USB 2.0 Extender over Cat6 100 Meters

480Mbps Plug-and-Play Extension to 328ft for Webcams, Printers & HID Devices — No Drivers Required

MPN: EXT-USB2100M

The KanexPro EXT-USB2100M extends USB 2.0 at 480Mbps up to 100 meters (328ft) over a single Cat5e/6 cable — delivering two USB-A ports at the remote end for webcams, touch screens, printers, HID devices, and USB hubs. Completely plug-and-play with no driver installation required.

Power over Cable means only one 12V/1A adapter is needed at either 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

The EXT-USB2100M is a compact USB 2.0 transmitter/receiver set designed to extend USB 2.0 signals from printers, touch screens, USB hubs, cameras, or HID devices to a host PC up to 328ft away. 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 100m/328ft over a single Cat5e/6 cable
- One USB-B input on Transmitter; two USB-A outputs on Receiver
- Power over Cable (PoC) — single 12V/1A adapter on either TX or RX end
- ESD protection: ±8kV Air-gap discharge, ±4kV Contact discharge
- Backward compatible with USB 1.1 devices
- Compact metal enclosure — simple plug-and-play, no drivers required
- KanexPro 3-Year Parts and Labor Warranty

3. Package Contents

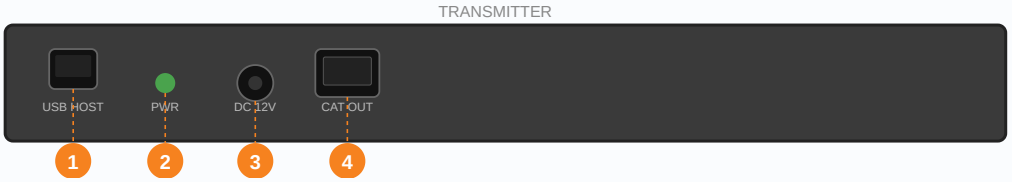
① 1× USB 2.0 Extender (Transmitter) ② 1× USB 2.0 Extender (Receiver)
③ 1× USB Cable (USB-B male to USB-A male, 1m) ④ 1× 12V/1A Locking Power Adapter ⑤ 1× User Manual

4. Specifications

TECHNICAL	
USB Protocol	USB 2.0 • Transmission Rate: Up to 480Mbps
Transmission Distance	100m / 328ft over Cat5e/6
ESD Protection	±8kV Air-gap discharge, ±4kV Contact discharge
CONNECTIONS	
Transmitter	Input: 1× USB-B [Female] • Output: 1× RJ45 [Female]
Receiver	Input: 1× RJ45 [Female] • Output: 2× USB-A [Female]
MECHANICAL	
Housing / Dimensions	Metal Enclosure • Black • TX/RX: 82×49×20mm • 100g each
POWER & ENVIRONMENT	
Power Supply	Input: AC 100–240V 50/60Hz • Output: DC 12V/1A • TX: 1.3W, RX: 2.3W
Temperature	Operating: 0–40°C • Storage: -20–60°C
Humidity	20–90% RH (non-condensing)

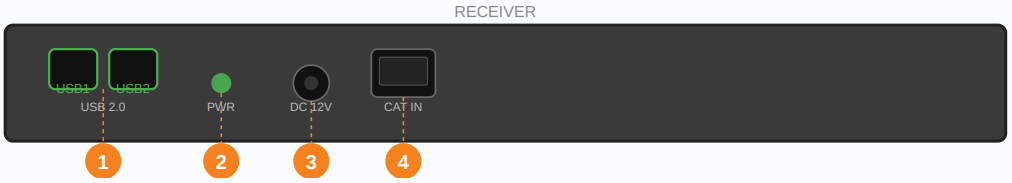
5. Operation Controls & Functions

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 PC controls all devices connected to the Receiver.
2	**POWER LED**	Green LED illuminates when the Transmitter is powered on.
3	**DC 12V**	DC 12V/1A power input. PoC: only one end (TX or RX) requires the power adapter.
4	**CAT OUT**	RJ45 female. Connect to the Receiver CAT IN port using Cat5e/6 cable (up to 100m/328ft).

5.2 RECEIVER PANEL



NO.	NAME	FUNCTION DESCRIPTION
1	**USB 1 / USB 2**	USB-A female output ports. Connect USB 2.0 peripherals such as webcams, printers, touch screens, keyboards, mice, or USB hubs.
2	**POWER LED**	Green LED illuminates when the Receiver is powered on.
3	**DC 12V**	DC 12V/1A power input. PoC supported — only one side requires the adapter.
4	**CAT IN**	RJ45 female. Connect to the Transmitter CAT OUT port using Cat5e/6 cable.

6. Application Example

USB 2.0 Extension to 100m — Peripheral & HID Device Deployment

▼ Power over Cable — single 12V/1A adapter on either TX or RX end

How it works: Connect the Transmitter to a PC via USB-B and run a Cat5e/6 cable up to 100m to the Receiver. Two USB-A ports connect webcams, printers, touch screens, or other USB 2.0 devices. No drivers required.
PoC: Only one 12V/1A adapter needed at either TX or RX. The other unit draws power through the Cat cable.
Note: Use with a USB hub on the Receiver to connect more than 2 devices.

Troubleshooting

Q: POWER LED is off on one unit?
A: Check that the 12V/1A adapter is firmly connected to either the TX or RX unit. PoC means only one end needs power — verify the powered unit's LED is green first.

Q: USB device not recognized at the Receiver?
A: Confirm the Cat5e/6 cable is securely connected to CAT OUT on TX and CAT IN on RX. Verify the device works when connected directly to the host PC. Ensure the cable does not exceed 100m.

Q: Intermittent connection or slow transfer speeds?
A: Replace the Cat cable with a high-quality shielded Cat6 cable. Avoid running the cable parallel to power cables. Ensure connectors are fully seated in RJ45 ports.

Q: How do I connect more than 2 USB devices at the Receiver?
A: Connect a USB 2.0 hub to one of the Receiver's USB-A ports to expand to additional devices.