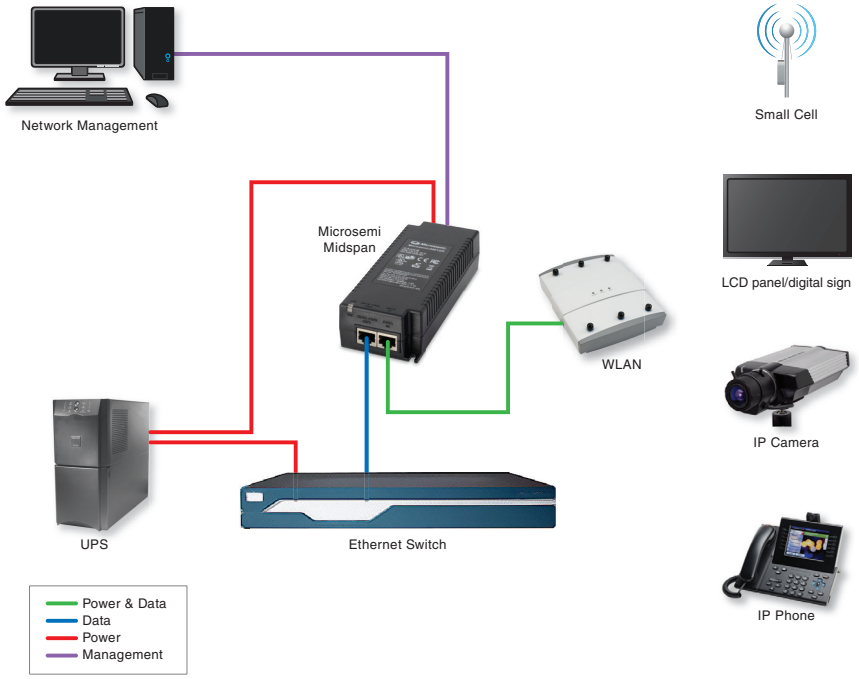
OEM PoE Systems Solutions

- Single & Multiport Midspans
- AC and DC Power Input
- Accessories
- Splitters & Adapters
- Management Software

Microsemi
Power Matters.™

How will you power that?



Microsemi single and multiport midspans are an economical and easy way to power popular devices such as WLAN access points, IP video phones, IP security cameras, security access devices, thin clients and printers over new or existing Ethernet infrastructure.

Microsemi PoE Midspans

Providing easy, low-cost power over new and existing Ethernet infrastructure

PoE Systems from Microsemi enable delivery of up to 95 watts of scalable, energy efficient Power over Ethernet (PoE) to IP phones, WLAN access points, IP cameras, thin clients and other Ethernet devices using existing CAT-5 or better cabling. Microsemi midspans leverage Ethernet infrastructure to deliver PoE technology; eliminating the need to install separate AC power cabling, or replace existing Ethernet switches.

The exclusive PowerView Pro network management system (SNMPv3) allows remote management and reboot of end-terminals. Microsemi is a major source of the 802.3af and 802.3at and upcoming HDBaseT standards, and the leader in providing high power PoE business communication solutions.

Microsemi midspans now comply with the Power over HDbaseT (PoH) standard delivering up to 60W per port, while also being backwards compatible with IEEE3802.3at type 1 and type 2 compliant products.
The PoH standard includes options to deliver up to 95W per port.

Expanded Input Voltage Options

Several Microsemi midspans now provide a selection of input voltage options including 24VAC and 12, 24 or 48VDC. To identify specific models that offer voltage options, look for our AC/DC symbol. Unless noted, input voltage for Microsemi midspans is 100-240VAC.

