Power Matters<sup>™</sup>

## Microsemi Power over Ethernet (PoE) Products







### Power over Ethernet (PoE) Solutions

Microsemi PoE systems enable delivery of up to 95 watts of reliable, scalable Power over Ethernet (PoE) to IP phones, IP cameras, WLAN access points, Zero Clients, and other Ethernet devices over standard Cat5 or better Ethernet cable. All Microsemi systems support 10/100/1000 data rates and are available in 1, 4, 6, 12, and 24-port increments, bringing flexibility and longevity to network upgrades. New to Microsemi's PoE lineup is a catalog of outdoor IP66-rated PoE midspans, hubs, and switches, enabling new power and data solutions for environmentally challenging deployments, as well as a new line of Industrial PoE products ideal for environments that need extended temperature range support and appropriate certifications.

More than just innovators of PoE solutions, Microsemi is a market leader in PoE technology and a major contributor to IEEE802.3af, IEEE802.3at, HDBaseT and the to be finalized IEEE802.3bt standards.





Figure 1: Microsemi PoE solutions include single and multi port midspans, hubs, switches, and accessories for indoor and outdoor activities

## Single and Multiport Indoor PoE Midspans

Product	Description	Specifications				
	<b>PD-3501G Midspan</b> This single-port midspan offers a solution for low port density IP terminal installations.	<ul> <li>1 port</li> <li>Provides 15.4 W</li> <li>IEEE802.3af compliant</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				
	PD-3504G Midspan This 4-port midspan offers a solution for IP terminals where available rack space is limited.	<ul> <li>4 ports</li> <li>Provides 15.4 W per port</li> <li>IEEE802.3af compliant</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				
	<b>PD-6500G Midspan</b> This remote management enabled midspan family provides 15.4 W to IP terminals, leaving network infra- structure completely unaltered.	<ul> <li>6/12/24 ports</li> <li>Provides 15.4 W per port</li> <li>Remote power management</li> <li>IEEE802.3af compliant</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				
Product	Description	Specifications				
A CONTRACT OF A	<b>PD-9001GR Midspan</b> This 30 W single-port midspan provides a high-power solution for remote powering of current and emerging high-power applications.	<ul> <li>1 port</li> <li>Provides 30 W</li> <li>IEEE802.3at compliant</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				
	PD-9004G Midspan This 4-port midspan offers a 30 W solution for emerging high-power devices.	<ul> <li>4 ports</li> <li>Provides 30 W per port</li> <li>Three units can fit in 1U 19" rack</li> <li>IEEE802.3at compliant</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				
	<b>PD-9000G Midspan</b> Remote management enabled midspan family provides 30 W to IP terminals, leaving network infra- structure completely unaltered.	<ul> <li>6/12/24 ports</li> <li>Provides up to 36 W per port</li> <li>IEEE802.3at compliant</li> <li>Midspan-midspan mutual backup</li> <li>Remote power management</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				
Product	Description	Specifications				
· · · ·	<b>PD-5501G Midspan</b> This DC-powered single-port midspan provides a high-power solution for remote powering while dissipating 50% less power.	<ul> <li>1 port</li> <li>Provides 30 W</li> <li>IEEE802.3at compliant</li> <li>12-24 VDC</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>				

## Single and Multiport Indoor PoE Midspans (continued)

Product	Description	Specifications					
	<b>PD-5524G Midspan</b> This high-power, remote management enabled Energy Efficient PoE (EEPoE) midspan is designed specifically to cut power dissipation over cables by 50% while powering end devices that require up to 30 W.	<ul> <li>24 ports</li> <li>Provides 30 W per port</li> <li>EEPoE technology – reduces power loss over cables by 50%</li> <li>Midspan-midspan mutual backup</li> <li>Remote power management</li> <li>High power over 4-pairs</li> <li>IEEE 802.3at compliant</li> <li>AC and DC input</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>					
Product	Description	Specifications					
	<b>PD-9501G Midspan</b> 60 W, single-port, high-power midspan enables remote powering of current and emerging high-power applications.	<ul> <li>1 port</li> <li>Provides 60 W</li> <li>IEEE802.3at compliant</li> <li>AC and DC models available</li> <li>Energy efficient PoE (EEPoE) dissipates 50% less power when powering 25.5 W devices</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>					
	<b>PD-9500G Midspan</b> High-power, remote management enabled EEPoE midspan family designed specifically to power IP terminals requiring up to 60 W.	<ul> <li>6/12/24 ports</li> <li>Provides 72 W per port in Extended Power Mode</li> <li>IEEE802.3at compliant</li> <li>High power over four pairs</li> <li>Remote power management</li> <li>EEPoE technology – reduces power loss over cables by 50%</li> <li>Midspan-midspan mutual backup</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>					
Product	Description	Specifications					
	<b>PD-9601G Midspan</b> Single port, Power over HDBaseT (PoH) midspan with 95 W across four pairs, fea- turing AC input and 10/100/1000Base-T.	<ul> <li>1 port</li> <li>Up to 95 W of power over four pairs</li> <li>PoH, IEEE802.3at, and 802.3af compliant</li> <li>Plug-and-play installation</li> <li>Guaranteed uptime</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>					
	PD-9606G and PD-9612G Midspan 6-port and 12-port high-power midspans for emerging high-power end devices.	<ul> <li>6/12 ports</li> <li>Provides 95 W per port over four pairs</li> <li>PoH, IEEE802.3at, and 802.3af compliant</li> <li>Managed</li> <li>AC and DC input</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>					

