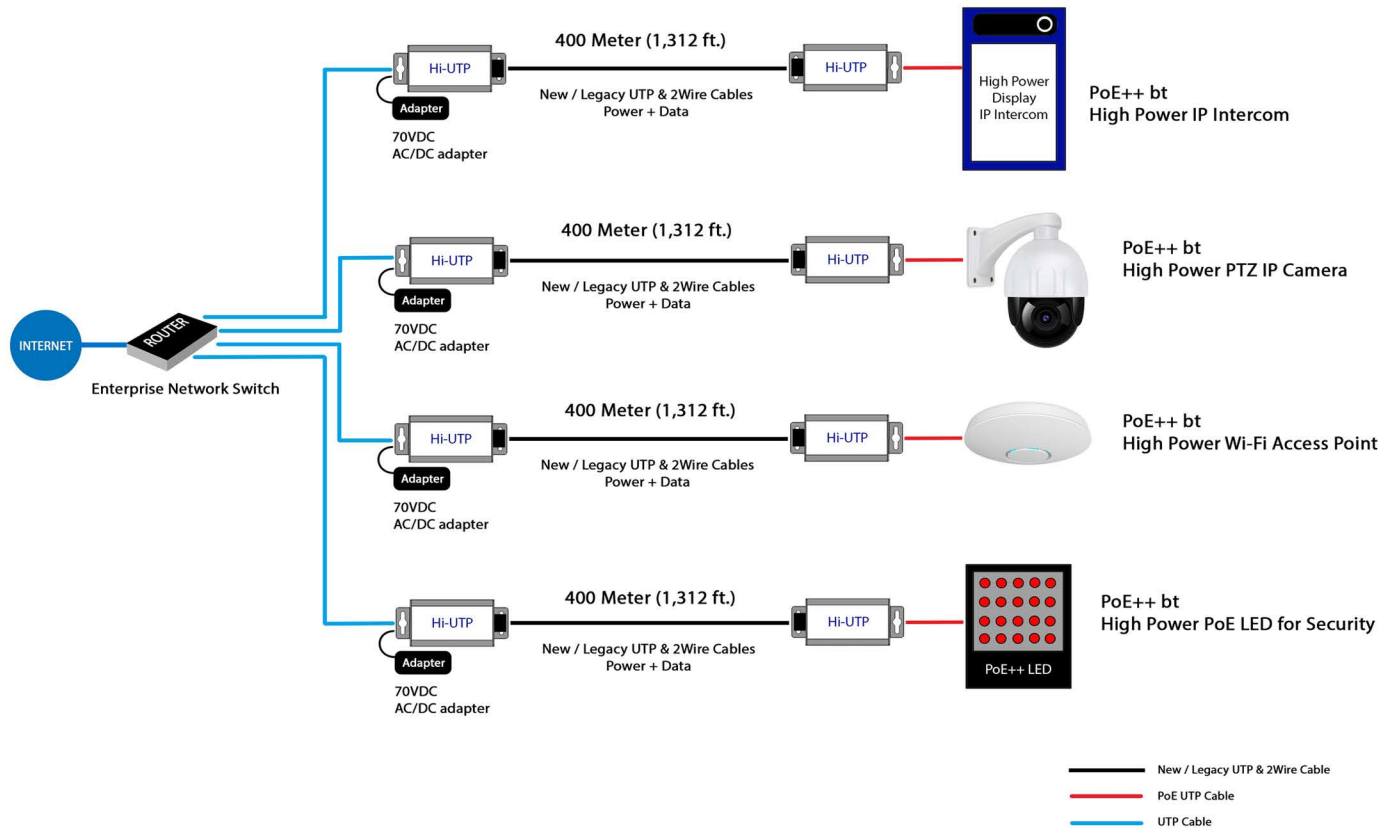


C4L6400-TWP-BT

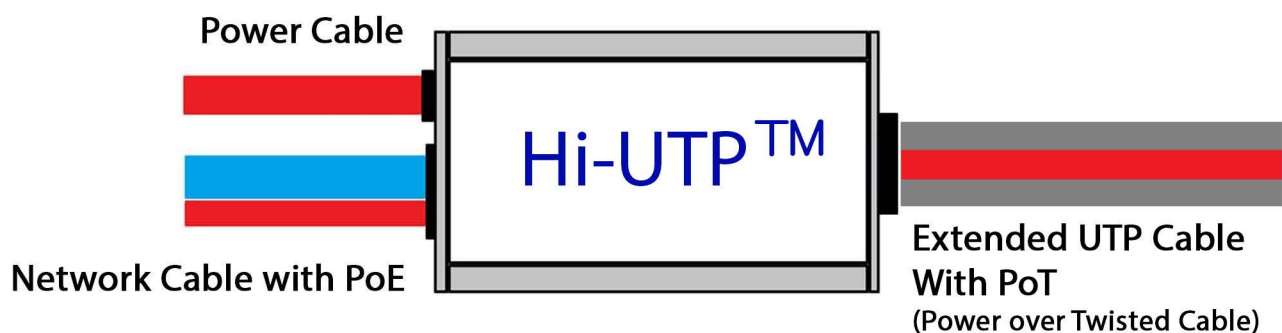
LongRange poe++ (bt) ip ethernet over UTP transceiver

