

# Power over Ethernet (PoE) Systems

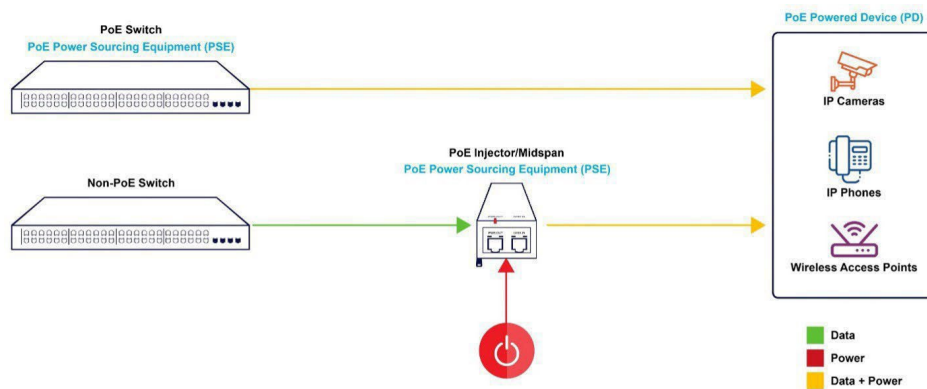
## Outdoor PoE Solutions





### 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.



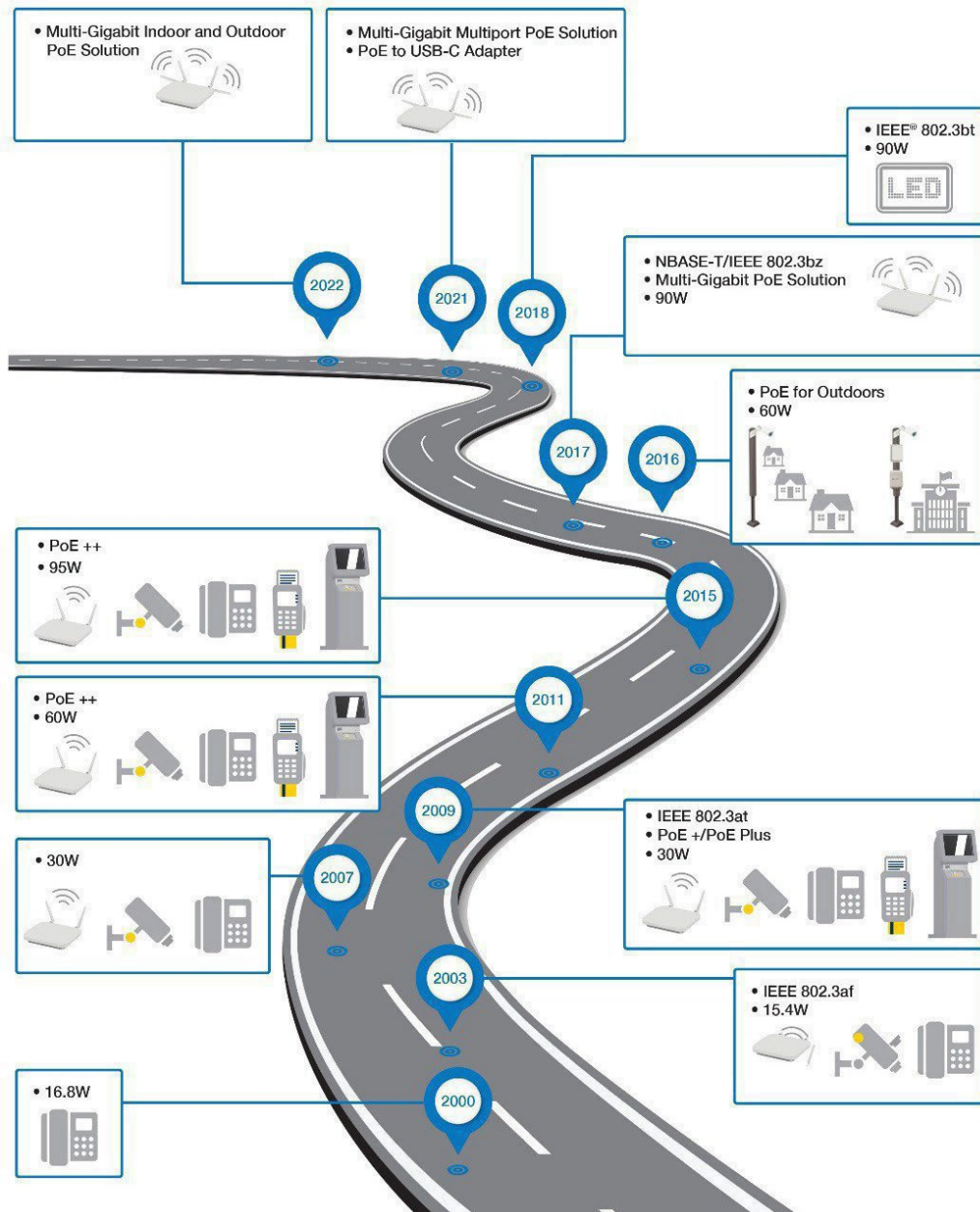
### Why Choose Microchip for Your PoE Requirements?

