

# EX-USB3-100-10

**NETVIO**

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**100M USB3.2 GEN1 5MBPS**



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## Safety Information



Do not attempt to remove the product casing, as this may result in electrical shock. Repairs should not be attempted by anyone other than qualified personnel. For any service or repair needs, please contact Netvio Ltd or an authorized reseller to follow the proper service procedures. Any unauthorized repairs or the use of non-approved components will void the product warranty. For complete warranty terms and conditions, please visit: [www.netvio.co.uk](http://www.netvio.co.uk).

Netvio's EX-USB3-100-10 USB 3.2 Gen 1 Extender over Category Cable allows you to extend a USB 3.2 Gen 1 signal up to 100 meters (328 feet) over standard 6/6a/7 cables. This device is ideal for environments where multiple USB devices, such as a camera, printer, or storage drive, needs to be located far from the host computer. With support for data transfer rates up to 5Gbps, the extender ensures reliable, high-speed communication.

## CABLE & CONNECTIONS

- **Important Notice on Cable Installation and Performance**
- Advertised cable distances are for reference only. Transmission distances can be influenced by various factors, including cable construction, quality, installation standards, patch panels, faceplates, and external elements such as electromagnetic interference (EMI).
- This product is designed to operate over unshielded twisted pair (UTP) Cat5e, Cat6, and Cat7 cables. When using shielded (STP) category cables, ensure that all drain wires and shielding are properly grounded.
- **RJ45 Termination Standards:**
- Follow the EIA/TIA-568-B termination standard. Do not simply wire pin-to-pin (e.g., Pin 1-1, Pin 2-2). The 568-B standard requires splitting the green pair between Pins 3 and 6.
- Maintain the twists in the Cat5e/Cat6/Cat7 cable pairs as close as possible to the point of termination.
- **Cable Installation Guidelines:**
- Avoid sharp bends or twists. Use gradual bends, with a minimum bend radius of 25mm wherever possible.
- Ensure that cables are not pulled too tightly or stretched. Excess tension can damage the cable. The maximum pulling force should not exceed 11kgf.
- Dress the cable with moderate to low pressure, ensuring the cable jacket is not pinched.
- Never splice, join, or bridge the cable, as this can cause significant transmission issues.
- **Electromagnetic Interference (EMI):**
- Keep category cables at least 300mm away from sources of EMI, such as electrical cables, transformers, and light fixtures. If necessary, cross electrical cables at right angles to minimize interference.
- **Testing and Certification:**
- After installation, ensure that the cable is thoroughly tested. A basic continuity check may not be sufficient to identify issues or certify performance.
- Finally, always verify compliance with local building and fire codes before installation.

## IN-THE-BOX

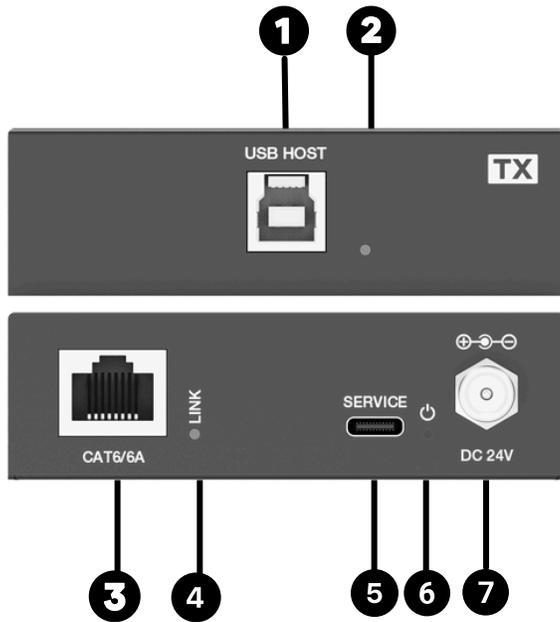
- 1 × USB Extender Transmitter
- 1 × USB Extender Receiver
- 1 × 24V/2A Locking Power Adapter
- 1 × Mounting hardware (4 ears, 8 screws)
- Type B to USB-C 0.25m cable for host connection

## WARRANTY

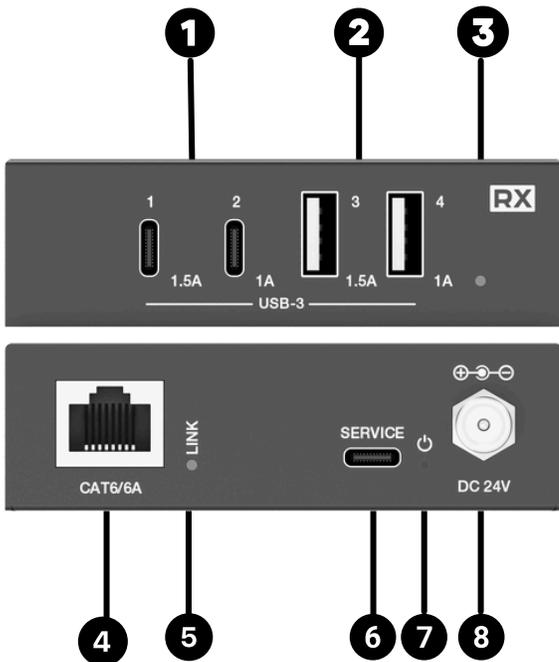
- Standard 5-Year warranty. Details available at [www.netvio.co.uk/warranty](http://www.netvio.co.uk/warranty)

