



PoE Solutions for Physical Security



Physical Security Networks

Microchip's physical security solutions serve multiple industries globally, addressing applications such as access control, audio systems and IP surveillance, including IP surveillance cameras, DVRs/NVRs and Ethernet networking. In an increasingly connected world, physical threats continue to be a major concern for governments, industry, and consumers alike.

Modern physical security systems must process large amounts of data and transform it into information that can help us identify and prevent threats. IP connectivity, either through wired Ethernet, WiFi, or HDBaseT, is increasingly common. Energy efficiency is another critical consideration, especially as security systems cover both indoor and outdoor venues.

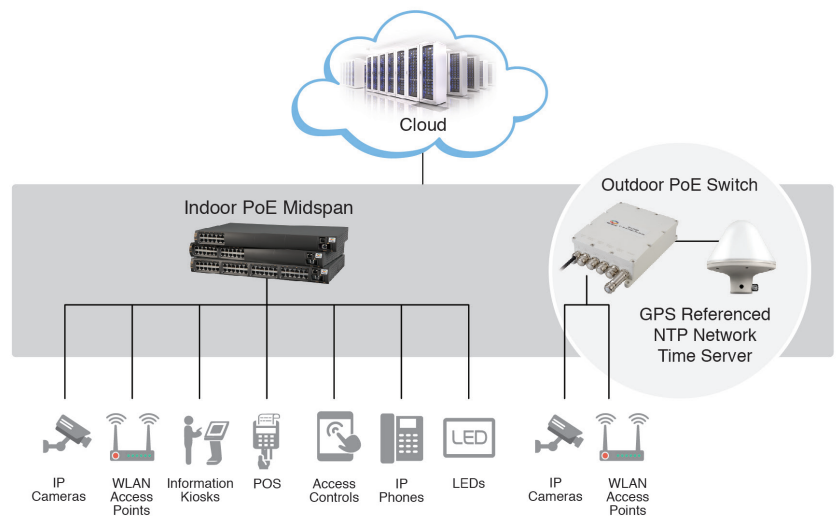
Power-over-Ethernet (PoE) technology is widely adopted on physical security applications, it's ubiquitous on network surveillance cameras, audio systems and sensors.

IP security networks also depend on accurate and precise network timing synchronization. Microchip leads the industry in NTP servers, which can connect to multiple synchronization sources, including GPS/GNSS inputs, to accurately distribute timing through NTP.

Particularly in physical security networks, accurate time stamps on video surveillance footage are essential to its admissibility as evidence.

Microchip provides both PoE infrastructure and point timing solutions for physical security networks:

- Infrastructure: PoE Midspan Injectors and Switches provide a simple and easy way to reliably power physical security applications in indoor, outdoor and industrial environments.
- Point Solutions: Indoor and outdoor NTP network time servers and management software for accurate time-stamped video capture in physical security networks.



PoE Infrastructure Solutions

Outdoor: The award-winning PDS-104GO allows you to leverage the well-known advantages of PoE in extreme weather conditions, typically associated with surveillance camera installations in outdoor environments. The outdoor PoE switch delivers significant benefits:

- Powers up to four devices with power consumption of up to 60 W
- Extends network reach by additional 100 meters for long distance installations
- Improves reliability through extended temperature range and in-built surge protection
- Facilitates virtual networks with increased security
- Simplifies installation
- Enables remote management through SNMP and web
- Ensures authorized system access by authenticating remote users

Indoor: Microchip high-power PoE (30W / 60W / 95W) single and multi-port midspan injectors and switches are ideal for indoor installations including one or multiple IP based applications, such as WLAN Access Points and surveillance cameras. Microchip also offers indoor to outdoor 30W and 60W single port solutions with inbuilt surge protection.

Point Solution: SyncServer S80

SyncServer S80 is a fully integrated GPS/ GLONASS antenna, receiver, NTP server, and PoE interface that easily integrates into existing PoE infrastructure to immediately be the source of accurate, secure, and reliable time stamps for all network-connected devices.

- Ruggedized Stratum 1 network time server is ideal for time-synchronizing IP security cameras, access control devices, and digital/network video recorders.
- Ready for plug-and-play delivery of accurate and secure NTP time stamps
- Equipped with the security-hardened NTP Reflector™ technology that works as a CPU-protecting firewall
- Static and dynamic modes are available to accommodate fixed land-based installations or mobile applications

PoE Solutions for Physical Security

Microchip: The Market Leader in PoE

As pioneers of PoE technology, Microchip has been instrumental in implementing the IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt, and HDBaseT standards. Microchip continues to innovate PoE solutions with the aim of supporting newer applications demanding higher power, greater speed, and challenging environment specifications, while ensuring lower OpEx and faster deployments.

Empower Partner Program

Partnerships are at the core of Microchip's success. Microchip offers Empower, a comprehensive channel partner program designed to educate and inspire our partners with industry leading PoE solutions. For more information, please email empower@microchip.com.

High-Power Product Selection Guide

Indoor

Power Per Port	Product	Number of Ports	Data Rate	Managed	Input Power	Warranty
30W	PD-9001GR/AT/AC	1	1G		AC	1 year
30W	PD-9001GR/SP/AC**	1	1G		AC	1 year
30W	PD-5501G/12-24VDC	1	1G		DC	1 year
30W	PD-9001-25GR/AC	1	2.5G		AC	1 year
30W	PD-9001-10GR/AC	1	10G		AC	1 year
30W	PD-9004G/AC	4	1G		AC	1 year
30W	PD-9006G/ACDC/M, PD-9012G/ACDC/M, PD-9024G/ACDC/M	6/12/24	1G	Yes	AC and DC	Limited lifetime***
30W	PDS-208G/AC*	8	1G	Yes	AC	3 years
30W	PD-5524G/ACDC/M	24	1G	Yes	AC and DC	Limited lifetime***
60W	PD-9501GR/AC	1	1G		AC	1 year
60W	PD-9501GR/SP/AC**	1	1G		AC	1 year
60W	PD-9501G/SFP/AC	1	1G		AC	1 year
60W	PD-9501G/24VDC	1	1G		DC	1 year
60W	PD-9501G/48VDC	1	1G		DC	1 year
60W	PD-9506G/ACDC/M, PD-9512G/ACDC/M, PD-9524G/ACDC/M*	6/12/24	1G	Yes	AC and DC	Limited lifetime***
95W	PD-9601G/AC	1	1G		AC	1 year
95W	PD-9606G/ACDC/M, PD-9612G/ACDC/M	6/12	1G	Yes	AC and DC	Limited lifetime***

*Any individual port can operate at up to 72 W.

**Includes integrated surge protection.

***Limited lifetime includes a limitation of 16 years warranty on the power supply and fans.

Outdoor

Power Per Port	Product	Number of Ports	Data Rate	Managed	Input Power	Warranty
30W	PD-9001GO-ET/AC	1	1G		AC	5 years
60W	PD-9501GO-ET/AC	1	1G		AC	5 years
60W	PD-9501GO/12-24VDC	1	1G		DC	5 years
60W	PD-9501GO/48VDC	1	1G		DC	5 years
60W	PDS-104GO/AC/M	4	1G	Yes	AC	5 years
90W	PD-9601GO/AC	1	1G		AC	5 years

Industrial

Power Per Port	Product	Number of Ports	Data Rate	Managed	Input Power	Warranty
30W	PD-9001GI/DC	1	1G		DC	5 years
60W	PD-9501GI/DCF	1	1G		DC	5 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:

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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.

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www.microchip.com

Microchip Technology Inc. | 2355 W. Chandler Blvd. | Chandler AZ, 85224-6199