

## Reliable and Scalable Midspan Injectors and Switches



The Pioneers of PoE

PoE Simplified

Embracing the PoE-driven Future

PoE Systems: Indoor, Outdoor, Industrial

PoE Systems: Accessories

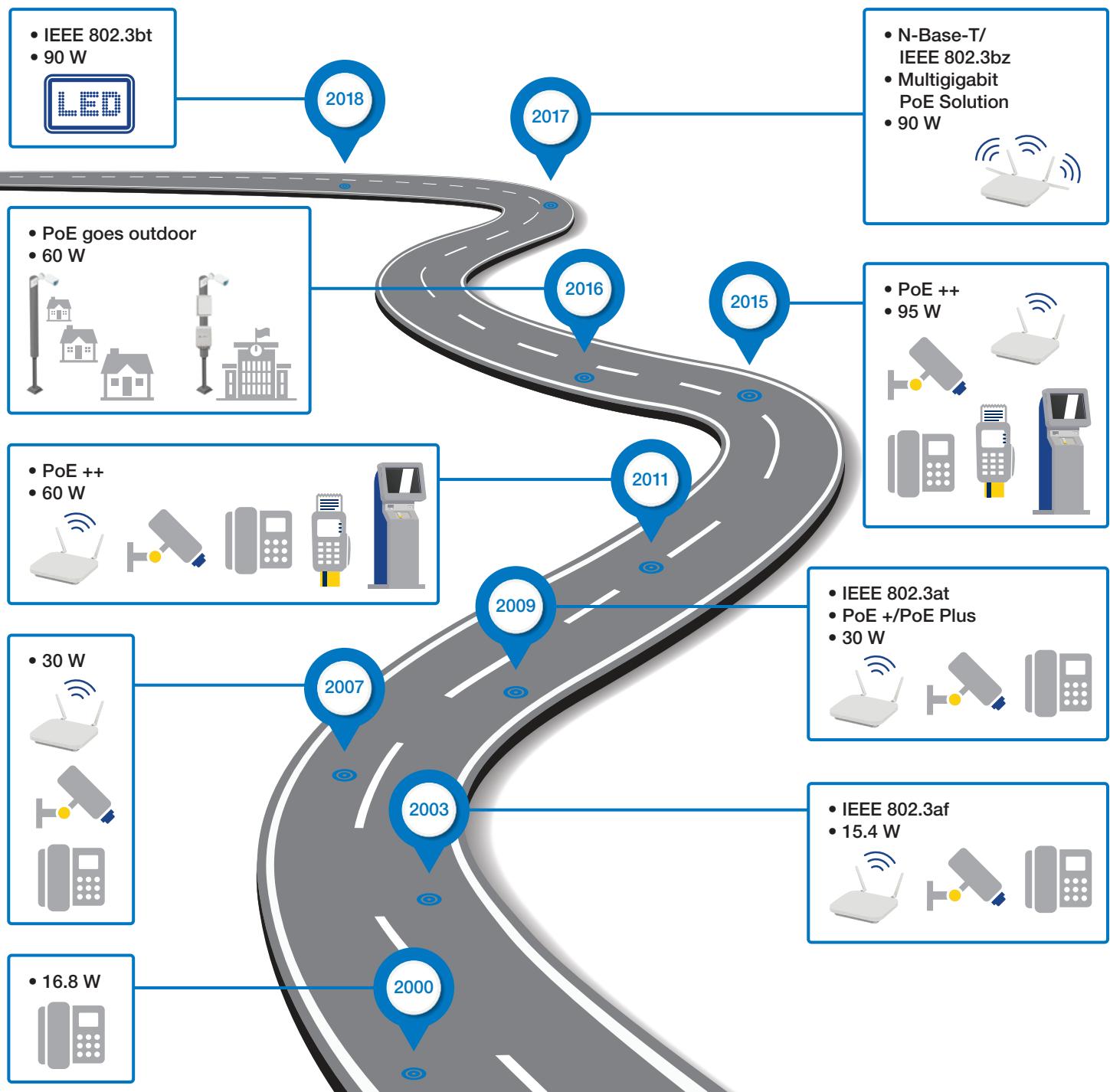
PowerView Pro SNMPv3 Cloud-based Power Management

PoE Selection Guide

# The Pioneers of Power over Ethernet (PoE)

Microsemi has been a leading provider of end-to-end PoE ICs and midspan injectors since 1999, with the broadest PoE product portfolio for indoor and outdoor deployments. As a market leader in PoE since the technology's inception, Microsemi has been instrumental in implementing the IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt, and HDBaseT

standards. Microsemi continues to innovate PoE solutions with the aim of supporting newer applications demanding higher power, greater speed, and challenging indoor and outdoor specifications, while ensuring lower OpEx and faster deployment.