# PoE Systems for Outdoor PoE Installations

Product	Description	Specifications
All and a second	PDS-104GO Switch The PDS-104GO is an outdoor PoE switch that enables the connection of four powered devices to the network (such as an outdoor WLAN, outdoor IP camera, and an outdoor P2P radio). The switch offers an SFP port for uplink in order to support optical interface or electrical interface and delivers PoE power up to 60 W per device.	<ul> <li>5 ports (1 SFP data input, 4 PoE outputs)</li> <li>Provides 60 W per port</li> <li>IEEE802.3at compliant</li> <li>Supports 10/100/1000 Mbps data rates</li> <li>Outdoor rated: IP66</li> <li>Extended temperature range, -40°C to 50°C</li> <li>Extends network reach by additional 100 m</li> <li>Includes integral surge protection</li> <li>Remotely managed (SNMP and web)</li> <li>Plug-and-play installation</li> </ul>
	PDS-102GO Switch The PDS-102GO is an outdoor PoE switch that enables remote monitoring and control of two outdoor devices, and includes remote reset while extending the reach between the switch and powered devices by an additional 100 m (up to 200 m maximum).	<ul> <li>2-port outdoor PoE switch</li> <li>Provides up to 30 W per device</li> <li>IEEE802.3at compliant</li> <li>Outdoor rated: IP66</li> <li>Remote power management</li> <li>Integrated surge protection</li> <li>Midspan-midspan mutual backup</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>
In the second seco	PD-9001GO and PD-9501GO Midspan Single-port outdoor midspans that combine IP66-rated enclosure and surge protection for remote powering of outdoor devices such as security cameras and WLAN access points.	<ul> <li>PD-9001GO provides 30 W</li> <li>PD-9501GO provides 60 W</li> <li>Outdoor rated: IP66</li> <li>Extended temperature range PD-9001G: -40°C, 65°C PD-9501G: -40°C, 50°C</li> <li>Fully IEEE802.3at compliant</li> <li>Supports 802.3af and 802.3at devices</li> <li>Includes critical surge protection</li> <li>AC power input</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>
	PD-9002GHO Hub The PD-9002GHO offers plug-and-play installation for outdoor Ethernet-based devices and is well suited to power IP camera and WLAN APs together, where the camera passes up to 1G data wirelessly through the WLAN AP.	<ul> <li>2-port PoE passive hub</li> <li>802.3at rated (30 W per port)</li> <li>Outdoor rated: IP66</li> <li>40°F to 131°F (-40°C to 55°C) operating temperature</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>
	PD-9001GI and PD-9501GI Midspan PD-9001GI and PD-9501GI are single- port midspan solutions with an extended temperature range and toler- ance for shock and vibration. They are designed for industrial and outdoor applications.	<ul> <li>1 port</li> <li>Provides 30 W (PD-9001GI)</li> <li>Provides 60 W (PD-9501GI)</li> <li>Industrial rated IP30</li> <li>Extended temperature range, -40°C to 75°C</li> <li>Plug-and-play installation</li> <li>Supports 10/100/1000 Mbps</li> <li>Shock IEC 60068-2-27</li> <li>Vibration IEC 60068-2-6</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>

### PoE Systems for Outdoor PoE Installations (continued)

Product	Description	Specifications
	<b>PD-9001G/SP Midspan</b> PD-9001G/SP single port indoor mid- span protects outdoor installed devices with surge protection according to GR 1089.	<ul> <li>1 port</li> <li>Provides up to 40 W</li> <li>IEEE802.3at-draft 4.2 compliant (with event 2 classification)</li> <li>IEEEE802.3af backward compatible</li> <li>Surge protection according to GR 1089</li> <li>Supports 10/100/1000 Mbps data rates</li> </ul>
	PD-OUT/SP11 Lightning Surge Protector Lightning surge protector is IP66 rated for outdoor installation and designed to protect Ethernet networks with outdoor mounted devices such as security cameras and WLAN access points.	<ul> <li>Outdoor PoE surge protection</li> <li>Outdoor rated: IP66</li> <li>Suitable for Ethernet</li> <li>Supports data rates up to 1 Gpbs</li> <li>All eight lines protected</li> </ul>

### PowerView Pro SNMPv3 Cloud-based Power Management

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- SNMPv3 and web-based management
- Supports both IPv4 and IPv6 addressing
- Comes standard in all rack mountable units
- Monitors battery life in UPS and manage flow to critical and non-critical devices
- Monitors statistics, usage, and availability
- Allows devices to be remotely rebooted
- On/off scheduling allows power saving in periods of non-use as well as remote reboot capabilities to increase network efficiency and uptime