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® 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.

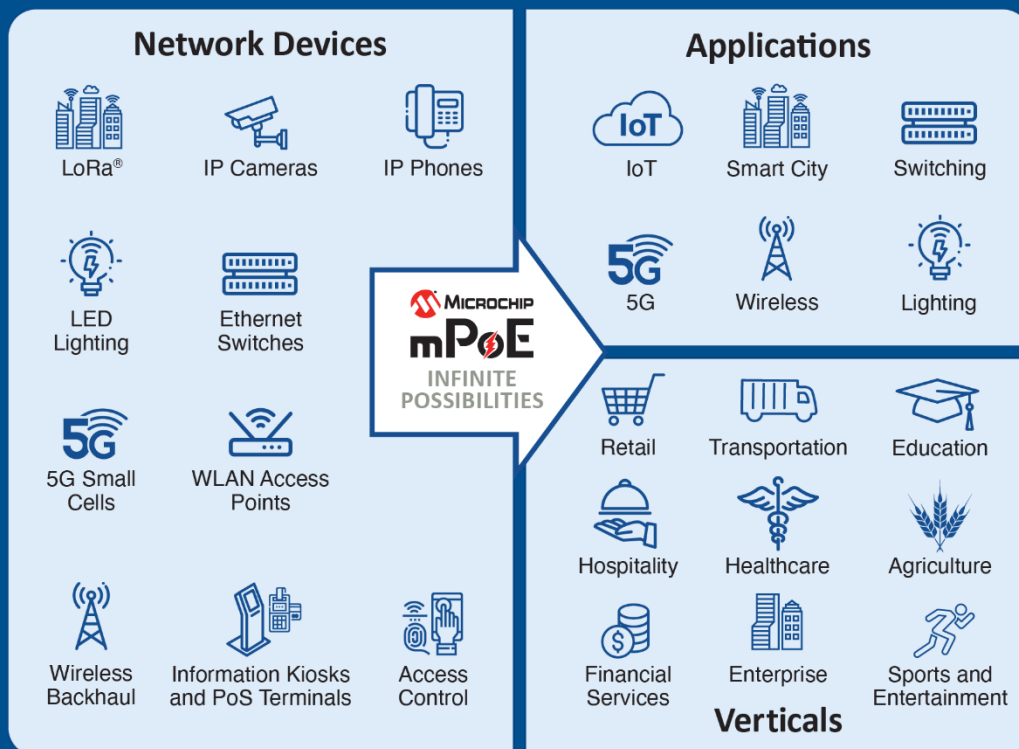




### Microchip multi-Power over Ethernet (mPoE)

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</b> IEEE 802.3bt	Indoor PD-9601GC	Outdoor PD-9601GCO	Indoor PD-9601-10GC		Indoor PD-96XXGC	Indoor PDS-408G	PD-USB-DP60
<b>60W</b> IEEE 802.3bt	Indoor PD-9501GC	Outdoor PD-9501GCO	Indoor PD-9501-10GC	Industrial PD-9501GCI	Indoor PD-95XX-10GC PD-95XXGC	Outdoor PDS-104GO	PD-OUT/ SP11 PD-IN/ SP11
<b>15.4/30W</b> IEEE 802.3af/at	Indoor PD-3501GC	Outdoor PD-9001GO-ET	Indoor PD-9001-10GC	Industrial PD-9001GCI	Indoor PD-90XXG PD-65XXG		PD-AFATBT-Tester PD-POE Extender

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

## Outdoor PoE

PoE technology has been implemented in outdoor environments over the last few years. With Microchip's industry leading outdoor PoE solutions, customers can leverage PoE's well-known advantages in extreme weather conditions typically associated with microwave point-to-point, small cells and surveillance camera installations.

## Outdoor Product Selection Guide

### Injectors/Midspans

Power Per Port	Product	Number of Ports	Data Rate	Managed	Input Power	Warranty
30W	<a href="#">PD-9001GO</a>	1	1G		AC	3 years
60W	<a href="#">PD-9501GCO</a>	1	1G		AC	3 years
90W	<a href="#">PD-9601GCO</a>	1	1G		AC	3 years

### Switch

Power Per Port	Product	Number of Ports	Data Rate	Managed	Input Power	Warranty
60W	<a href="#">PDS-104GO</a>	4	1G	Yes	AC	3 years

## 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)
- Evaluation samples of any Microchip device: [www.microchip.com/sample](http://www.microchip.com/sample)
- Knowledge base and peer help: [www.microchip.com/forums](http://www.microchip.com/forums)
- Sales and Global Distribution: [www.microchip.com/sales](http://www.microchip.com/sales)

