

EVEXUSB32 Product Manual

USB 3.2 Extender Over HDBaseT with USB-C



Safety Instructions

For optimum performance and safety, please read these instructions carefully before use and keep this manual for future reference. Please have the part number, serial number, and invoice available when requesting support.

- To prevent electric shock, please ensure that all apparatus is properly grounded.
- Place the device in a well-ventilated area, do not block any ventilation openings.
- Do not expose this apparatus to rain or place it near water. Any liquid that goes into the apparatus may cause a failure, fire, or electric shock.
- Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
- Never insert anything metallic into the open parts of this apparatus. This may cause a danger of electric shock.
- If a third-party power supply is used, please ensure that the power supply specifications meet the product requirements.

Introduction

The EVEXUSB32 is a complete USB 3.2 extender that transmits and controls data signals up to 328ft (100m) over a single Cat6A cable. It supports up to four USB 3.2 devices, such as webcams, keyboards, mice, and storage devices using USB-A and USB-C connections. Power over HDBaseT (PoH) technology allows for a single power supply on either end while two 1.5A ports (USB-A & USB-C) and two 1A ports (USB-A) provide power to the connected devices. With its reliable transmission and versatile connectivity options, the EVEXUSB32 supports corporate, medical, security, educational, and other applications.

Product features:

- Supports USB 3.2 Gen 1x1 standards
- 5Gbps data transfer up to 328ft (100m) over a single Cat6A cable or up to 164ft/50m over a single Cat6 cable
- Backwards compatible with USB 3.0, 2.0, and 1.1 standards
- One USB-C port on the transmitter (host) unit
- One USB-C port and three USB-A ports on the receiver (device) unit
- Features VBUS, FSYNC, and RS232 pass-through
- Power over HDBaseT (PoH) technology allows for a single power supply on either end
- Includes two 1.5A ports (USB-A & USB-C) and two 1A (USB-A) ports on the receiver (device) unit
- Features the HDBaseT-USB3 standard for high performance and reliable connectivity with low power consumption

Package contents:

- (1) Transmitter (host) unit
- (1) Receiver (device) unit
- (1) DC 20V/3A power adapter and cable
- (4) Mounting brackets and screws
- (2) 4-pin screwdown terminal connectors

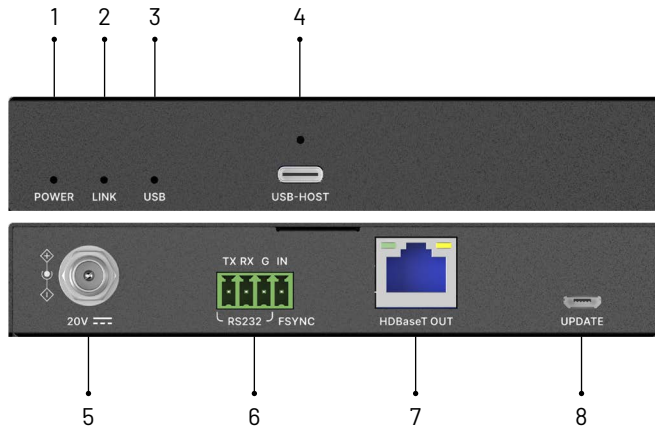
Specifications

Technical		
Input/Output Port	Transmitter	1 x USB HOST (USB Type-C); 1 x RS232 & FSYNC (3.5mm, 4-Pin Phoenix Connector); 1 x HDBaseT OUT (RJ45); 1 x POWER; 1 x UPDATE (Micro-USB)
	Receiver	4 x USB DEVICE (3 USB Type-A + 1 USB Type-C); 1 x RS232 & FSYNC (3.5mm, 4-Pin Phoenix Connector); 1 X HDBaseT IN (RJ45); 1 x POWER; 1 x UPDATE (Micro-USB)
USB Standard	USB 3.2 Gen1, and backward compatible with USB 3.0, USB 2.0, and USB 1.1 standards	
Data Rate	10% to 90%, non-condensing	
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	Human-body Model: ±8kV (Air-gap discharge) / ±4kV (Contact discharge)	
Power Supply	20V, 3A	
Power Consumption (Max)	31.28W (Pair, USB fully loaded)	
Dimension (W x H x D)	130mm x 22.5mm x 120mm / 5.12" x 0.89" x 4.72" (both)	
Product Weight	Transmitter: 0.35kg/0.77lb, Receiver: 0.34kg/0.75lb	

