100m USB 3.2 Extender

U3EX100



User Manual

AV Access
Simplify your life

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Introduction

Overview

U3EX100 is a new generation of USB 3.2 & USB 3.0 extender. It supports USB 3.2 Gen 1 standard with up to 5Gbit/s USB data transmission rate, and is backward compatible with USB 3.0, USB 2.0, and USB 1.1 specifications.

This USB extender can extend the USB 3.2 & USB 3.0 data up to 100m/330ft via a single Cat 6A/7 F/FTP or U/FTP cable. It has a built-in 4-port USB hub in the receiver, which can be connected to multiple USB devices. Pure hardware architecture is compatible with Control / Bulk / Interrupt / Isochronous transmission protocols. For multiple USB device scenarios, this extender can also be used with an external USB 3.2 & 3.0 hub.

The transmitter can be powered by the USB Type-C host, and the receiver can be powered by the local power source. The extender supports USB VBUS pass-through, if the USB Host port of the transmitter is not connected to a host device, the USB Device ports on the receiver have no VBUS output.

Features

- Slim profile, easy to install anywhere.
- Support USB 3.2 Gen 1 standard, and backward compatible with USB 3.0, USB 2.0, and USB1.1 standard.
- Supports up to 5Gbit/s data transfer rate.
- Support up to 100m transmission via Cat 6A/7 F/FTP or U/FTP cable.
- One USB-C host port for connected to the laptop.
- Provide four USB 3.2 & 3.0 device ports on RX, including one 1.5A port for connecting high-power USB devices.
- Pure hardware architecture is compatible with Control / Bulk / Interrupt / Isochronous transmission protocols.
- Plug and play, no driver required, compatible with multiple operating systems.
- Support FW update via Micro-USB.

Package Contents

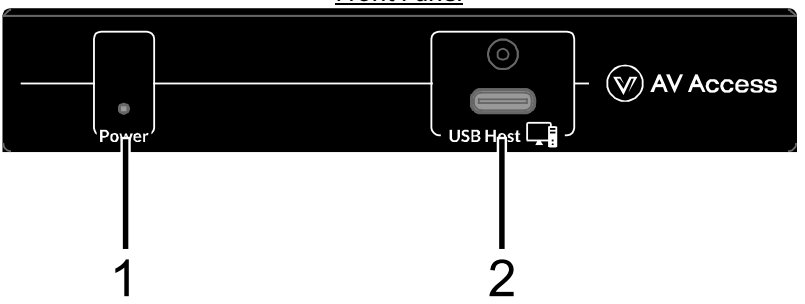
Before you start the installation of the product, please check the package contents:

- Transmitter x 1
- Receiver x 1
- Power Adapter (DC 12V 3A) x 1
- USB Type-C to Type-C Cable (L=2m) x 1
- Mounting Brackets (with Screws) x 4
- User Manual x 1

Panel

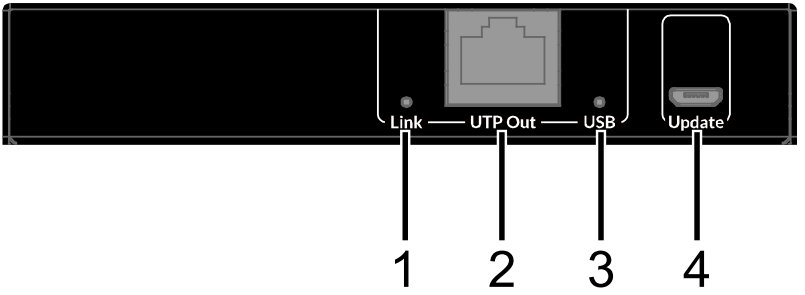
Transmitter

Front Panel



No.	Name	Description
1	POWER LED	On: The transmitter is powered on. Off: The transmitter is powered off.
2	USB Host	USB 3.2 Type-C port. Connect to a USB-C laptop. Please use the cable recommended: USB Type-C to Type-C cable (USB 3.2 or above).

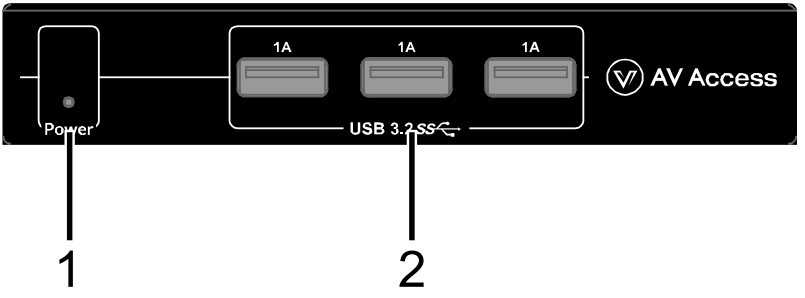
Rear Panel



No.	Name	Description
1	Link LED	On: The HDBT link is normal. Blinking/Off: No HDBT link or link error.
2	UTP Out	Connect to UTP In port of receiver.
3	USB LED	On: The USB data is being transmitted. Off: There's no USB data being transmitted.
4	Update	Micro-USB port. Connect to a PC for upgrading firmware versions of the transmitter and receiver.