Models for AC or DC Input

Single Port Midspan Solutions for Indoor Installations

Product	Description	Specifications
	**PD-3501G Midspan** This 15w single port midspan provides 802.3af power for applications such as IP Phones, IP Camera, Wi-Fi access points and other IP based terminals.	• Provides 15.4W • IEEE802.3af compliant • 10/100/1000 Mbps data transfer rates • PoH type 1
	**PD-9001GR/AT Midspan** This 30W single port midspan provides a high-power solution for remote powering of current and emerging high power applications including 802.11n access points, pan-tilt-zoom cameras, video-phones and small cells access points.	• Provides 30W • 10/100/1000 Mbps data transfer rates • IEEE802.3at compliant • PoH type 1, PoE+ including 2-event, PoH type 2
	**PD-5501G/12-24VDC Midspan** This 30w DC powered single port Midspan provides high power to power current and emerging applications such as IP camera, Wi-Fi access points in environments where 12v and 24v is the only powering source.	• Provides 30W • 12-24vdc range • 10/100/1000 Mbps data transfer rates • PoH type 1, PoE+ including 2-event, PoH type 2
	**PD-9001-10G/AC & PD-9501-10G/AC Midspans** This 30w and 60w 10G single port Midspan provides high power and a high data rate to power current and emerging high power applications such as: 802.11ac wave 2 access points, home automation and multi-media devices.	• Provides 30w and 60w options • 10G data transfer rates • IEEE 802.3 at compliant • PoH type1, PoE+ including 2-event, PoH type 2 • See selection guide for part options
Models for AC or DC Input 	**PD-9501GR & PD-9501G Series Midspans** This 60W single port, high power midspan enables remote powering of current and emerging high power applications including remote distance wireless IEEE802.11n access points, pan-tilt-zoom cameras, video-phones, access control, thin clients and POS.	• Provides 60W • 10/100/1000 Mbps data transfer rates • IEEE802.3at compliant • PoH type 1, PoE+ including 2-event, PoH type 2 • AC,DC and 24VAC input powering options • See selection guide for part options

Single Port Midspan Solutions for Indoor Installations

Product	Description	Specifications
	**PD-9601G Midspan** This 95W single port, high power midspan is designed to power wireless and cellular base stations, pan-tilt-zoom and dome cameras, physical access control with door locks, televisions and interactive displays, point-of-sale and information kiosks, thin clients and other high power end terminals.	• Provides 95W • 10/100/1000 Mbps data transfer rates • PoH, IEEE802.3at and 802.3af compliant

MultiPort Midspan Solutions for indoor Installations

Product	Description	Specifications
	**PD-3504G Midspan** This 4 port midspan offers a solution for IP telephones, wireless LAN access points, security network cameras and IP terminals.	• 4 ports • Provides 15.4W per port • IEEE802.3af compliant • 10/100/1000 Mbps data transfer rates • PoH type 1
	**PD-6500G Midspan Family** The remote management enabled 6500G midspans can power IP telephones, wireless LAN access points, IP cameras and many other types of data terminals to receive power, along with data, over standard Ethernet cables, leaving network infrastructure completely unaltered.	• 6/12/24 ports • Provides 15.4W per port • IEEE802.3af compliant • 10/100/1000 Mbps data transfer rates • PoH type 1 • Remote power management
	**PD-9000G Midspan Family** The high power, remote management enabled 9000G midspans are designed specifically to power IEEE802.11n and 802.3at access points, pan-tilt-zoom and dome network cameras, video phones, thin clients, POS systems and other end terminals.	• 6/12/24 ports • Provides 30W per port • IEEE802.3at compliant • 10/100/1000 Mbps data transfer rates • PoH type 1, PoE+ including 2-event, PoH type 2 • Remote power management

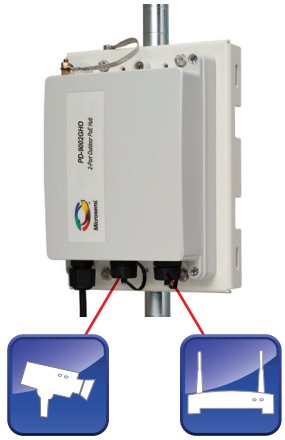
MultiPort Midspan Solutions for indoor Installations

Product	Description	Specifications
	**PD-9004G Midspan** This 4 port high power midspan offers a solution for IP telephones, wireless LAN access points, security network cameras and IP terminals.	• 4 ports • Provides 30W per port • IEEE802.3at compliant • 10/100/1000 Mbps data transfer rates • PoH type 2
	**PD-5524G Midspan** This high power, remote management midspan has energy efficient PoE. EEPoE utilizes all 4 pairs on a cat5, 6 or 7 cable which in turn reduces power loss. This midspan is designed specifically to power IEEE 802.11n and 802.3at access points, videophones, thin clients, POS systems and other end terminal that require up to 30W.	• 24 ports • Provides 30W per port • IEEE 802.3at compliant • PoH type 1, PoE+ including 2-event, PoH type 2 • EEPoE technology - reduces cable power loss by 50% • Midspan-midspan mutual backup • Remote power management • High power over 4-pairs
	**PD-9500G Midspan Family** The high power, remote management enabled power IEEE802.11n and 802.3at access points, pan-tilt-zoom and dome network cameras, video-phones, thin clients, POS systems and other end terminals.	• 6/12/24 ports • Provides 60W per port • 10/100/1000 Mbps data transfer rates • IEEE802.3at compliant • PoH type 1, PoE+ including 2-event, PoH twin type 2 (4-pairs) • Remote power management • High power over 4-pairs
	**PD-9600G Midspan Family** The high power, remote management enabled power IEEE802.11n and 802.3ac access points, pan-tilt-zoom and dome network cameras, video-phones, thin clients, POS systems and other end terminals.	• 6/12 ports • Provides 95W per port • PoH Compliant • 10/100/1000 Mbps data transfer rates • PoH type 1, PoE+ including 2-event, PoH twin type 2 (4-pairs) • Remote power management • High power over 4-pairs

