

SC-UMM Series USB 3.0 Active Optical Cables



Features

- Low power consumption, no external power supply needed
- Thinner, lighter, and softer than the normal copper cable
- Supports Windows operating systems
- Extends USB 3.0 super speed devices up to 100m
- Supports all USB 3.0 device types at Host: control, interrupt, bulk and isochronous at up to 5 Gbps
- Operates with USB 3.0 super speed host controllers
- Number of devices can be increased using additional hubs
- Plug & Play no driver required
- RF screening to prevent interference

Overview

The SC-UMM Series USB 3.0 Active Optical Cable (AOC) is a USB 3.0 electrical to optical conversion module.

This product can translate signals between USB 3.0 electrical and optical signals. AOC is a cabling technology that accepts the same electrical inputs as a traditional copper cable but uses optical fiber “between the connectors”.

AOC uses electrical to optical conversion on the cable ends to improve speed and distance performance of the cable without sacrificing compatibility with standard electrical interface. USB3.0 AOC can extend the transmission distance of USB3.0 transmission to more than 100 meters. AOC offers a quick solution to supply longer cable for USB3.0 application.

Specifications

| | |
|-------------------------------|--|
| Cable Diameter | 4.5mm |
| Bend Radius (Dynamic/Static) | 40mm/20mm |
| Tensile Strength @ Long term | 100N |
| Tensile Strength @ Short term | 200N |
| Crush Resistance @ Long term | 200N |
| Crush Resistance @ Short term | 400N |
| Cable configuration | 2*Fiber + 2*cooper + PVC Jacket |
| Fiber Module | 50/125 um |
| Transducer | 850nm VCSEL/PIN |
| Working current | ≤45mA |
| Power Consumption | ≤250mw |
| Range | Up to 100m |
| Connectors | USB 3.0 Standard-A Male to A Male plug |
| Total Bandwidth | 5.0 Gbps |
| Operating Temperature Range | 0~50 degrees centigrade |
| Operating Humidity Range | 10%-90% non-condensing |
| Storage Temperature Range | -20~70 degrees centigrade |
| Storage Humidity Range | 10%~90% non-condensing |
| Warranty | 2 years |

Models

| Part Number | Description |
|-------------|---|
| SC-UMM-A10 | 10m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |
| SC-UMM-A15 | 15m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |
| SC-UMM-A20 | 20m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |
| SC-UMM-A25 | 25m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |
| SC-UMM-A30 | 30m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |
| SC-UMM-A40 | 40m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |
| SC-UMM-A50 | 50m USB3.0 AOC, Male to Male, 5Gbps, USB2.0 not supported |