

# User Manual



## MPTP-TU100S-KIT

100m USB 5Gbps Extender over HDBT



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Version: MPTP-TU100S-KIT\_2025V1.0

## Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till May 31, 2024. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

## FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



## **SAFETY PRECAUTIONS**

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

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## 1. Product Introduction

Thanks for choosing the 100m USB 5Gbps Extender kit. The extender which includes a host and a device is designed to transmit USB signal up to 100m distance. The host port contains one Type-C for PC or laptop connect; The device port with USB power management contains four USB ports, applications include extending conferencing cameras, video capture devices, and audio devices for boardrooms and conference rooms. The extender also supports two-way 24V PoC power supply.

### 1.1 Features

- USB3.2 Gen1 data transfer rate up to 5Gbps;
- Up to 100m extension over single CAT6a cable;
- Support USB device power management;
- Provides up to 3A current for devices;
- Two-way 24V PoC power supply.

### 1.2 Package List

- 1x HOST(MPTP-TU100ST)
- 1x DEVICE(MPTP-TU100SR)
- 1x DC24V 1.5A Adapter
- 1x User Manual

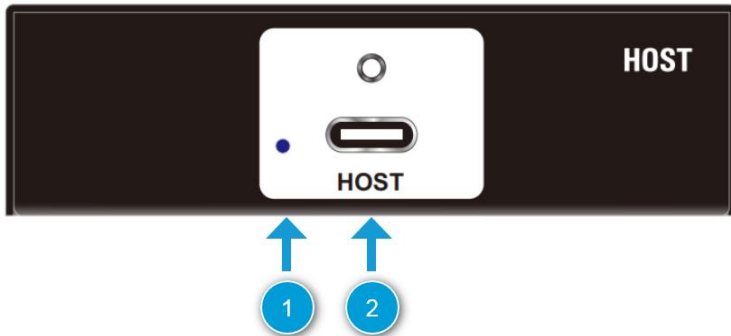
**Note:** Please contact your distributor immediately if any damage or defect in the components is found.

## 2. Specification

<b>MPTP-TU100ST</b>	
Host Connector	(1) Type-C USB
USB Version	USB 3.2 Gen1
FW Port	(1) Type-C USB
Dimension (W*H*D)	130.0mm x 21.5mm x 75.0mm
Net Weight	240g
<b>MPTP-TU100SR</b>	
Devices Connector	(3) Type-A USB (1) Type-C USB
Devices Power	Devices share 3A current limit
USB Version	USB 3.2 Gen1
Dimension (W*H*D)	130.0mm x 21.5mm x 75.0mm
Net Weight	275g
<b>Control Part</b>	
Control Connector	(1) 2-pin DIP switch
<b>General</b>	
Transmit distance	Up to 100m with CAT6A cable
PoC standard	Two-way 24V PoC
Data Rate	5Gbps
Operation Temperature	-10℃ ~ +55℃
Storage Temperature	-25℃ ~ +70℃
Relative Humidity	10% ~ 90%
External Power Supply	DC 24V 1.5A

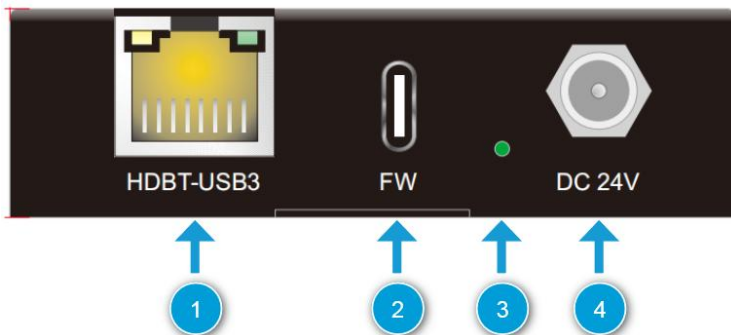
### 3. Panel Description

#### 3.1 HOST Front Panel



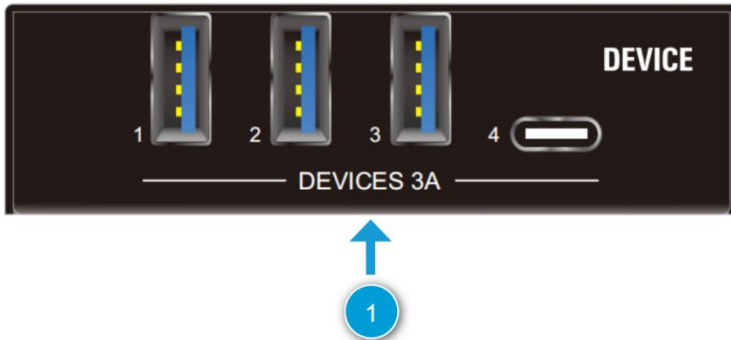
- ① **HOST LED:** The LED illuminates blue when the host connected.
- ② **HOST:** Type-C USB 3.2 Gen1, connecting to the PC/Laptop.