Midspans for Outdoor Installations

Product	Description	Specifications
Models for AC or DC Input 	**PD-9001GO & PD-9501GO Series** This 30w or 60w high power outdoor rated Midspan enables remote powering of current and emerging high power applications including IEEE802.11n access points, pan-tilt-zoom cameras, Small Cell radio's, Microwave and backhaul radios. With its unique features such as plug and play installation, there is no need for installers to open up the unit. With IP66 rating and AC or DC powering options, it makes it ideal for outdoor installations.	• Provides 30w & 60w options • 10/100/1000 Mbps data transfer rates • IEEE802.3at compliant • PoH type 1, PoE+ including 2-event, PoH type 2 • Outdoor rated: IP66 • Extended temperature range up to: -40°C, +65°C depending on power level • Plug 'n Play installation • Includes integral surge protection • AC or DC power input options
	**PD-9001GR/SP & PD-9501GR/SP Series** This 30W or 60w single port Midspan provides high-power solutions as well as offers integrated surge lighting protection and can be used indoors to power outdoor applications such as IEEE802.11n access points, pan-tilt-zoom cameras, Small Cell radio's, Microwave and backhaul radios.	• Provides 30w & 60w options • 10/100/1000 Mbps data transfer rates • IEEE802.3at compliant • PoH type 1, PoE+ including 2-event, PoH type 2 • Indoor midspan for outdoor devices • Surge protection according to GR 1089 • AC power input
	**PD-9601GO** This 90w high power outdoor rated Midspan enables remote powering of current and emerging high power applications including IEEE802.11n access points, pan-tilt-zoom cameras, Small Cell radio's, Microwave and backhaul radios. With its unique features such as plug and play installation, there is no need for installers to open up the unit. With IP66 rating and AC powering options, it makes it ideal for outdoor installations.	• Provides 90w options • 10/100/1000 Mbps data transfer rates • IEEE802.3at compliant • PoH type 1, PoE+ including 2-event, PoH type 2 • Outdoor rated: IP66 • Extended temperature range up to: -40°C, +65°C at full power • Plug 'n Play installation • Includes integral surge protection

