

USB 3.0/3.1 Gen 1 Javelin™ Active Optical Plenum Cable



The CUSB3-AP cables are members of Hall Research's Javelin™ family of active optical video and USB cables. The CUSB3-AP cables are used to extend USB 3.0 (USB 3.1 Gen1) Super-Speed signals at data rates of up to 5 Gbps. They support transparent extension of USB 3.1 Gen1 and are compatible with all USB 3.0 devices including 4K USB 3.0 cameras and USB 3.0 memory devices. They are offered at standard lengths of 15, 30, and 50 meters (50, 100, and 164 ft).

The cables are light-weight and are constructed using a hybrid of fiber and copper. Fiber optics offer high immunity to EMI and RFI noise for trouble free operation. The cable uses minimal power and does not require any additional power supply. The USB host connection provides 5v power for operation and the cable sends 5v via its copper wires to the remote (device) end. The cables are constructed using Plenum (CMP) Rated jacket material to ensure compliance with modern building codes. The small cable ends can be easily pulled through most conduits (pulling sock is recommended)

CUSB3-AP cables are compatible with virtually all USB 3.0 and 3.1 Gen1 devices, and are a perfect solution for extending 4K videoconferencing cameras, video capture, docking stations, and other high-speed data communications. Note that the CUSB-AP cables only extend USB 3.0 signals. They are not recommended for use with USB 2.0 or 1.1 devices. For use with USB 2.0 or 1.1 Hall Research offers Special Hubs with USB 2.0/1.1-to-USB3.0 Transaction Translators that convert USB 2.0 traffic to USB 3.0 so that they can be extended using the CUSB3-AP cables.

CUSB3-AP-xx USB 3.0/3.1 Gen 1 Javelin™ Active Optical Plenum Cable



Specifications

Performance Characteristics

Input Male USB 3.0 Type A
Output Female USB 3.0 Type A

Available lengths CUSB3-AP-15 15 meters (50 ft) CUSB3-AP-30 30 meters (100 ft) CUSB3-AP-50 50 meters (164 ft)

USB Standards USB 3.0 or USB 3.1 Gen 1

Bandwidth 5 Gbps max

Electrical Characteristics

Supply Voltage Powered from USB 5v pin

Nominal: 5v (operating range: $4.7v \sim 5.3 v$) Damage will occur if 5v input is greater than 6v

Supply Current Nominal: 50 ma max (not including the remote USB device load)

Power Consumption Nominal: 0.25 watts

Cable Characteristics

Grade Plenum CMP (UL)

Color Black

Diameter 5 mm (0.2 inch)
Bend Radius 8 mm (0.3 inch) minimum

Connector Pull Strength 10 Kg (22 lbs) maximum (never pull on the connector, use a pulling sock)

General

Connector Housing USB A Male (host side)

Dimensions 1.4 inch x 0.6 inch x 0.3 inch (35.6mm x 15.3mm x 7.6 mm)

Total length including USB and Strain relief: 2.3 inch (58.4mm)

USB A Female (device side)

1.8 inch x 0.6 inch x 0.3 inch (45.7mm x 15.3mm x 7.6 mm)

Total length including Strain relief: 2.2 inch (55.9mm)

Temp/humidity Storage: -4 to +158 °F (-20 to +70 °C) / 5% to 90%, non-condensing

Operating: +32 to +122 °F (0 to +50 °C) / 10% to 85%, non-condensing

Regulatory CE, RoHS EMI/EMC CE, FCC Class A