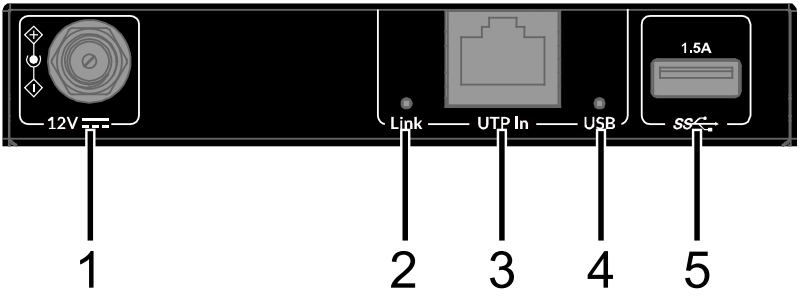
Receiver

Front Panel



No.	Name	Description
1	Power LED	On: The receiver is powered on. Off: The receiver is powered off.
2	USB 3.0	USB Type-A ports. Connect to USB devices.

Rear Panel



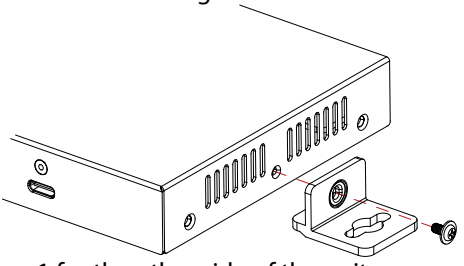
No.	Name	Description
1	DC 12V	12V DC power input. Connect to the provided power adapter to supply power for the receiver.
2	Link LED	On: The HDBT link is normal. Blinking/Off: No HDBT link or link error.
3	UTP In	Connect to UTP Out port of transmitter.
4	USB LED	On: The USB data is being transmitted. Off: There's no USB data being transmitted.
5	USB (1.5A)	USB Type-A port. The 1.5A USB port can be used to connect with high-power USB devices such as USB camera.

Installation and Application

Brackets Installation

Note: Before installation, please ensure the device is disconnected from the power source.

1. Position and install the mounting brackets with the screws provided in the package, as shown in the figure.

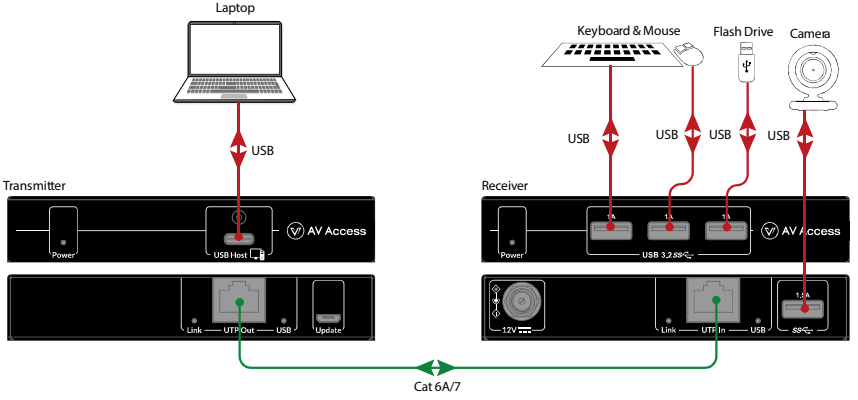


2. Repeat the step 1 for the other side of the unit.
3. Mount and secure the transmitter/receiver to a surface or a suitable location with the mounting screws.

Application

Warnings:

- Before wiring, disconnect the power from all devices.
- During wiring, connect and disconnect the cables gently.



Specification

Technical	
Input/Output Port	Transmitter: 1 x USB Host (USB Type-C); 1 X UTP Out; 1 x Update (Micro-USB) Receiver: 4 x USB DEVICE (USB Type-A); 1 X UTP In; 1 x DC 12V IN
USB Standard	USB 3.2 Gen1, and backward compatible with USB 3.0, USB 2.0, and USB 1.1 standards
Data Rate	Up to 5Gbit/s

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Surge Protection	Voltage: ±1 kV
Power Consumption (Max)	27.31W
Device Dimension (W x H x D)	Transmitter/Receiver: 115mm x 20.5mm x 100mm/4.53" x 0.81" x 3.94"
Product Weight	Transmitter/Receiver: 0.32kg/0.71lb

Transmission Distance

Note:

- T568B straight-through category cable is recommended.
- Please use F/FTP or U/FTP cable, and don't use UTP, F/UTP, or U/UTP cables.

Cable Type	Range
Cat 6a/7 (F/FTP or U/FTP) Cable	100m/330ft

Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

1. The original serial number (specified by AV Access) labeled on the product has been removed, erased, replaced, defaced or is illegible.
2. The warranty has expired.
3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV Access authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
5. The service, configuration and gifts promised by salesman only but not covered by normal contract.
6. AV Access preserves the right for interpretation of these cases above and to make changes to them at any time without notice.

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