Measured with PRBS 2³¹-1 test pattern @10.3125Gbps
4. 12dB reflection
5. Measured with PRBS 2³¹-1 test pattern @10.3125Gbps, BER≤10⁻¹²

Mechanical Specification



Cable Color: Aqua