## Sales Office Listing

### AMERICAS

**Atlanta, GA**  
Tel: 678-957-9614

**Austin, TX**  
Tel: 512-257-3370

**Boston, MA**  
Tel: 774-760-0087

**Chandler, AZ (HQ)**  
Tel: 480-792-7200

**Chicago, IL**  
Tel: 630-285-0071

**Dallas, TX**  
Tel: 972-818-7423

**Detroit, MI**  
Tel: 248-848-4000

**Houston, TX**  
Tel: 281-894-5983

**Indianapolis, IN**  
Tel: 317-773-8323  
Tel: 317-536-2380

**Los Angeles, CA**  
Tel: 949-462-9523  
Tel: 951-273-7800

**Raleigh, NC**  
Tel: 919-844-7510

**New York, NY**  
Tel: 631-435-6000

**San Jose, CA**  
Tel: 408-735-9110  
Tel: 408-436-4270

**Canada – Toronto**  
Tel: 905-695-1980

### EUROPE

**Austria - Wels**  
Tel: 43-7242-2244-39

**Denmark - Copenhagen**  
Tel: 45-4450-2828

**Finland - Espoo**  
Tel: 358-9-4520-820

**France - Paris**  
Tel: 33-1-69-53-63-20

**Germany - Garching**  
Tel: 49-8931-9700

**Germany - Haan**  
Tel: 49-2129-3766-400

**Germany - Heilbronn**  
Tel: 49-7131-67-3636

**Germany - Karlsruhe**  
Tel: 49-721-62537-0

**Germany - Munich**  
Tel: 49-89-627-144-0

**Germany - Rosenheim**  
Tel: 49-8031-354-560

### EUROPE

**Israel - Ra'anana**  
Tel: 972-9-744-7705

**Italy - Milan**  
Tel: 39-0331-742611

**Italy - Padova**  
Tel: 39-049-7625286

**Netherlands - Drunen**  
Tel: 31-416-690399

**Norway - Trondheim**  
Tel: 47-7289-7561

**Poland - Warsaw**  
Tel: 48-22-3325737

**Romania - Bucharest**  
Tel: 40-21-407-87-50

**Spain - Madrid**  
Tel: 34-91-708-08-90

**Sweden - Gothenberg**  
Tel: 46-31-704-60-40

**Sweden - Stockholm**  
Tel: 46-8-5090-4654

**UK – Wokingham**  
Tel: 44-118-921-5800

### ASIA/PACIFIC

**Australia - Sydney**  
Tel: 61-2-9868-6733

**China - Beijing**  
Tel: 86-10-8569-7000

**China - Chengdu**  
Tel: 86-28-8665-5511

**China - Chongqing**  
Tel: 86-23-8980-9588

**China - Dongguan**  
Tel: 86-769-8702-9880

**China - Guangzhou**  
Tel: 86-20-8755-8029

**China - Hangzhou**  
Tel: 86-571-8792-8115

**China - Hong Kong SAR**  
Tel: 852-2943-5100

**China - Nanjing**  
Tel: 86-25-8473-2460

**China - Qingdao**  
Tel: 86-532-8502-7355

**China - Shanghai**  
Tel: 86-21-3326-8000

**China - Shenyang**  
Tel: 86-24-2334-2829

**China - Shenzhen**  
Tel: 86-755-8864-2200

**China - Suzhou**  
Tel: 86-186-6233-1526

**China - Wuhan**  
Tel: 86-27-5980-5300

**China - Xiamen**  
Tel: 86-592-2388138

**China - Xian**  
Tel: 86-29-8833-7252

### ASIA/PACIFIC

**China - Zhuhai**  
Tel: 86-756-321-0040

**India - Bangalore**  
Tel: 91-80-3090-4444

**India - New Delhi**  
Tel: 91-11-4160-8631

**India - Pune**  
Tel: 91-20-4121-0141

**Japan - Osaka**  
Tel: 81-6-6152-7160

**Japan - Tokyo**  
Tel: 81-3-6880-3770

**Korea - Daegu**  
Tel: 82-53-744-4301

**Korea - Seoul**  
Tel: 82-2-554-7200

**Malaysia - Kuala Lumpur**  
Tel: 60-3-7651-7906

**Malaysia - Penang**  
Tel: 60-4-227-8870

**Philippines - Manila**  
Tel: 63-2-634-9065

**Singapore**  
Tel: 65-6334-8870

**Taiwan - Hsin Chu**  
Tel: 886-3-577-8366

**Taiwan - Kaohsiung**  
Tel: 886-7-213-7830

**Taiwan - Taipei**  
Tel: 886-2-2508-8600

**Thailand - Bangkok**  
Tel: 66-2-694-1351

**Vietnam - Ho Chi Minh**  
Tel: 84-28-5448-2100

## 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)