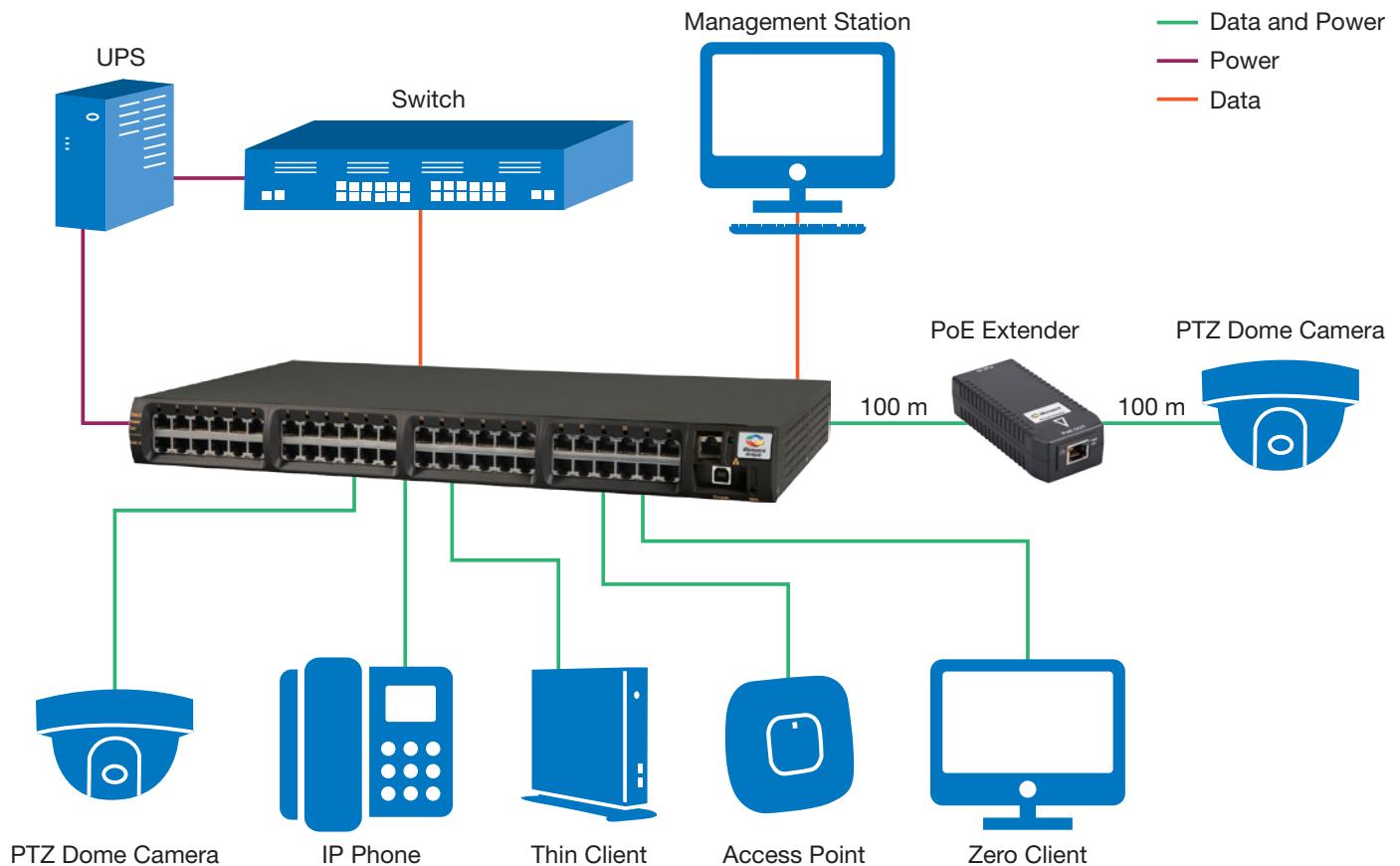


# PoE Simplified

Have you or your customers ever attempted to install devices on a network, only to find out that it would either be too cumbersome or too costly to add a power outlet at what seemed like the perfect location? If so, then you have encountered the need for PoE.

