

USB 3.0 (Compatible with USB 2.0/1.1) AOC Cable



LA-AOC-UAMF Series

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The Link Aura LA-AOC-UAMF Series USB 3.0 Type A male to Type A female AOC is the first Gen2 active optical cable which can support downward compatible with USB 2.0 in the market. Super speed data transmission depending on optical fiber, not only its support length become much longer up to 15m max, but also signal quality is much more stable, no EMI completely, especially can support 10Gbps super speed, meets USB3.0 (newly name USB 3.2Gen2x1) standard. It is suitable for applications that do not have on-site power supply. This optical fiber cable can be applied to machine vision, Remote monitoring, etc.

Features

- Extends USB 3.2 Gen 2X1, 10Gbps and lengths up to 15m/49.2ft
- Support all USB 3.0 devices, downward compatible with USB 2.0 & USB1.1
- Support all major operating systems: Windows, Mac OS, Linux
- Offers fiber-optic noise immunity
- For use with self-powered peripherals only
- Cable OD : 4.5mm, 4 fiber + 4 copper wire
- Ideal for a wide variety of USB devices, from printer, scanners, hard drives, and audio devices,
- to touch screens, web cams, and game controllers
- Plug and Play, requires no external power supply

Application

- Industrial Control
- Digital Signage
- Home Network Integration
- Medical Device Connectivity
- KVM Extension
- Remote Desktop USB 3.0 and USB2.0/1.1 Connections
- Security: web camera, access control
- USB3.0/2.0/1.1 Device Sharing: print, scan, storage

Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Units
Supply Voltage	VCC	-0.5	5.5	V
Operating Temperature	Top	0	70	°C
Storage Temperature	Ts	-40	85	°C
Storage Relative Humidity	Hs	10	85	%RH

Characteristics

Parameter	Description	Minimum	Typical	Maximum	Units
VCC	Supply Voltage	4.75	5	5.25	V
IBUS	Current at USB Bus Power	49.5	55	60.5	mA
RDIFF	Differential impedance		90		Ω
USB3.0 AOC TX Characteristic					
PTX	Optical TX output power	0			dBm
Rj	Random jitter			3	ps
Dj	Deterministic jitter			60	ps
Tj	Total jitter at a 10-12 BER			100	ps
USB3.0 AOC RX Characteristic					
SRX	RX sensitivity	-7.5			dBm
CAC-COUPPLING	AC coupling capacitor on RXOUT	75	100	200	nF

Ordering Information

Part Number	Description
LA-AOC-UAMF-05	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 & USB1.1-5mtr
LA-AOC-UAMF-10	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 & USB1.1-10mtr
LA-AOC-UAMF-15	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 & USB1.1-15mtr
LA-AOC-UAMF-20	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 -20mtr
LA-AOC-UAMF-25	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 -25mtr
LA-AOC-UAMF-30	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 -30mtr
LA-AOC-UAMF-50	USB 3.0 Type A (Male-Female) AOC downward compatible with USB 2.0 -50mtr

Drawings