#### 3.2 HOST Rear Panel



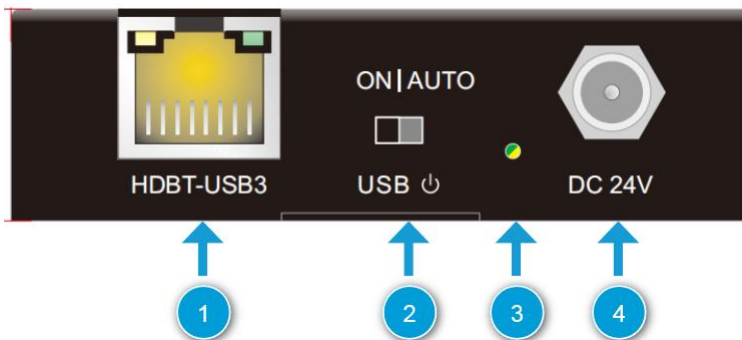
- ① **HDBT-USB3:** 1x RJ45 port for connecting with the device unit of the extender and supports two-way 24V PoC power supply. The yellow light indicates the connection status of the HDBT, and the green LED is the data light.
- ② **FW:** Firmware upgrade.
- ③ **Power LED:** The LED illuminates green when the unit is power on.
- ④ **DC 24V:** DC port for DC24V 1.5A power adapter connection.

### 3.3 DEVICE Front Panel



- ① **Devices 3A:** 3x USB-A and 1x USB-C 3.2 gen1 for connecting KVM devices, cameras or other USB devices. Devices share 3A current limit.

### 3.4 DEVICE Rear Panel



- ① **HDBT-USB3:** 1x RJ45 port for connecting with the device unit of the extender and supports two-way 24V PoC power supply. The yellow light indicates the connection status of the HDBT, and the green LED is the data light.
- ② **USB power :** 1x DIP switch for USB device ports power settings:  
 AUTO(Default): Follow Host, USB device ports will only output power when a host is active connected;  
 ON: USB device ports output power all the time.
- ③ **Power LED:** The LED illuminates green when the unit is power on.
- ④ **DC 24V:** DC port for DC24V 1.5A power adapter connection.

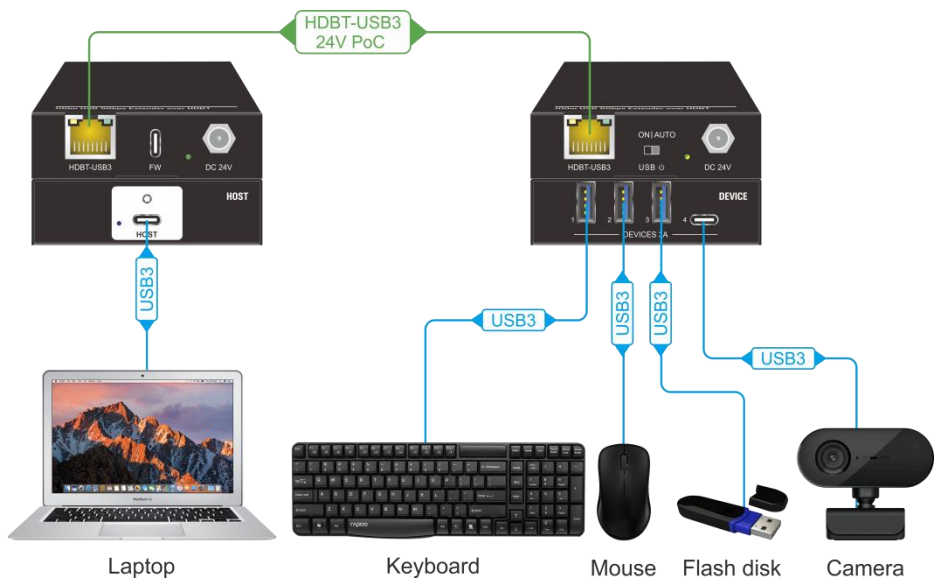


## 4. System Connection

### 4.1 Usage Precaution

- Make sure all components and accessories included before installation.
- System should be installed in a clean environment with proper temperature and humidity.
- All of the power switches, plugs, sockets, and power cords should be insulated and safe.
- All devices should be connected before power on.

### 4.2 System Diagram



## 5. Panel Drawing