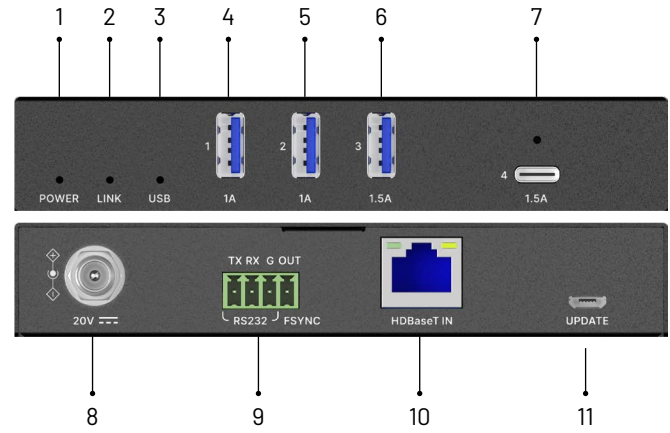
Panel Descriptions

Please reference the panel descriptions below for icon information and port descriptions. A detailed connection diagram illustrating the EVEXUSB32 in use is shown on the following page.

Transmitter (Host) Unit



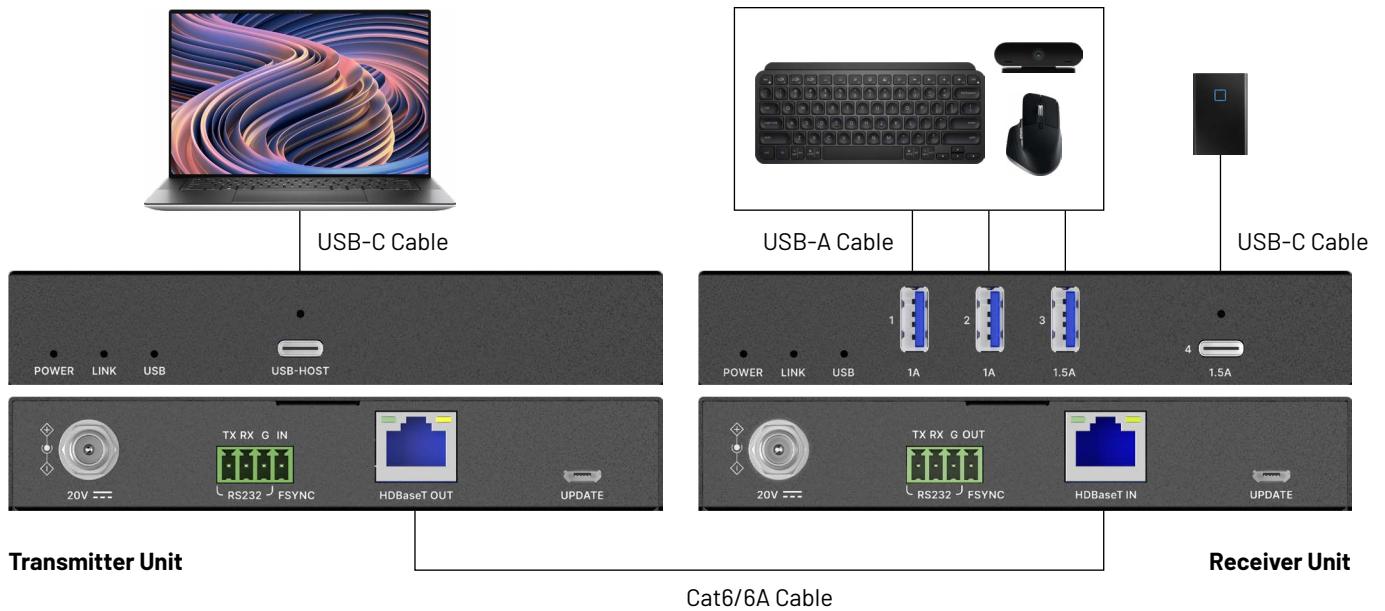
Receiver (Device) Unit



Transmitter (Host) Unit		
1	Power LED	Emits solid when power is applied to either the transmitter or receiver when a Cat6/6a cable is connected between the devices.
2	Link LED	ON: HDBT link is active and connected to receiver
		Blinking/OFF: No HDBT link is present or there is a link error
3	USB LED	ON: USB data is being transmitted
		OFF: No USB data is being transmitted
4	USB Host	Connects to USB host device.
5	20V Power	Connects to DC 20V/3A power supply. Connecting power on this unit will send power over Cat6/6A to the receiver.
6	RS232/FSYNC	RS232 pass-through
		FSYNC GPIO input, 3.3V
7	HDBaseT Out	Connects to well terminated and tested Cat6/6A cable.
8	Update	Connects mini-USB for future updates.

Receiver (Device) Unit		
1	Power LED	Emits solid when power is applied to either the transmitter or receiver when a Cat6/6a cable is connected between the devices.
2	Link LED	ON: HDBT link is active and connected to transmitter
		Blinking/OFF: No HDBT link is present or there is a link error
3	USB LED	ON: USB data is being received
		OFF: No USB data is being received
4	USB-A Port	Connects USB device and provides up to 1A of power.
5	USB-A Port	Connects USB-A device and provides up to 1A of power.
6	USB-A Port	Connects USB-A device and provides up to 1.5A of power.
7	USB-C Port	Connects USB-C device and provides up to 1.5A of power
8	20V Power	Connects to DC 20V/3A power supply
9	RS232/FSYNC	RS232 pass-through
		FSYNC GPIO input, 3.3V
10	HDBaseT In	Connects to well terminated and tested Cat6/6A cable.
11	Update	Connects mini-USB for future updates.

Connection Diagram



Connect & Operate

1. Connect the transmitting unit to the USB C host device such as a computer or security video recorder.
2. Connect up to four USB devices such as a mouse, keyboard, webcam, microphone, touchscreen, USB flash drive, or other USB peripheral to the USB ports (3 USB-A and 1 USB-C) on the receiving unit.
3. Connect a single Cat6/6a cable from the transmitting unit to the receiving unit (home-run cabling strongly recommended without any couplings, punch-downs, or patch panels).
4. Plug the power supply into the transmitter OR receiver and test.

NOTE: The EVEXUSB32 does NOT support alt-mode video.

NOTE: Adapters to convert USB-C to other USB formats can be used. For best uses, make sure they capable of USB 3.X.