PoE is a revolutionary technology that eliminates the need for electric power infrastructure, enabling quick and easy installation of powered devices (PDs) such as IP telephones,

WLAN access points, security cameras, and other IP-based terminals. It allows PDs to receive power in parallel to data over the existing Ethernet infrastructure while keeping the structured cabling safe and not interfering with concurrent network operation.



# Embracing the PoE-driven Future

## Diversified Portfolio

Well-known for innovation and quality, Microsemi offers a broad portfolio of PoE solutions from 15 W to 95 W of full power: single and multi-port midspan injectors/switches and accessories, addressing unique requirements of both indoor and outdoor environments. Microsemi PoE systems deliver power over a single category 5/5E/6/6A/7 cable, support 10/100/1000/10000 data rates, and are available in 1, 4, 6, 12, or 24 ports.

## YOUser Centricity

Microsemi partners have discovered value in innovative solutions, addressing the unique requirements of various industries while offering significant business benefits. Microsemi is proud to have been a part of their journey.

There's value for each one of you. Microsemi ensures highly reliable products with significant return-on-investment for both system integrators and end-users.

Integrators	End-users
<ul style="list-style-type: none"><li>• Increase sales using vendor-agnostic solutions</li><li>• Reduce project costs by eliminating the need for electrical retrofitting</li><li>• Accelerate time-to-market with quick and seamless installation</li><li>• Maximize profits with remote infrastructure management</li><li>• Address power requirements with integrated solutions</li><li>• Provide ongoing value with a lifetime PoE product warranty</li><li>• Generate power savings with remote control and monitoring of operation, scheduling, and diagnostics</li><li>• Expand user networks effortlessly with increased installation flexibility</li></ul>	<ul style="list-style-type: none"><li>• Reduce initial investment by eliminating separate data and power infrastructures</li><li>• Increase flexibility by installing access points and surveillance cameras in the most appropriate locations</li><li>• Optimize costs with remote shutdowns of access points when not in use</li><li>• Improve reliability with cost-effective centralized backup power</li><li>• Enhance safety by not using high-voltage power lines</li><li>• Reduce maintenance costs with remote infrastructure management</li><li>• Scale network easily and seamlessly by adding new devices as needed</li></ul>

# PoE Systems: Indoor

All Microsemi PoE products support Gigabit data rates or higher and are backward compatible.

## IEEE 802.3af-compliant 15.4 W PoE Midspan Injectors

All products in this table have AC input power.

Product	PD-3501G	PD-3504G	PD-65xxG Family
			
Number of ports	1	4	6 (PD-6506G) 12 (PD-6512G) 24 (PD-6524G)
Remote management			•

## IEEE 802.3at-compliant 30 W PoE Midspan Injectors

Product	PD-5501G	PD-5524G	PD-90xxG Family	PD-9001GR/AT	PD-9004G
					
Number of ports	1	24	6 (PD-9006G) 12 (PD-9012G) 24 (PD-9024G)	1	4
Input power	DC	AC and DC	AC and DC	AC	AC
Remote management		•	•		

# PoE Systems: Indoor

All Microsemi PoE products support Gigabit data rates or higher and are backward compatible.

## IEEE 802.3at-compliant 60 W to 95 W PoE Midspan Injectors

Product	PD-95xxG Family	PD-9501G	PD-9501GR	PD-9601G	PD-96xxG Family
					
Number of ports	6 (PD-9506G) 12 (PD-9512G) 24 (PD-9524G)	1	1	1	6 (PD-9606G) 12 (PD-9612G)
Power level	60 W	60 W	60 W	95 W	95 W
Input power	AC and DC	DC	AC	AC	AC and DC
Remote management	•				•

## IEEE 802.3at-compliant Multigigabit Solutions

All products in this table have 30 W of AC input power.

