

COMET-UPAA-**M Technical Specifications

Plenum USB 2.0 480Mbps Active Optical Cable

Rev. 211015

The COMET-UPAA-**M extends USB 2.0 signals via a plenum rated, Active Optical hybrid cable assembly. Utilizing active circuitry in the permanent USB connectors, USB signals can be transmitted on fixed length cables ranging from 8 meters up to 40 meters. The cables can deliver USB 2.0 power up to 0.5W to 25m. The cable is a USB 2.0 cable for data transfer up to 480Mbps.

As a hybrid fiber optic cable, the COMET-UPAA is immune to electromagnetic (EM) and radio frequency (RF) interference, which could degrade signal performance, the signals on the cable will not interfere with other sensitive electronic equipment.

The USB A male to A male format is not a standard USB approved format. A to A male is often used to extend from Host to a coupler and then a USB A-B or A-C cable is used on the coupler Client side to associate the correct connector. This is a directional cable and the heads are marked with "Host" and "Device". It will function in the normal USB Host to Client Mode. For best practices the connecting cable used on the Client side should be 1 meter or less in length. Any configuration should be be bench tested prior to installation.

Key Features:

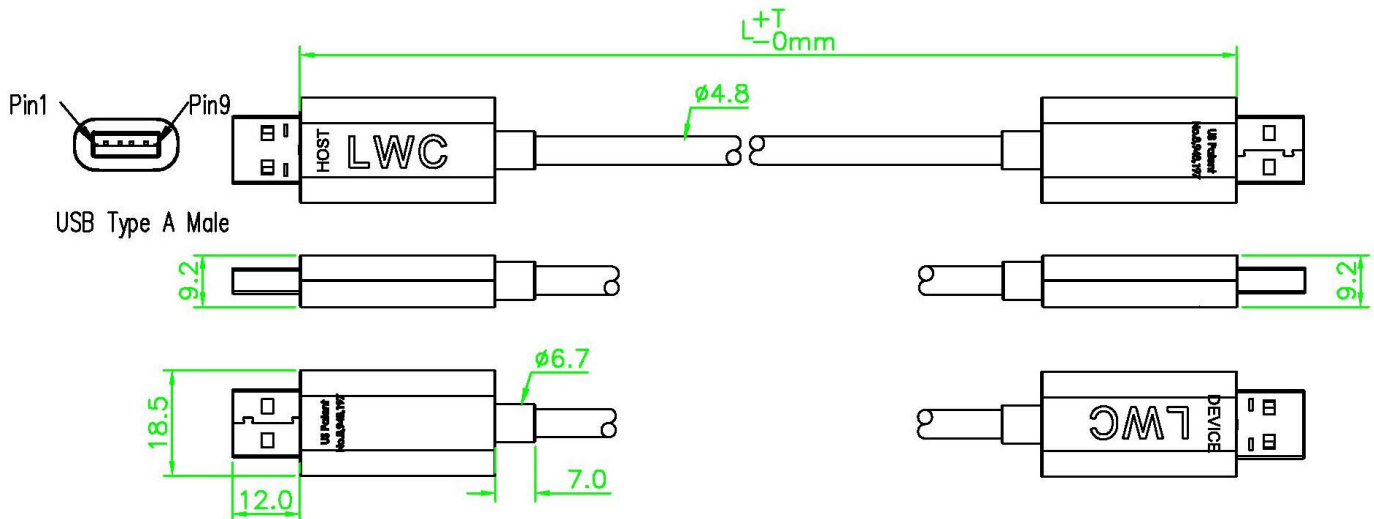
- Supports USB 2.0
- USB 2.0 480Mbps
- Immunity to EMI/RFI
- Plenum rated small diameter
- No external power needed
- Supplies 100mA @5VDC

Key Applications:

- USB Extension and Routing
- USB peripheral control
- Video over USB
- Boardroom, Collaboration
- Education



Product Image and Drawing information:



Handling and Care:

1. When plugging or unplugging from a receptacle, do not pull on the cable. Pull the connector by its housing to mate/de-mate.
2. Do not remove the connector housing or cut into the cable.
3. Discard cables with mechanically damaged housings or jackets properly
4. AOC circuitry is susceptible to high temperatures, ensure environmental controls to keep ambient temperature under 40°C (104°F). Never exceed 50°C (122°F).

Safety Considerations:

1. Optical energy is contained within cable and the end housings there are no optical emissions exposed to the user
2. CAUTION: Do not cut optical cable Viewing the cut fiber ends, especially with certain optical instruments (for example, eye loupes, magnifiers, and microscopes) may pose an eye hazard

Laser Information:

This product is classified as a Class 1 Laser product in accordance with IEC 60825 1 1993 +A 1 +A 2 and complies with 21 CFR 1040 10 and 1040 11 except for deviations pursuant to laser notice N 0 50 dated 24 Jun 2007 Use or modification of this device other than those specified herein may result in hazardous radiation To meet laser safety requirements the cable shall be used within environmental specifications Tampering with or modifying the device will result in voiding of the product warranty.

INVISIBLE LASER RADIATION
 CLASS 1 LASER PRODUCT
 840-860nm, 700µW

Technical Specifications	
I/O Connections	
USB	Male to male USB Type A connectors, Gold Plated contacts
Supported Signals	
USB	USB 2.0 High Speed 480Mbps
Formats Supported	Enumeration, Interrupt, Bulk, Isochronous
Power	Up to 25m supports 0.5W (5V 100mA), over 25m may need power inserters
Maximum Bandwidth	480Mbps
Cable Construction	
USB Hood Material	Black Anodized Plated ABS
Male USB Hood Dimensions	34.5mm x 18.5mm x 9.20mm. Strain relief is 7.0mm
Fiber Jacket Material	Fluoropolymer (FEP)
Cable Construction	Hybrid GOF (Glass Optical Fiber) OM2 and 24 AWG Copper
Overall Cable Diameter	4.8 mm (0.189-inch)
Minimum Bend Radius	Unloaded: 48 mm (1.89"), Loaded: 96mm (3.78")
Maximum Tensile Load	20 kg (44 lbs.)
Environmental Requirements	
Operating Temperature	0° to 50° C (+32° to +122° F)
Operating Humidity	20% to 85%, Non-condensing
Storage Temperature	-30° to 75° C (-22° to +122° F)
Storage Humidity	20% to 85%, Non-condensing
Power and Regulatory	
Power Supply	USB BUS power supplied by Host/Client
Power Consumption	<0.50W both sides when not used to power remote client
Power Delivery	1 USB 2.0 Power Unit = 100mA@5VDC to 25m
Regulatory	NEC® rated CMP, CEC rated CMP, RoHS Compliant, CE, EU CPR Eca
EMI/EMC	FCC Class B, CISPR32
Laser	Class 1 840-860nm, 700µW
Other	
Warranty	3 years

Product Listing

Part Numbers	Part Description	Cable Length
COMET-UPAA-08M	USB 2.0 AOC AM-AM CMP 8M	8 meters / 26 feet
COMET-UPAA-10M	USB 2.0 AOC AM-AM CMP 10M	10 meters / 33 feet
COMET-UPAA-15M	USB 2.0 AOC AM-AM CMP 15M	15 meters / 50 feet
COMET-UPAA-23M	USB 2.0 AOC AM-AM CMP 23M	23 meters / 75 feet
COMET-UPAA-30M	USB 2.0 AOC AM-AM CMP 30M	30 meters / 100 feet
COMET-UPAA-40M	USB 2.0 AOC AM-AM CMP 40M	40 meters / 130 feet

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