

Product Description - GAT-USBC-PD-V4® PoE supply and Data adapter

This device provides a compact solution for delivering power and wired Ethernet data to a USBc device over 328ft of network cable. This PD (Powered Device) allows power to be carried on CAT-5e or CAT-6 network cables using either 802.3at standard or 48 volt passive PoE. 10/100/1000 or 10/100 switches can be used – the device will negotiate to the highest speed.

Intended for use with any 802.3at PoE switch – this active PoE solution negotiates with the switch to activate power and provide it to the client device. It is a compact and cost effective power solution. The PoE switch supplies between 48 and 56 volts DC at the source location. The higher DC voltage means the current is reduced by a factor of 9 compared to 5 volts, and then carried with 90% less loss over the Ethernet cable from the source. The USBc device then autonegotiates with the laptop or tablet for the highest charge rate supported, and allows you to extend the charge distance for this application up to 328ft or 100 meters.

802.3af switches can be used if the load is limited to 13 watts. The device will not automatically downgrade the output power if a 802.3af switch is used and the load is greater than 13 watts – please use a 802.3at switch or passive PoE injector with greater than 25 watts of power.

Simple usage:

Step a) connect your PoE switch to an internet router
Step b) use an Ethernet cable to connect the RJ45 female to your PoE switch up to 100 meter distance.
Step c) connect the USBC male connector to your device (eg tablet)
Step d) disable the wifi on the tablet
Step e) run speed test

The Ethernet cable can be 568A or 568B style, 2 pairs (orange and green) are required for 100 mb, 4 pairs for 1000 mb/s operation. PoE power can be mode A or mode B.

Specifications

Power source Data Data+Power input Pins (802.3af mode A or mode B) Input Voltage Max Input Current at 48v no load, default USBc 9v **Output Voltage** USBc 12v USBc 15v USBc 20v Standby power / Keep Alive **Operating Temperature** Size Weight

RJ 45 female connector 10/100/1000 mbit/s RJ45 Ethernet to USBC bridge inside 1&2 and 3&6 - either polarity 4&5 plus and 7&8 minus Up to 57 volts 265 ma input delivers 2 amps out 5.2v – 2600 mA max 13 watts - 1780 mA 16 watts - 1340mA 16 watts - 1370mA 20 watts - 1150mA 23 watts 440 mA with no load $0^{\circ}C \sim 50^{\circ}C$ 76 x 22.5 x 43.6 mm 2.5 ounces



Data and Power by Ethernet