Product	PDS-EM-8100-25/AC	PD-9001-25GR/AC	PD-9001-10GR/AC
			
Number of ports	2 x 1 (1G) = 1 (2.5G)	1	1
Data rate	2.5G	2.5G	10G

## PoE Systems: Indoor

All Microsemi PoE products support Gigabit data rates or higher and are backward compatible.

### IEEE 802.3at-compliant PoE Switch for Digital Ceiling

Product	PDS-208G
	
Number of ports	10 (8 PoE ports + 2 data uplinks)
Power level	30 W (any 1 port up to 72 W in full power mode)
Input power	AC
Design	Fanless
Remote management	•

### IEEE 802.3at-compliant Indoor for Outdoor PoE Midspan Injectors

All products in this table are single port, with AC power, and inbuilt surge protection.

Product	PD-9001GR/SP	PD-9501GR/SP
		
Power level	30 W	60 W
Extended temperature range	-10 °C to 55 °C	-10 °C to 40 °C at 60 W -10 °C to 55 °C at 30 W

### IEEE 802.3at-compliant Media Converter

Product	PD-9501G/SFP
	
Number of ports	3 (1 SFP, 2 RJ45)
Power level	60 W
Input power	AC

# PoE Systems: Outdoor

All Microsemi PoE products support Gigabit data rates or higher and are backward compatible.

## PoE Midspan Injectors and Surge Protector

All products in this table are single port with inbuilt surge protection.

Product	PD-9001GO-ET	PD-9501GO-ET	PD-9501GO	PD-9601GO	PD-OUT/SP11
					
Power level	30 W	60 W	30 W and 60 W	90 W	95 W
IEEE 802.3at compliant	•	•	•	•	
IP67/IP66 compliant	IP67	IP67	IP66	IP66	IP66
Input power	AC	AC	DC	AC	
Extended temperature range	–40 °C to 65 °C	–40 °C to 65 °C	–40 °C to 55 °C (30 W) –40 °C to 50 °C (60 W)	–40 °C to 65 °C	–40 °C to 85 °C

## IEEE 802.3at-compliant Switches

Product	PDS-104GO
	
Number of ports	5 (1 SFP data input, 4 PoE outputs)
Power level	30 W and 60 W
Extended temperature range	–40 °C to 50 °C
Extended network reach	100 m
Inbuilt critical surge protection	•
IP66 compliant	•
Input power	AC
Remote power management	•

## PoE Systems: Industrial

All Microsemi PoE products support Gigabit data rates or higher and are backward compatible.

### IEEE 802.3at-compliant Midspan Injectors

All products in this table are single port, with DC input power, a  $-40^{\circ}\text{C}$  to  $75^{\circ}\text{C}$  extended temperature range, IP30 industrial standard compliant, and shock/freefall/vibration resistant.

Product	PD-9001GI	PD-9501GI
		
Power level	30 W	60 W

## PoE Systems: Accessories

### Testers, Splitters, Extenders

PD-AFAT-Tester	PD-AS-601/5	PD-AS-951/12-24	PoE Extender
			
Tests the presence of power over Ethernet	Converts power from 48 V to 5 V	PoE in, data + power out (12 VDC or 24 VDC)	Extends network reach by 100 m
Indicates the type of power source	Supports up to 10 W	Supports up to 60 W	Supports up to 30 W
Detects IEEE 802.3af, IEEE 802.3at, 4 pairs PSE	DC jacks: 3.4 mm $\times$ 1.35 mm, 5.5 mm $\times$ 2.5 mm	DC jacks: 2.5 mm $\times$ 6.4 mm, 5.5 mm $\times$ 2.5 mm, 3.4 mm $\times$ 1.4 mm	PoE in/PoE out extender

# PowerView Pro SNMPv3 Cloud-based Power Management

Infrastructure management at your fingertips—anytime, anywhere!

