

# Power over Ethernet (PoE) Systems

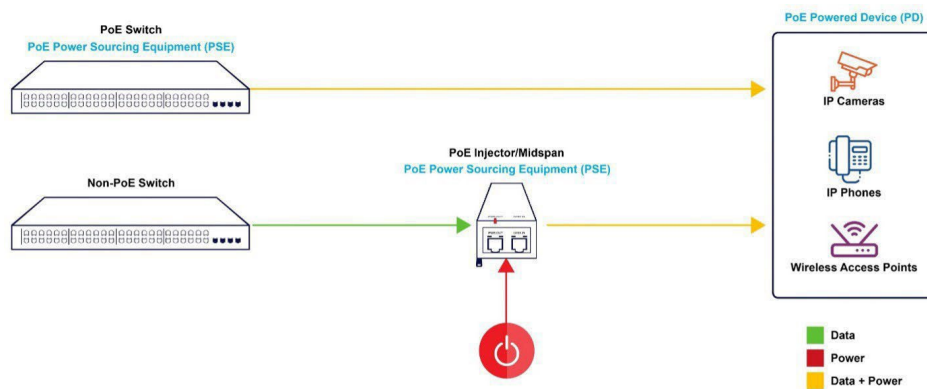
PoE and USB Accessories





## PoE Simplified

PoE technology is becoming the most used and most efficient power source for IT networks. PoE offers an international network power standard that eliminates the need to depend on the AC infrastructure, and its variations, to power wired network devices. It enables quick and easy installation of powered devices such as IP telephones, WLAN access points, security cameras and other IP-based terminals. PoE allows powered devices to receive both power and data on a single Ethernet cable and over an existing Ethernet infrastructure without affecting existing cabling or interfering with concurrent network operation.



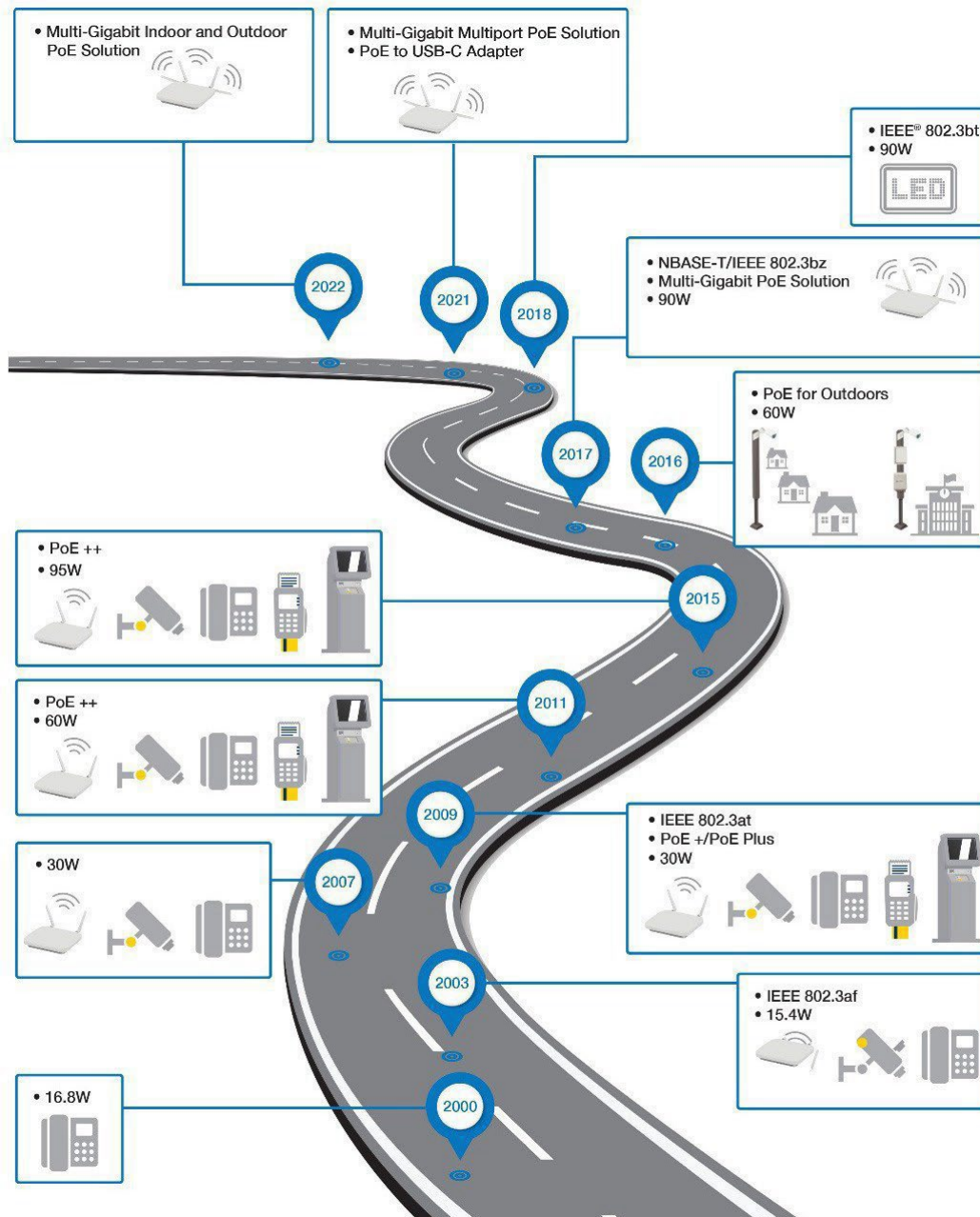
## Why Choose Microchip for Your PoE Requirements?