Use of adapters and convertors rated for USB 2.X will limit the overall specifications.

RS232 & FSYNC

The transmitter and receiver feature a RS232 & FSYNC (IN) port and an RS232 & FSYNC (OUT) port respectively, which are used for industrial camera control.

- RS232 & FSYNC (IN): FSYNC (IN), GPIO digital in port, supports 3.3V voltage input. Connect to a PC.
- RS232 & FSYNC (OUT): FSYNC (OUT), GPIO digital out port, supply for 3.3V voltage output. Connect to an industrial camera.



Limited Warranty

With the exceptions noted in the next paragraph, Vanco warrants to the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of 10 years from the date of purchase. Should this product, in Vanco's opinion, prove defective within this warranty period, Vanco, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of Vanco. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into Vanco products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to Vanco. A surge protector, power conditioner unit, or an uninterruptible power supply must be installed in the electrical circuit to protect against power surges.

If repairs are needed during the warranty period, the purchaser will be required to provide a sales receipt/invoice or another acceptable proof of purchase to the seller of this equipment. The seller will then contact Vanco regarding repair or replacement.

Liability Statement

Every effort has been made to ensure that this product is free of defects. The manufacturer of this product cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user and installer of the hardware to check that it is suitable for their requirements and that it is installed correctly. All rights are reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

Manufacturer reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way. For additional information, please visit www.vanco1.com.

Technical Support

Please read this product manual prior to calling or installing this unit, since it will familiarize you with the capabilities of this product and its proper installation.

In case of problems, please contact Vanco Technical Support by dialing 1-800-626-6445. You can also email technical support issues to techsupport@vanco1.com. When calling, please have the part number, serial number, and invoice available for reference.

All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theater applications.

Vanco Tech Support

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Email: techsupport@vanco1.com

Web: www.vanco1.com/tech-support

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