



Industrial USB 2.0 Repeater/Extender

(Part Number: USB-RPT-2)



Communications made easy

[Http://www.CommFront.com](http://www.CommFront.com)

Industrial USB 2.0 Repeater/Extender

Part Number: USB-RPT-2



■ INTRODUCTION

The USB-RPT-2 is a rugged, industrial-grade USB 2.0 repeater/extender that can be used to extend USB 2.0/1.1's distance to up to 250ft (76m). The USB-RPT-2 works in pair (one transmitter and one receiver) to extend the USB 2.0/1.1's distance over inexpensive CAT 5/5e/6 cables and it supports data rates up to 480Mbps (USB 2.0 specifications); the unit supports plug-and-play (hot-pluggable) and it requires no software drivers; thus making it an ideal solution for connecting USB devices that exceed the distance limitation of 16ft (5m). The USB-RPT-2 is ideal for a wide range of USB devices, such as USB printers, USB scanners, USB hard drives, USB audio devices, USB touch screens, USB cameras, and USB game controllers.

■ FEATURES

- Industrial grade.
- USB 2.0 compatible (backward compatible with USB 1.1).
- Plug and play (hot-pluggable), no software drivers required.
- Extends USB distance to up to 250ft (76m) over CAT 5/5e/6 cables.
- Low, full and high speed data rates: 1.5Mbps, 12Mbps, and 480Mbps.
- Supports all USB device types: Control, Interrupt, Bulk and Isochronous.
- Operating temperature: -40°F to 185°F (-40°C to 85°C).
- Surface Mount Technology manufactured to RoHS and ISO-9001 standards.
- Safety: Strictly certified by SGS (Cert no. E1/2014/C0020C; E1/2014/C0021C).
- 5-year manufacturer's warranty.

■ SPECIFICATIONS

Compatibility:	USB 2.0 (backward compatible with USB 1.1)
Devices:	1x Transmitter (USB-RPT-2T); 1x Receiver (USB-RPT-2R)
Power Source:	Transmitter: USB bus power; Receiver: 5VDC/1A (input: 100 -240VAC) power adapter (included)
Power Consumption:	Transmitter: 100mA (standby); 130mA (link); 190mA (TX) Receiver: 160mA (standby); 190mA (link); 250mA (RX)
Data Rates:	48/12/1.5Mbps (auto-sensing and self-adjusting)
Distances:	250ft (76m)
Connectors:	Transmitter: USB Type A Male; RJ-45 Female Receiver: USB Type A Female; RJ-45 Female
LED Indicators:	Transmitter: 1 (Power); Receiver: 1 (Power)
Dimensions (H x W x D):	2.6 x 1.5 x 0.8 in (66 x 39 x 20 mm) (excluding cable)
Dimensions (DC Barrel Plug):	Ø3.5mm / Ø1.3mm
Cable Length:	Transmitter: 5.9 in (0.15 m)
Weight:	Transmitter: 1.4 oz (40 g); Receiver: 1.4 oz (40g)
Operating Temperature:	-40°F to 185°F (-40°C to 85°C)
Operating Humidity:	5~95% RH (no condensation)

■ PACKING CONTENTS

- Transmitter (part number: USB-RPT-2T) x1
- Receiver (part number: USB-RPT-2R) x1
- 5VDC Regulated Power Adapter (for receiver) x1

■ CONNECTIONS

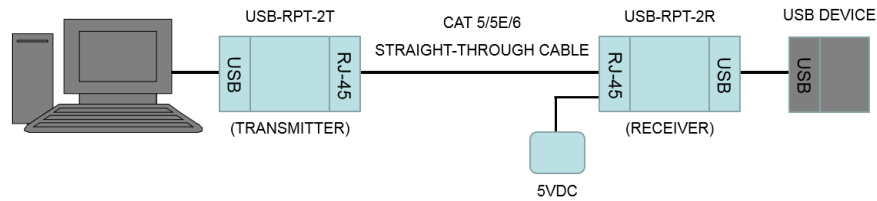
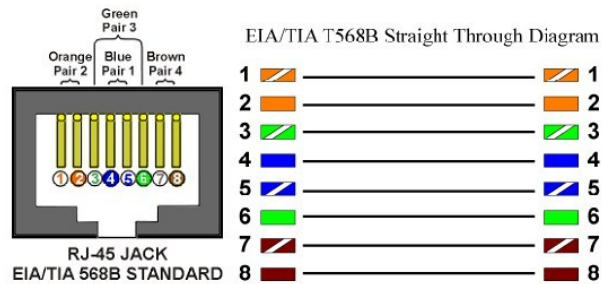


FIGURE 1: USB-RPT-2 CONNECTION DIAGRAM

■ RECOMMENDED CAT 5/5E/6 WIRING DIAGRAM (EIA/TIA 568B STANDARD)



■ TROUBLESHOOTING

- Be sure that the power LED is lit up when the transmitter USB-RPT-2T is connected to the computer.
- Be sure that the power LED is lit up when the 5VDC power adapter is connected to the receiver USB-RPT-2R.
- Be sure that the CAT 5/5e/6 cables used for extension are the straight-through type (EIA/TIA 568B recommended, see above diagram). Incorrect connection could damage the receiver module.
- Be sure that the Transmitter (USB-RPT-2T) is connected to computer's USB port (upstream) and the Receiver (USB-RPT-2R) is connected to USB device (downstream), the product will not work if it is reversed.
- Please note that up to 4 USB layers from upstream to downstream (e.g. PC, USB-RPT-2, and the USB device) are allowed for smooth operation.