

USB 2.0 Extender over Cat6 50 Meters

480Mbps Plug-and-Play Extension to 164ft — TX Bus-Powered, No Drivers Required

MPN: EXT-USB250M



The KanexPro EXT-USB250M extends USB 2.0 at 480Mbps up to 50 meters (164ft) over a single Cat5e/6 cable — delivering two USB-A ports at the remote end for webcams, touch screens, printers, and HID devices. The Transmitter is bus-powered from the host USB-B port — no external adapter required at the TX end.

Backward compatible with USB 1.1 and backed by KanexPro's 3-year parts and labor warranty.

Notice: Please read this manual carefully before connecting or operating this product. Surge protection is recommended.

1	Introduction	1
2	Features	1
3	Package Contents	1
4	Specifications	1
5	Operation Controls & Functions	2
6	Application Example	3

1. Introduction

The EXT-USB250M is a compact USB 2.0 transmitter/receiver set designed to extend USB 2.0 signals from touch screens, USB hubs, cameras, or HID devices to a host PC up to 164ft away. The Transmitter draws power from the host USB-B port. Simple plug-and-play — no driver installation required.

2. Features

- Supports USB 2.0 protocol at transmission rates up to 480Mbps
- Extends USB 2.0 up to 50m/164ft over a single Cat5e/6 cable
- One USB-B input on Transmitter; two USB-A outputs on Receiver
- Transmitter bus-powered from host USB-B port — no external power adapter required at TX end
- Receiver powered by included 5V/1A adapter
- ESD protection: ±8kV Air-gap discharge, ±4kV Contact discharge
- Backward compatible with USB 1.1 devices — compact metal enclosure
- KanexPro 3-Year Parts and Labor Warranty

3. Package Contents

- ① 1× USB 2.0 Extender (Transmitter)
- ② 1× USB 2.0 Extender (Receiver)
- ③ 1× USB Cable (USB-B Male to USB-A Male, 1m)
- ④ 1× 5V/1A Power Adapter
- ⑤ 1× User Manual

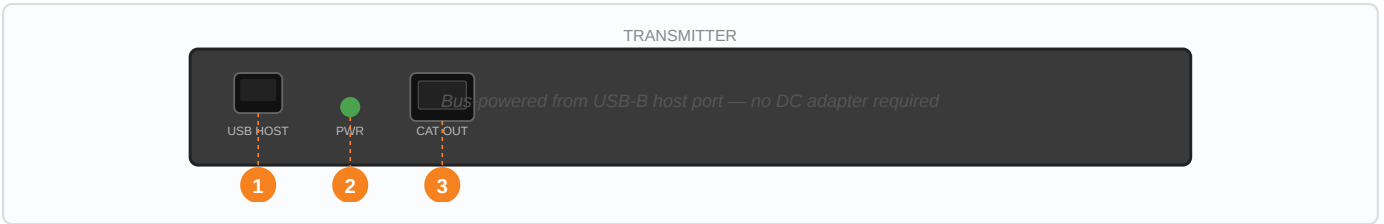
4. Specifications

TECHNICAL	
USB Protocol	USB 2.0 • Transmission Rate: Up to 480Mbps
Transmission Distance	50m / 164ft over Cat5e/6 • Note: up to 40m for some USB 2.0 hubs
ESD Protection	±8kV Air-gap discharge, ±4kV Contact discharge
CONNECTIONS	
Transmitter	Input: 1× USB-B [Female] • Output: 1× RJ45 [Female] • Power: bus-powered via USB-B
Receiver	Input: 1× RJ45 [Female] • Output: 2× USB-A [Female] • Power: DC 5V/1A
MECHANICAL	
Housing / Dimensions	Metal Enclosure • Black • TX/RX: 82×49×20mm • 100g each
POWER & ENVIRONMENT	
Power Supply	TX: Bus-powered (USB-B) • RX: AC 100–240V 50/60Hz, Output DC 5V/1A
Power Consumption	TX: 0.7W • RX: 1W
Temperature	Operating: 0–40°C • Storage: -20–60°C
Humidity	20–90% RH (non-condensing)