# EX-USB3-100-10

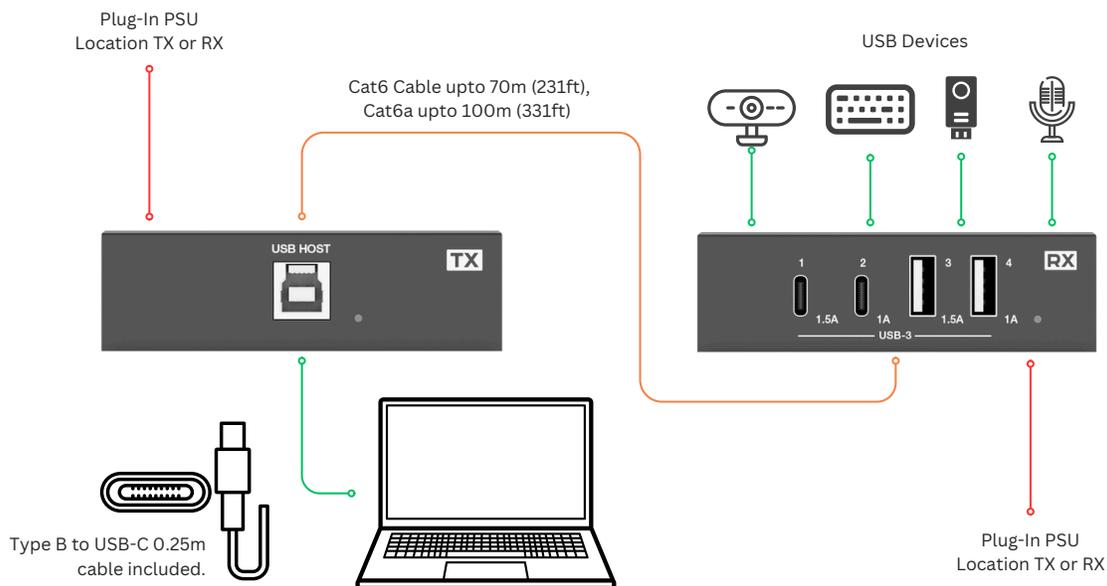
## Connectivity



<b>1</b>	<b>USB-B Host</b>	Connects to PC/Host
<b>2</b>	<b>USB LED</b>	USB Signal Detected
<b>3</b>	<b>RJ45 Socket</b>	For direct connection of RJ45 Plug & Cable
<b>4</b>	<b>Link</b>	Confirmed USB connection between TX & RX
<b>5</b>	<b>Service</b>	Firmware Update Port
<b>6</b>	<b>Power</b>	Power Present Confirmation
<b>7</b>	<b>DC 24V Power</b>	Connection of Power Supply Unit. Either TX or RX



<b>1</b>	<b>USB-C</b>	5V/1.0A & 1.5A
<b>2</b>	<b>USB-A</b>	5V/1.0A & 1.5A
<b>3</b>	<b>USB LED</b>	USB Signal Detected
<b>4</b>	<b>RJ45 Socket</b>	For direct connection of RJ45 Plug & Cable
<b>5</b>	<b>Link</b>	Confirmed USB connection between TX & RX
<b>6</b>	<b>Service</b>	Firmware Update Port
<b>7</b>	<b>Power</b>	Power Present Confirmation
<b>8</b>	<b>DC 24V Power</b>	Connection of Power Supply Unit. Either TX or RX



### Step 1: Check Package Contents

Before installation, ensure you have all the necessary components from the package, including the TX unit, RX unit, power adapter, and a suitable Category cable (not included).

### Step 2: Connect the Extender

#### 1. On the Transmitter (TX) Unit:

Connect the USB 3.2 Gen 1 cable from your host device (computer/server) to the USB Input Port of the TX unit.

Connect one end of the Category cable to the Category Cable Port on the TX unit.

You can use the included Type B to USB-C cable for additional out-of-box connectivity option.

#### 2. On the Receiver (RX) Unit:

Connect the other end of the Category cable to the Category Cable Port on the RX unit.

Connect the USB device (e.g., camera, printer) to the USB Output Ports on the RX unit.

### Step 3: Powering the Units

#### 1. Power over Cable (PoC) is supported:

Connect the included power adapter to either the TX or RX unit. Only one power supply unit is required for both TX and RX devices.

### Step 4: Verifying the Connection

**Power On:** The Red LED indicators on both units should light up to indicate power.

**Data Transmission:** Once the devices are connected, the data status Green LED should be active. If the USB device is recognized by the host computer, you're ready to use the extended USB connection.

### Troubleshooting

#### Issue: No Power Indication

**Solution:** Verify the power adapters are correctly connected. Check if the outlet is functioning.

#### Issue: USB Device Not Recognized

**Solution:** Ensure both the TX and RX units are correctly connected via the Category cable. Check that the USB device is functional by connecting it directly to the host device.

Technical	
USB Protocol	Up to USB 3.0
Transmission Rate	Up to 5 Gbps
Transmission Distance	100m (328ft.)
ESD Protection	Human-body Model : ±8kV (Air-gap discharge), ±4kV (Contact discharge)

Connection	
Transmitter	Input: 1× USB-B Female Output: 1x <u>HDBaseT</u> (RJ-45) Control: 1x RS-232 (3-Pin Phoenix) 1x FSYNC (1-Pin Phoenix) 1x USB-C Update Port
Receiver	Input: 1× <u>HDBaseT</u> (RJ-45) Output: 2x USB Type-A 2x USB-C Control: 1x RS-232 (3-Pin Phoenix) 1x FSYNC (1-Pin Phoenix) 1x USB-C Update Port
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions (RX & TX)	100mm (3.94") [W] × 85mm (3.35") [D] × 25.5mm (1.0") [H]
Weight	TX 253g/8.92oz. RX 260g/9.17oz.
Power Supply	Input: AC100~240V 50/60Hz, Output: DC24V/2A (US/EU standards, CE/FCC/UL certified)
Power Consumption	40W Max
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)