## PoE Accessories

Family	Product Number	Description
PoE Tester	PD-AFAT-Tester	The Power over Ethernet (PoE) Tester, connected to an RJ-45 outlet, tests the cabling infrastructure for the presence of power, either IEEE802.3af or IEEE802.3at (two pairs 30 W or four pairs 60 W). The PoE Tester also identifies the existence and type of Power Sourcing Equipment (either Endspan or Mid- span) in the network.
802.3af Active Splitter	PD-AS-601/5	<ul> <li>Power conversion from 48 V to 5 V output</li> <li>Two DC jacks: round 3.4 mm x 1.35 mm and 5.5 mm x 2.5 mm</li> </ul>
CMCrown	PD-AS-951/12-24	<ul> <li>Power conversion from 48 V to 12 V or 24 V DC output (user selectable)</li> <li>Supports PoE up to 60 W</li> <li>For use with PD-9500G family</li> </ul>
PD-AS-951/12-24	PD-AS-951/18	<ul> <li>Power conversion from 48 V to 18 V DC output</li> <li>Supports PoE up to 60 W</li> <li>For use with PD-9500G family</li> </ul>
PoE Extender	PD-PoE Extender	<ul> <li>1 port</li> <li>Extends PoE range by additional 100 m</li> <li>802.af/802.at output power</li> </ul>

### PoE Selection Guide

#### Indoor PoE Midspan

Watts per Port	Product Number	Number of Ports	Remotely Managed	Gigabit	Input	Warranty	Other
15.4 W	PD-3501G/AC	1		х	AC	1-year	
15.4 W	PD-3504G/AC	4		х	AC	1-year	
15.4 W	PD-6506G/AC/M	6	Х	х	AC	Limited lifetime	
15.4 W	PD-6512GAC/M	12	Х	х	AC	Limited lifetime	
15.4 W	PD-6524G/AC/M/F	24	Х	х	AC	Limited lifetime	400 W total power
30 W	PD-5501G/12-24VDC	1		х	DC	1-year	
30 W	PD-5524G/ACDC/M	24	х	х	AC & DC	Limited lifetime	450 W total power
30 W	PD-9001GR/AC	1		х	AC	1-year	
30 W	PD-9004G/AC	4		х	AC	1-year	
30 W	PD-9006G/ACDC/M	6	Х	х	AC & DC	Limited lifetime	450 W total power
30 W	PD-9012G/ACDC/M	12	Х	х	AC & DC	Limited lifetime	450 W total power
30 W	PD-9024G/ACDC/M/F	24	Х	х	AC	Limited lifetime	1000 W total power
60 W	PD-9501G/AC	1		х	AC	1-year	
60 W	PD-9501G/24VDC	1		х	DC	1-year	
60 W	PD-9501G/48VDC	1		х	DC	1-year	
60 W	PD-9506G/ACDC/M	6	Х	х	AC & DC	Limited lifetime	450 W total power
60 W	PD-9512G/ACDC/M	12	х	х	AC & DC	Limited lifetime	1000 W total power
60 W	PD-9524G/ACDC/M	24	х	х	AC & DC	Limited lifetime	1000 W total power
95 W	PD-9601G/AC	1		х	AC	1-year	
95 W	PD-9606G/ACDC/M	6	х	х	AC & DC	Limited lifetime	1000 W total power
95 W	PD-9612G/ACDC/M	12	х	х	AC & DC	Limited lifetime	1000 W total power

#### PoE Systems for Outdoor Installations

Watts per Port	Product Number	Number of Ports	Remotely Managed	Gigabit	Input	Warranty	Other
60 W	PDS-104GO/AC/M	5 (1 SFP data input, 4 PoE outputs)	х	х	AC	1-year	Lightning Protection for switch and other indoor network
30 W	PDS-102GO/AC/M	3 (1 data input, 2 PoE output)	Х	х	AC	1-year	
30 W	PD-9001GO/AC	1		х	AC	1-year	Outdoor deployment
60 W	PD-9501GO/AC	1		х	DC	1-year	Outdoor deployment
60 W	PD-9501GO/12-24VDC	1		х	DC	1-year	Outdoor deployment
60 W	PD-9501GO/48VDC	1		Х	DC	1-year	Outdoor deployment
30 W	PD-9002GHO/AC	2		х	AC	1-year	PoE hub - outdoor deployment
30 W	PD-9001GI/DC	1		х	DC	1-year	Industrial applications, Outdoor applications (extended temperature range support)
60 W	PD-9501GI/DC	1		x	DC	1-year	Industrial applications, Outdoor applications (extended temperature range and environmental support)
40 W	PD-9001G-40/SP/AC	1		х	AC	1-year	Indoor deployment



## Microsemi is continually adding new products to its industry-leading portfolio.

For the most recent updates to our product line and for detailed information and specifications, please call, email, or visit our website:

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