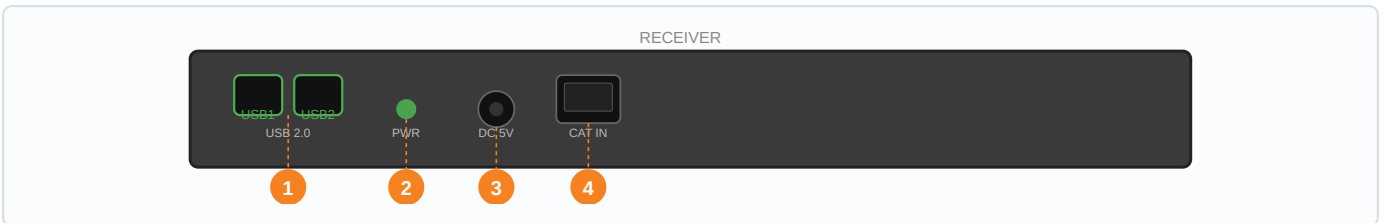
5. Operation Controls & Functions

5.1 TRANSMITTER PANEL



NO.	NAME	FUNCTION DESCRIPTION
1	USB HOST	USB-B female input. Connect to PC using the included USB-B to USB-A cable. The Transmitter is bus-powered from this port — no external adapter required.
2	POWER LED	Green LED illuminates when the Transmitter is powered on via the host USB-B port.
3	CAT OUT	RJ45 female output. Connect to the Receiver CAT IN port using Cat5e/6 cable (up to 50m/164ft).

5.2 RECEIVER PANEL

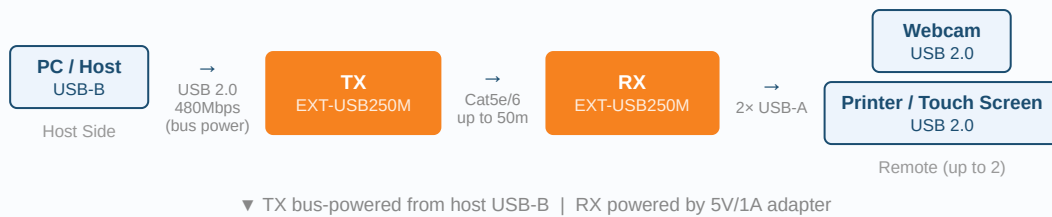


NO.	NAME	FUNCTION DESCRIPTION
1	USB 1 / USB 2	USB-A female output ports. Connect USB 2.0 peripheral devices — webcams, printers, touch screens, keyboards, mice, or USB hubs.
2	POWER LED	Green LED illuminates when the Receiver is powered on.
3	DC 5V	DC 5V/1A power input for the Receiver. Connect the included 5V/1A power adapter to an AC outlet.
4	CAT IN	RJ45 female input. Connect to the Transmitter CAT OUT port using Cat5e/6 cable.



6. Application Example

USB 2.0 Extension to 50m — Peripheral & HID Device Deployment



How it works: Connect the Transmitter to a PC via USB-B — it draws power from the host port, no adapter needed. Run Cat5e/6 cable up to 50m to the Receiver. Two USB-A ports connect webcams, printers, touch screens, or other USB 2.0 peripherals. No drivers required.

Power: TX is bus-powered via USB-B. The Receiver requires the included 5V/1A power adapter.

Note: Maximum distance for some USB 2.0 hubs is 40m/131ft.

Troubleshooting

Q: POWER LED off on the Receiver?

A: Confirm the 5V/1A power adapter is firmly connected to the Receiver DC 5V port and plugged into an AC outlet.

Q: POWER LED off on the Transmitter?

A: The Transmitter is bus-powered from the host USB-B port. Ensure the USB cable is firmly connected between the PC and the Transmitter USB HOST port.

Q: USB device not recognized at the Receiver?

A: Verify Cat5e/6 cable connects CAT OUT on TX to CAT IN on RX. Confirm both POWER LEDs are green. Ensure cable does not exceed 50m (40m for USB hubs).

Q: How do I connect more than 2 USB devices?

A: Connect a USB 2.0 hub to one of the Receiver USB-A ports to expand to additional devices.