Installation Manual

C4L6400-TWP-BT Typical Application



C4L6400-TWP-BT Wiring Connection



Hi-UTP™, model C4L6400-TWP-BT is the World First Long Range PoE++ (bt) IP Ethernet over UTP transceiver.

It support up to 1,312 Feet (400Meter) PoE++ (bt) power pass-through for High Power IP Intercom, IP Camera, PoE LED, PA Speaker, Digital Signage, Wi-Fi AP and etc. application. Its powerful data streaming technology transports high speed networks in Home, Residential Building and Large Building.

It support 1 Master to 4 Slave or more slaves network topology to reduce the installation cost dramatically.

For the secure networking, it support the 128bit-AES security encryption.

C4L6400-TWP-BT Installation Steps

Step 1. Hardware Check and Preparation

- Please check the product physical defects. If you find the defects, do not operate the product.
- Prepare 1) Network cable for End device, 2) New / Legacy UTP cable (Please check the cable short, Spec. and connection status), 3) AC/DC Adapter for power supply, 4) Pinclip for Unjoining and Joining Process (Optional)

Step 2 . Product Installation

- Use one C4L6400-TWP-BT transceiver at each end of the Extended UTP cable.
- Connect the UTP network cable to each side of IP devices (IP Intercom, IP Camera, IP Access Control, VoiP, PC, Notebook and etc.) for operating the entire network system.
- Connect a AC/DC Adapter into one of transceivers to provide power to entire system, including IP Intercom, IP Camera, IP Access Control, VoiP, PC, Notebook and etc..
- All transceivers are in Join Mode. They will find each other and establish basic level encrypted communication.

If you use more than 1 master unit of large installation site, you should follow the Un-joining and joining steps as below.

Un-Joining and Joining Transceivers for Encrypted communication(Optional)

If you want to build enhanced encrypted communication Network Group to another, it must be returned to an un-joined state.

Step 1.Un-Joining Process to build enhanced encrypted network

- Do this by applying power, and pressing the small push-button (Grp) for **12 seconds (Unjoining process)** to all of units until the TWP and PoE LEDs illuminate and then go out, about one second. The transceiver is now ready to be joined to build encrypted Network Group.

Step 2. Joining Process

- For more transceivers in an enhanced encrypted network, disconnect the joined transceiver from grouped UTP cable and connect the new un-joined transceiver.
- On the new un-joined transceiver, momentarily **depress the small push-button(Grp) about 1.5 seconds** using the straightened paper-clip.
After then the PoE LED will be blinking.
- **Depress the small push-button(Grp) about 1.5 seconds** on the any transceiver within existing encrypted Network Group.
- Both transceivers are now in Joining mode.
They will find each other and establish encrypted communication.
In about 10 seconds, the TWP LEDs on both transceivers will illuminate (blinking or steady on), indicating a successful Join.

Step 3. Adding Transceivers (if required)

- Disconnect one of the transceivers and replace it with a new un-joined transceiver.
- Repeat **Step 2.** to add additional transceivers to the same Network Group.

Power over Ethernet (PoE) Function

- C4L6400-TWP-BT support IEEE 802.3 af/at/bt PoE++
- C4L6400-TWP-BT support 90 Watt local PoE for PoE Powered Devices (IP Intercom, IP Camera, VoiP, Wi-Fi AP and etc.)
- For PoE Powered Device function support, please use 48V 0.83A Adapter at least.

C4L6400-TWP-BT Installation Warnings

- Do not use the transceiver near the harsh (temperature, humidity, cabling quality) installation site.
- If transceiver flooded by water or other liquid materials, please turn off the power source and disconnect all of cables from transceiver. And request to C4Line technical team for after service asap.
- Do not use transceiver over 176°F (80°C) temperature condition for transceiver's operation performance and lifetime.
- Do not disassemble transceiver at a person's service.