We are a market leader in PoE. We have contributed to the IEEE 802.3af/at/bt standards for over 25 years. As pioneers in PoE technology, we developed the first PoE ICs and midspans, initiated IC integration for simple PoE designs and were the first to introduce outdoor and multi-Gigabit PoE midspans. As an innovator and thought leader in this market, we are the only supplier of PoE Powered Device (PD) ICs, PoE Power Sourcing Equipment (PSE) ICs, PoE systems (injectors/ midspans and switches) and test equipment.

Our comprehensive end-to-end product portfolio enables seamless deployment of PoE technology to Ethernet-based devices in indoor, outdoor and industrial environments. Our stand-alone, fully tested, qualified and certified PoE systems are available off the shelf and ready to install, speeding your time to market in the most demanding environments.

## Pioneers of PoE Technology

We are innovators and thought leaders in PoE technology, as well as a major contributor to the IEEE<sup>®</sup> 802.3af, 802.3at and 802.3bt standards. We continue to innovate in PoE solutions with the aim of supporting newer applications that demand higher power, greater speed and challenging indoor and outdoor specifications, while reducing operating expenses and offering faster deployment.



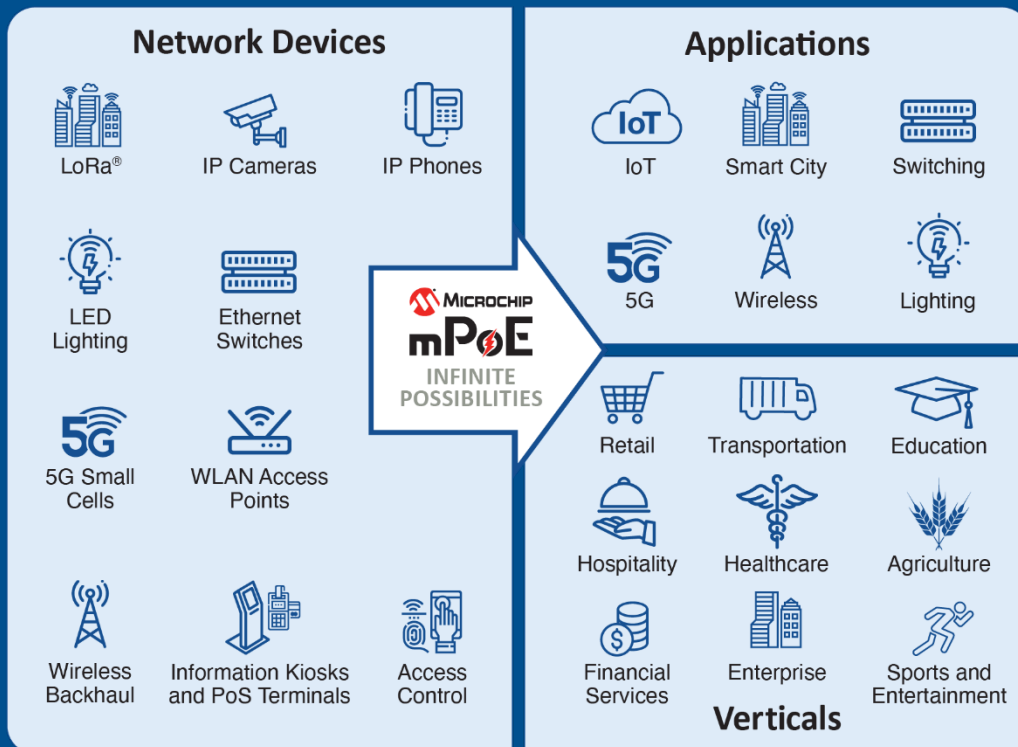




### Microchip multi-Power over Ethernet (mPoE)

Microchip multi-Power over Ethernet (mPoE) technology allows you to power any wired network device seamlessly and efficiently, making it an excellent solution for Ethernet-based applications. This technology leverages an algorithm to enable backward compatibility with pre-standard devices while

supporting all IEEE PoE standards. Our PoE injectors/midspans and PoE switches implement this technology to allow quick and simple deployment of Microchip mPoE in any network without changing existing switches or cabling.


