## Key Benefits

- Up to 68% savings per device through scheduled power shutdown
- 24/7 business uptime
  - Improve reliability by actively monitoring UPS for centralized power backup
  - Manage power flow to critical and non-critical devices
- Increased network efficiency
  - Monitor network statistics for usage and availability
- Convenience of remote management
  - Access and manage network devices in real time, regardless of your geographic location

## Key Features

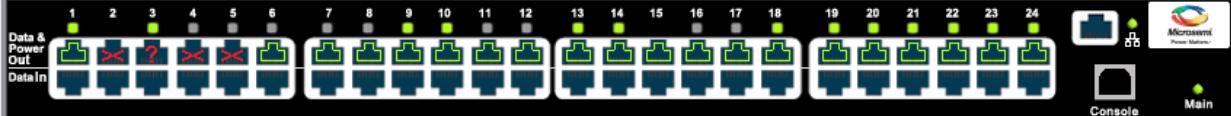
- Available on multiport units (65XX,90XX,95XX)
- Supports SNMP V3 IPV4 and 6
- Supports needed security features: HTTPS, SSH, SNMPV3
- Offers integration with RADIUS server
- Offers integration with SNMP UPS to prioritize ports in case of power failure
- Offers port scheduling (turns on/off, saves energy, and protects from intrusion)

 **Microsemi**  
Power Matters.™

**Home**   **View**   **System Configuration**   **Port Configuration**

### View - Status

Midspan Nickname: Room 3 Midspan Number 5      Energy saving: 262.3 KWatt/Year



#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Power (W)	15.04	19.03	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	
Description																								

Midspan Status		Local		External		Total
Total Power Consumption (Watt)	75			150	225	
Maximum available Power (Watt)	200			230	430	
System Voltage (Volt)	48.6			-	-	
Temperature (F)	53.2			-	-	
PD Detection Method	IEEE802.3af IEEE802.3at Legacy			-	-	
Midspan Status	Active			-	-	

UPS Power Management		
Midspan UPS Powered by		
Midspan UPS Battery Level(%)		68
Midspan UPS Battery Time Left (min)	25	

Power Source Status		
Internal (950W) Power Source	Ok	
External (950W) Redundancy Power Source	Fail	

# PoE Selection Guide

## Indoor PoE Solutions

Power per Port	Product	Number of Ports	Data Rate	Remotely Managed	Input Power	Warranty
15.4 W	PD-3501G/AC	1	1G		AC	1 year
15.4 W	PD-3504G/AC	4	1G		AC	1 year
15.4 W	PD-6506G/AC/M, PD-6512G/AC/M, PD-6524G/AC/M/F	6/12/24	1G	Yes	AC	Limited lifetime***
30 W	PDS-EM-8100-25/AC	1	2.5G		AC	1 year
30 W	PD-9001-25GR/AC	1	2.5G		AC	1 year
30 W	PD-9001-10GR/AC	1	10G		AC	1 year
30 W	PD-9001GR/AT/AC	1	1G		AC	1 year
30 W	PD-9004G/AC	4	1G		AC	1 year
30 W	PD-9006G/ACDC/M, PD-9012G/ACDC/M, PD-9024G/ACDC/M/F	6/12/24	1G	Yes	AC and DC	Limited lifetime***
30 W	PD-5501G/12 V to 24 V DC	1	1G		DC	1 year
30 W	PD-5524G/ACDC/M	24	1G	Yes	AC and DC	Limited lifetime***
30 W	PD-9001GR/SP/AC**	1	1G		AC	1 year
30 W	PDS-208G/AC*	10 (8 PoE ports + 2 data uplinks)	1G		AC	3 years
60 W	PD-9501GR/AC	1	1G		AC	1 year
60 W	PD-9501G/24 V DC	1	1G		DC	1 year
60 W	PD-9501G/48 V DC	1	1G		DC	1 year
60 W	PD-9506G/ACDC/M, PD-9512G/ACDC/M, PD-9524G/ACDC/M	6/12/24	1G	Yes	AC and DC	Limited lifetime***
60 W	PD-9501G/SFP/AC	1	1G		AC	1 year
60 W	PD-9501GR/SP/AC**	1	1G		AC	1 year
95 W	PD-9601G/AC	1	1G		AC	1 year
95 W	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 ventilator.

