PD-USB-DP30

Power-over-Ethernet (PoE) to USB-C® Power and Data Adapter

Summary

The Microchip PoE to USB-C adapter connects IoT devices with a USB-C connector to PoE networks, enabling users to leverage the advantages of PoE and USB-C technologies. This adapter provides both power and data to USB-C hosts and power to USB-C-powered devices.
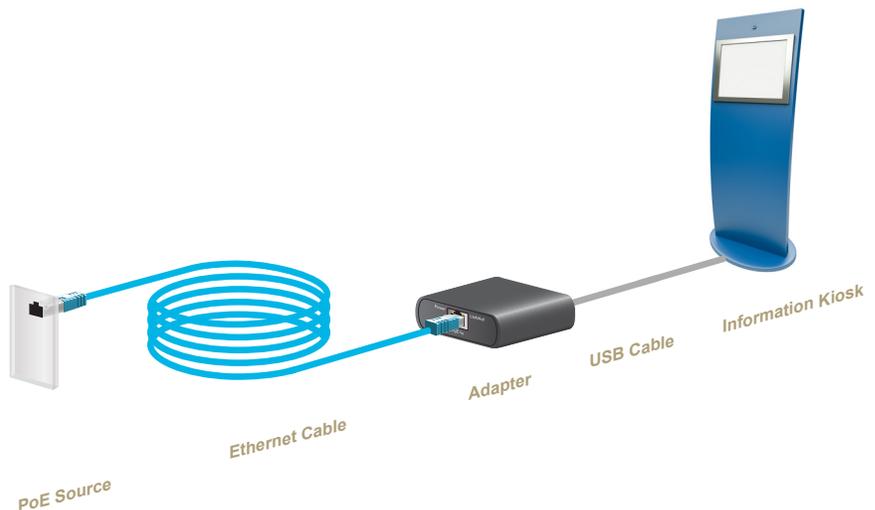
The PD-USB-DP30 adapter enables flexible installation of USB-C devices, removes the need for a close power outlet and resolves the issue of limited USB cable length. The PoE source can be up to 328 ft/100m from the location of the USB-C device. A single Ethernet cable is needed to deliver up to 23.5W of USB power at the output of the adapter.

The PD-USB-DP30 connects with small PCs/Next Unit of Computing (NUC) devices, interactive information kiosks, smart monitors, cellphones, cameras and other USB-C-powered devices consuming up to 23.5W. The adapter is compatible with USB2.0 and USB3.1 and will automatically provide the exact amount of power required by the end device.

Key Features

- Delivers up to 23.5W output power
- Enables powering of small PCs/NUC devices, interactive information kiosks, smart monitors, cameras and other USB-C-powered devices
- Provides power and data to USB-C hosts
- Allows 328 ft/100m installation range
- Supports PoE switches and injectors from 15.4W up to 90W
- Provides easy-to-use plug-and-play USB-C power with no configuration needed

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Specifications

Feature	Description
Number of Ports	1 PoE input, 1 USB-C® output
Data Rate	10/100/1000 Mbps
PoE Input	PoE up to 90W (42-57 V$_{DC}$)
USB-C Output	Data: USB 2.0, USB 3.1 Gen 1 Power: up to 23.5W (5 V$_{DC}$/3A, 9 V$_{DC}$/2.61A, 15 V$_{DC}$/1.57A, 20 V$_{DC}$/1.18A)
Dimensions	22.4 mm (H) × 66.8 mm (W) × 105.2 mm (L) 0.88 in. (H) × 2.63 in. (W) × 4.14 in. (L)
Net Weight	150g (0.33 lb)
Connectors	PoE: Shielded RJ-45, EIA 568A and 568B USB: USB Type-C
Indicators	PoE Power: Yellow Data Link: Green V$_{BUS}$ (located on USB-C Cable): Green
Environmental Conditions	Operating Ambient Temperature: 32°F to 104°F (0°C to +40°C) Operating Humidity: Maximum 90%, Non-Condensing Storage Temperature: –4°F to +158°F (–20°C to +70°C) Storage Humidity: Maximum 95%, Non-Condensing
Hazardous Substances	CE, WEEE
Warranty	1 year
Extended Warranty Available	Contact Microchip
Reliability	MTBF: 150,000 hrs
Electromagnetic Emission and Immunity	FCC Part 15, Class B EN 55032 Class B EN 55035 ICES-003 VCCI

Technical Support

For technical support, please visit the Microchip Technical Support Portal at www.microchip.com/support.

LAN7800 Driver

To download device drivers for the LAN7800, please visit the LAN7800 web page. LAN7800

Ordering Information

Product Name	Part Number	Description
PoE to USB-C® Adapter	PD-USB-DP30	PoE to USB-C Data and Power Converter With 30 cm USB Type-C Cable

About Microchip mPoE

Microchip multi-Power over Ethernet (mPoE) is a technology that powers any wired network device seamlessly and efficiently, making it the ideal solution for Ethernet-based applications. Leveraging a uniquely designed algorithm, this technology solves interoperability issues between different PoE standards and legacy solutions to provide an international network power standard. As a pioneer in PoE technology, we offer a comprehensive end-to-end portfolio of PoE solutions comprised of PoE ICs and PoE systems (midspans/injectors and switches).

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