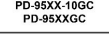

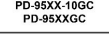














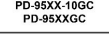



































## PoE Systems Product Portfolio

We offer a complete product portfolio, from single ports to 24 ports, 15.4W to 90W, 1 Gbps to 10 Gbps, indoor, outdoor and industrial- rated PoE systems. Microchip mPoE solutions have significant differentiators and features and are ideal to power traditional network devices such as IP phones, Wireless Access Points (WAPs), IP surveillance cameras, 5G small cells, LoRa® gateways, LED luminaires, access control terminals and other Internet of Things (IoT) devices.

Microchip PoE midspans/injectors and switches are:

- IEEE standard compliant and backward compatible
- Supporting 1G data rate, with multi-gigabit midspans supporting up to 10G
- Compliant with necessary regulatory and safety standards
- Available with power cord options for different geographies
- Built with compact design
- Plug and play

	Single Port	Multigig	Multiports	Switches	PoE and USB Accessories																				
<b>90W IEEE 802.3bt</b>	<table border="1"> <tr> <th>Indoor</th> <th>Outdoor</th> </tr> <tr> <td> PD-9601GC</td> <td> PD-9601GCO</td> </tr> </table>	Indoor	Outdoor	 PD-9601GC	 PD-9601GCO	<table border="1"> <tr> <th>Indoor</th> </tr> <tr> <td> PD-9601-10GC</td> </tr> </table>	Indoor	 PD-9601-10GC	<table border="1"> <tr> <th>Indoor</th> </tr> <tr> <td> PD-96XXGC</td> </tr> </table>	Indoor	 PD-96XXGC	<table border="1"> <tr> <th>Indoor</th> </tr> <tr> <td> PDS-408G</td> </tr> </table>	Indoor	 PDS-408G	<table border="1"> <tr> <td> PD-USB-DP60</td> </tr> </table>	 PD-USB-DP60									
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## Infrastructure Management at Your Fingertips

Our PoE systems offer PowerView Pro SNMP v3 cloud-based power management

### Key Features

- Available on multi-port units (65XX, 90XX, 95XX)
- Supports SNMP v3 IPv4 and IPv6
- Supports security features: HTTPS, SSH, SNMP v3
- Offers integration with RADIUS server
- Offers integration with SNMP UPS to prioritize ports in case of power failure
- Offers port scheduling (turns on/off, saves energy and protects from intrusion)

### Key Benefits

- Delivers up to 68% savings per device through scheduled power shutdown
- Offers 24/7 business uptime
- Improves reliability by actively monitoring the UPS for centralized power back up
- Manages power flow to critical and non-critical devices
- Enables convenient remote management
- Accesses and manages network devices in real time

## PoE and USB Accessories

Microchip's PoE product portfolio includes several accessories that facilitate PoE like the PoE extender that offers a cost-effective way to extend the Ethernet network range beyond 100m. The PoE-extender will deliver both data and power to network devices up to 200m while complying with IEEE PoE and data standards.

### Accessories Product Guide

Product	Description
<a href="#">PD-PoE-Extender</a>	1-port, extends PoE range by additional 100m, 802.3af/802.3at output power
<a href="#">PD-AFATBT-TESTER</a>	PoE Tester to test your RJ-45 for PoE (incl. new BT standard)
<a href="#">PD-IN/SP11</a>	1-port Indoor Surge protector
<a href="#">PD-OUT/SP11</a>	1-port Outdoor Surge protector, IP66

### Mounting Brackets

Product	Description
<a href="#">PD-OUT/MBK/ET</a>	Mounting Brackets for 9001GO-ET Outdoor Midspans
<a href="#">PD-OUT/MBK/GCO</a>	Mounting Brackets for Outdoor GCO Midspans
<a href="#">PD-OUT/MBK/S</a>	Mounting Brackets for 104GO Outdoor Switch

### Splitters

Product	Description
<a href="#">PD-AS-951/12-24</a>	Single port PoE splitter for contemporary devices unable to accept power via Ethernet. Power Conversion from 48V to 12V or 24V DC output

### Adapters

Product	Description
<a href="#">PD-USB-DP60</a>	PoE to USB-C adapter that provides both power and data to USB-C hosts and power to USB-C Powered Devices

## Support

Microchip is committed to supporting its customers in developing products faster and more efficiently. We maintain a worldwide network of field applications engineers and technical support ready to provide product and system assistance. For more information, please visit [www.microchip.com](http://www.microchip.com):

- Technical Support: [www.microchip.com/support](http://www.microchip.com/support)
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- Sales and Global Distribution: [www.microchip.com/sales](http://www.microchip.com/sales)

## Training

If additional training interests you, Microchip offers several resources including in-depth technical training and reference material, self-paced tutorials and significant online resources.

- Overview of Technical Training Resources: [www.microchip.com/training](http://www.microchip.com/training)
- MASTERS Conferences: [www.microchip.com/masters](http://www.microchip.com/masters)
- Developer Help Website: [www.microchip.com/developerhelp](http://www.microchip.com/developerhelp)
- Technical Training Centers: [www.microchip.com/seminars](http://www.microchip.com/seminars)

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