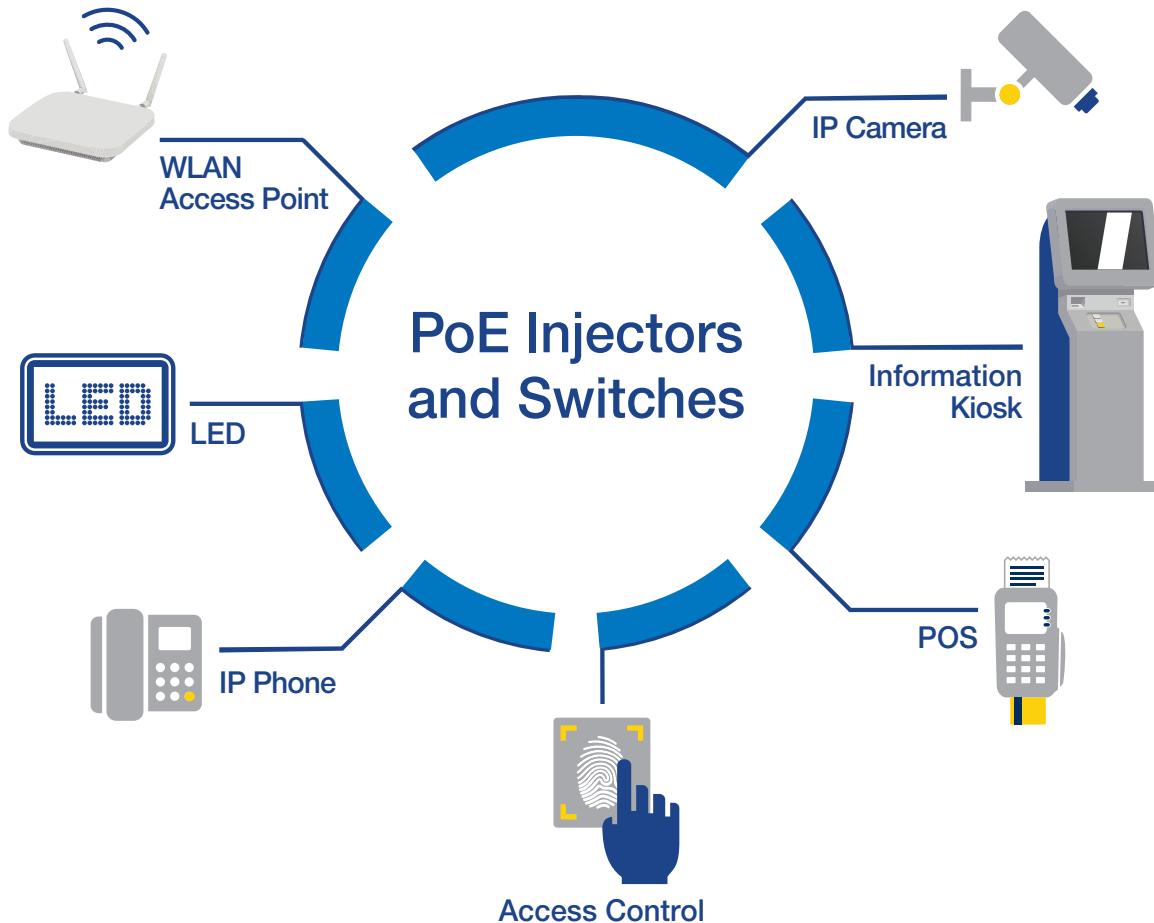
## Outdoor PoE Solutions

Power per Port	Product	Number of Ports	Data Rate	Remotely Managed	Input Power	Warranty
30 W/60 W	PDS-104GO/AC/M	5 (1 SFP data input, 4 PoE outputs)	1G	Yes	AC	5 years
30 W	PD-9001GO-ET/AC	1	1G		AC	5 years
60 W	PD-9501GO-ET/AC	1	1G		AC	5 years
30 W/60 W	PD-9501GO/12 V DC to 24 V DC	1	1G		DC	5 years
30 W/60 W	PD-9501GO/48 V DC	1	1G		DC	5 years
90 W	PD-9601GO/AC	1	1G		AC	5 years
95 W	PD-OUT/SP11	1-port outdoor surge protector	1G			5 years

## Ruggedized/Industrial PoE Solutions

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

# Unlock the Full Potential of PoE In a Wide Range of Applications



## Microsemi Empower Partner Program

Partnerships are at the core of Microsemi's success. Microsemi 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@microsemi.com](mailto:empower@microsemi.com).



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