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Higher-Power PoE-To-USB Type-C Adapter Extends Reach Of USB Type-C Devices

<u>Microchip Technology</u>'s PD-USB-DP60 PoE-to-USB-C adapter converts both power and data while offering up to 60 W of USB output power via an Ethernet cable supported by PoE infrastructure. This represents the highest power capability available for a PoE-to-USB-C adapter, according to the vendor, which comments that most adapters on the market provide only power, and that is limited to 25 W.

The PD-USB-DP60 adapter can accept up to 90 W of PoE and convert it to 60-W output over USB-C that will power most cameras, laptops, tablets and other devices using USB-C for input power (Figs 1 and 2). This adapter simplifies installation by reducing dependency on ac infrastructure. Without the dependency of an ac outlet, there is no longer the USB range limitation of 3 meters and power can be delivered over 100 meters.

This adapter also enhances the remote power management capabilities of the USB-C power device. The remote power reset capability, provided by the PoE source, allows power cycling via web interface or simple network management protocol (SNMP) to reset the device, rather than having to manually unplug and restart at the location of the equipment.

Microchip's PoE to USB-C adapter can connect to a variety of PoE sources with various standards deployed. It supports newer IEEE 802.3af/at/bt standards as well as legacy PoE standards. Having a versatile adapter is crucial due to the many different implementations of PoE already installed.

"This new device is ideal for easily deploying USB-C devices and providing them long-range power and data connectivity," said Iris Shuker, director of Microchip's PoE business unit. "The adapters are built using Microchip's USB power delivery ICs and PoE chipsets and are a perfect pairing with our latest PoE injectors and midspans."

Having the capability of converting 90-W input to 60W output enables devices requiring higher-power charging to make use of PoE that could not have done so before. The adapter can be paired with Microchip's cost-effective single-port and multi-port (up to 24) PoE injectors/midspans and switches that comply with IEEE 802.3af/at/bt industry standards and provide up to 90 W power per port. If a lower power is needed to power the USB-C device, IEEE802.3af (15.4 W) or IEEE802.3at (30 W) PoE sources can be used.

For more information see the PD-USB <u>page</u>. The PoE-to-USB-C adapter is available now for \$100.00 each. For additional information, contact a Microchip sales representative, authorized worldwide distributor or visit Microchip's website. To purchase products mentioned here visit the company's <u>purchasing portal</u> or contact a Microchip authorized distributor.



Fig. 1. The PD-USB-DP60 PoE-to-USB-C adapter connects USB-C devices to the PoE network and converts both power and data into a single USB-C connector.





Fig. 2. The PoE-to-USB-C adapter enables extended installation reach of USB Type-C devices . The adapter can accept up to 90 W of PoE power and convert it to 60-W output over USB-C, which will power most cameras, laptops, tablets and other devices using USB-C for input power. By reducing dependency on ac infrastructure, the adapter simplifies installation and can deliver power over 100 meters versus the 3-meter limit for USB cables.