

OBI

PoE to USB-C

Ethernet Charging Adaptor



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Introductions

The OBI is a charging adaptor for the PoE Gigabit Ethernet to USB Type-C (USB-C) connection, while supporting USB-C PD3.0 with PPS charging specifications. The design is to provide a maximum 60W (20V/3A) power for charging Notebook with USB-C charging requirement by tapping IEEE 802.3bt 90W PoE++ input power, while having Internet IP access simultaneously thru the PoE Gigabit Ethernet Switch connecting to the Notebook.

With plug and play features, it is an ideal solution for user applications in the office cubicle, the meeting room, and the Free Address Office (FAO) to access Internet independently through the PoE Ethernet interfaces, while tapping the full 60W charging power from the PoE++ power source without the AC power outlet.

The Ethernet interface of the OBI, as an IEEE802.3af/at/bt PoE PD device, is equipped with an RJ45 port for the 10/100/1000Mbps Gigabit Ethernet connection. It takes the PoE power and Internet data in a distance of 100m away from the PoE Ethernet Switch, and convert to the USB-C connector for both power PD3.0 charging supplies and the USB-C data. There are 2 LED indicators for the RJ45 connector; one for PoE power on, and the other for 10/100Mbps/1000Mbps data link/act indications. When the PoE mode is ON, the PoE LED indicator will be ON to indicate that the main power supply is from the PoE.

For the USB-C connector interfaces, the OBI provides with compatibility of USB3.0, 2.0, and 1.1 for USB super speed data connection as well as the charging capability on the PD3.0 PPS charging protocol. There are 2 LEDs for the USB-C interface. The lower LED for USB-C data link will be ON indicating that the OBI is working as an Ethernet adaptor to connect the Notebook to the internet for the USB-C data connection and activity. The upper LED for power charging will be ON indicating that the OBI is charging the Notebook with support for PD3.0 charging protocol of PPS specification which would be up to max. 20V/3A.

To support 20V/3A total power charging budget, the PoE must connected to IEEE802.3bt PoE switch for a 90W high power capacity at a distance 100m away. If PoE is other than IEEE802.3bt, the OBI may result in a less charging current.



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Key Features

- PoE Gigabit Ethernet to USB-C Adaptor with PD3.0 charging capability
- 1x RJ-45 port with IEEE802.3bt/at/af PoE PD for 10/100/1000 Mbps Gigabit Ethernet
- 1x USB-C port supporting USB3.0, 2.0, and 1.1, and PPS PD3.0 charging protocol
- Maximum power charging budget: Max. 20V / 3A
- Compliant with IEEE802.3, IEEE802.3X, 802.3u, 802.3ab,
- Ethernet Jumbo frame: 9K bytes
- Auto MDI/MDIX
- Supporting IPv4/IPv6, TCP, UDP
- RJ45 LED Indicators: Ethernet Link/Act 10/100/1000 Mbps, PoE
- USB-C LED Indicators: Data Link/Act, PD3.0 Charging
- Power Input: PoE
- USB-C back-flow protection
- Plug & Play
- Physical Dimension: 104 x 100 x 28mm



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Technical Specifications

Ethernet Port	RJ45 with IEEE802.3bt/at/af PoE Powered Device
Ethernet Data Rates	10/100/1000 Mbps
Ethernet Interface	Supporting IEEE802.3, IEEE802.3X, 802.3u, 802.3ab, with auto MDI/MDIX
Pin Assignment / Polarity	Compatible to standard IEEE802.3bt/at/af PoE Switch
Ethernet Jumbo Frame	9K bytes
Ethernet Packets	Supporting IPv4/v6, TCP, UDP
USB Data Port	USB-C connector supporting with USB3.0, 2.0, and 1.1
USB Charging Protocol	USB-C connector supporting PPS PD3.0 with max. 20V/3A
Input Power Source	PoE with IEEE802.3bt/at/af
Dimensions / Weight	104 x 100 x 28 mm
Ethernet LED Indicators	Ethernet Data Link/Act for 10/100 Mbps (Amber) Ethernet Data Link/Act for 1000 Mbps (Green) PoE on (Amber)
USB-C LED Indicators	USB-C Link/Act (Green) USB-C Charging (Green)
Plug & Play	With Notebooks and iPad supporting PPS PD3.0 charging protocol
USB-C Back Flow Protection	Yes
Operating Ambient Temperature	0 to 40 °C



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Front Panel

PoE Gigabit Ethernet to USB-C Adaptor / Charger



Rear Panel

10/100/1000Mbps Gigabit Ethernet RJ45 Port for PoE compatible with IEEE802.3bt/at/af

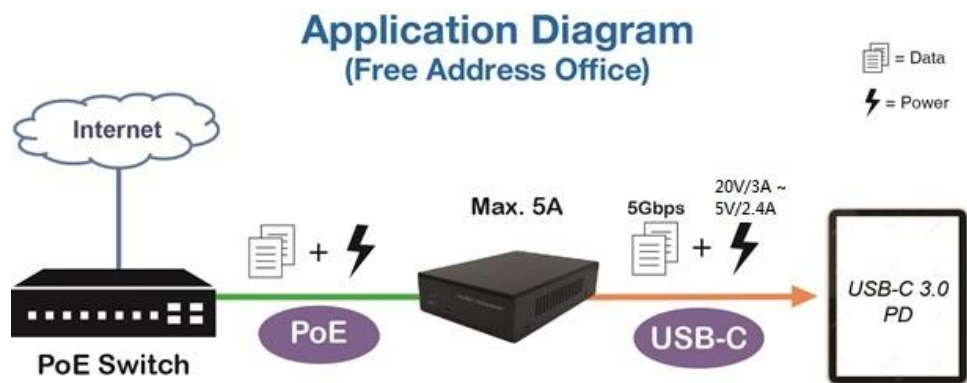


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Applications:



Ordering Informations

OBI	PoE to USB-C Ethernet Charging Adaptor
USB-C to USB-C cable	Male USB type-C to Male USB type-C Cable with 1m in length