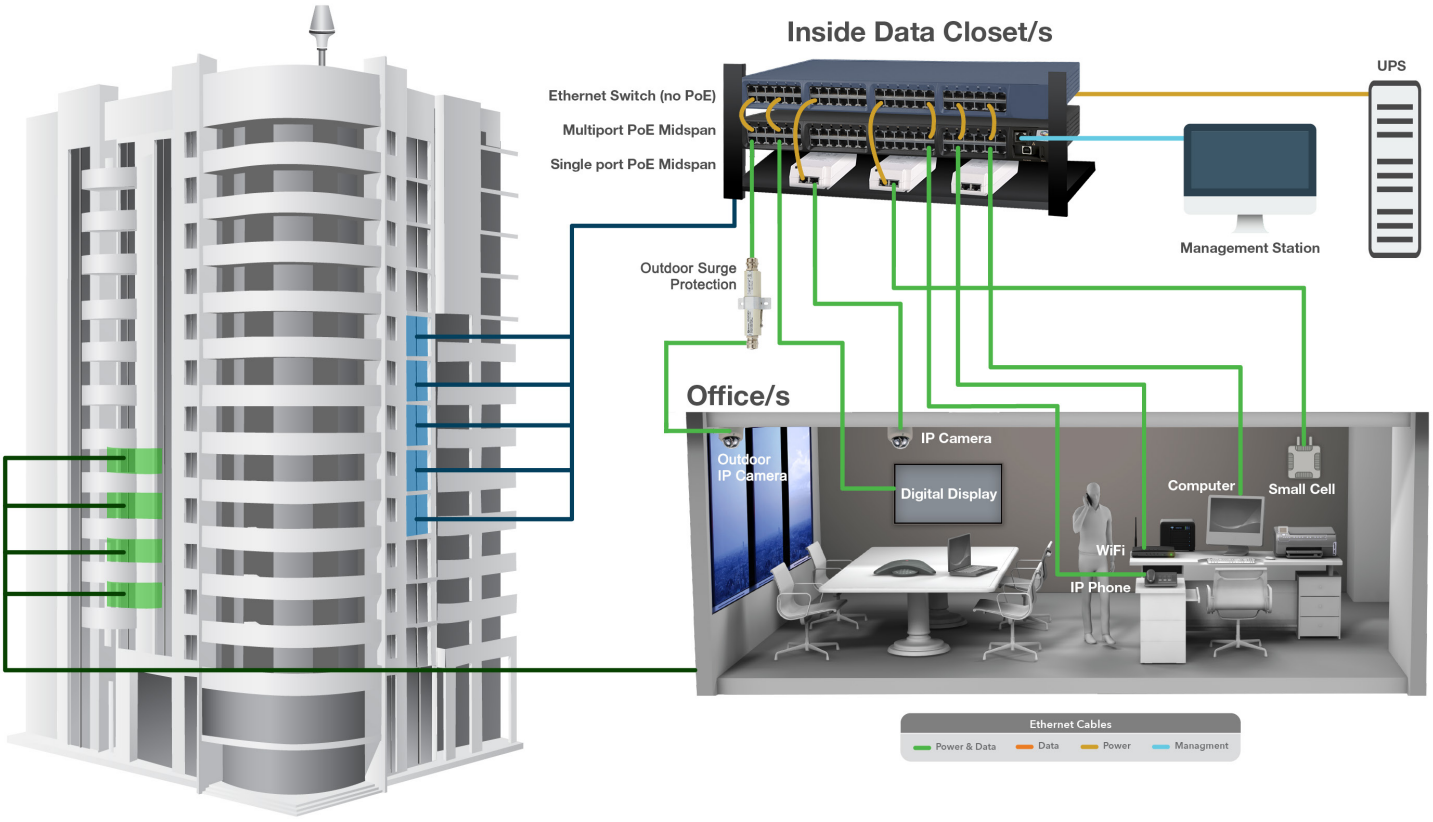
Outdoor Hubs and Switches

Product	Description	Specifications
	**PD-9002GHO 2-Port Outdoor PoE Hub** The PD-9002GHO is an outdoor PoE Hub. It enables the connection of 2 powered devices to a network such as a outdoor Camera and Wi-Fi Access point.	• 2 port • Provides 30W per port • IEEE802.3at standard compliant • Supports 10/100/1000Mbps data rate • Data connectivity between all RJ45 connectors • Outdoor rated: IP66 • Extended temperature range: -40ºC, +55ºC • Plug 'n Play installation (installer does not have to open unit) • Includes integral surge protection • AC power input
	**PDS-102GO** The PDS-102GO is an outdoor PoE switch. It enables the connection of 2 powered devices to the network such as an outdoor WLAN, outdoor IP Camera and outdoor P2P radio.	• 3 ports – 1 data input, 2 PoE outputs • Provides 30W per port • IEEE802.3at compliant • Supports 10/100/1000Mbps data rates • Remotely managed – SNMP and web • Outdoor rated: IP66 • Extended temperature range -40C, +65C for 802.3af • Includes integral surge protection • Plug 'n Play installation (installer does not have to open unit) • Extends network reach by additional 100m
	**PDS-104GO** The PDS-104GO is an outdoor PoE switch. It enables the connection of 4 powered devices to the network such as an outdoor WLAN, outdoor small cells, outdoor IP Camera and outdoor P2P radio.	• 4 ports – 1 data input, 4 PoE outputs • Provides up to 60w on 1-2 ports • IEEE802.3at compliant • Supports 10/100/1000Mbps data rates • Remotely managed – SNMP and web • Outdoor rated: IP66 • Extended temperature range -40C: +50C for full power 150W up to 60W per1-2 ports • Includes integral surge protection • Plug 'n Play installation (installer does not have to open unit) • Optional SFP Module

Midspans for Industrial Installations

Product	Description	Specifications
	PD-9001GI/AC & PD9501GI/AC Series Microsemi's 30w & 60w industrial rated single port midspans enables remote power for a new range of industrial applications including 802.11n Access Points, pan-tilt zoom (PTZ) cameras and other IP terminals.	• Provides 30w or 60w • IEEE 802.3at compliant • Supports 10/100/1000 Mbps • Extended temp range -40 °C - +75 °C • Dual DC input – 20-60VDC range • Industrial rated IP30 • Plug and play installation

Indoor and Outdoor Installation Example

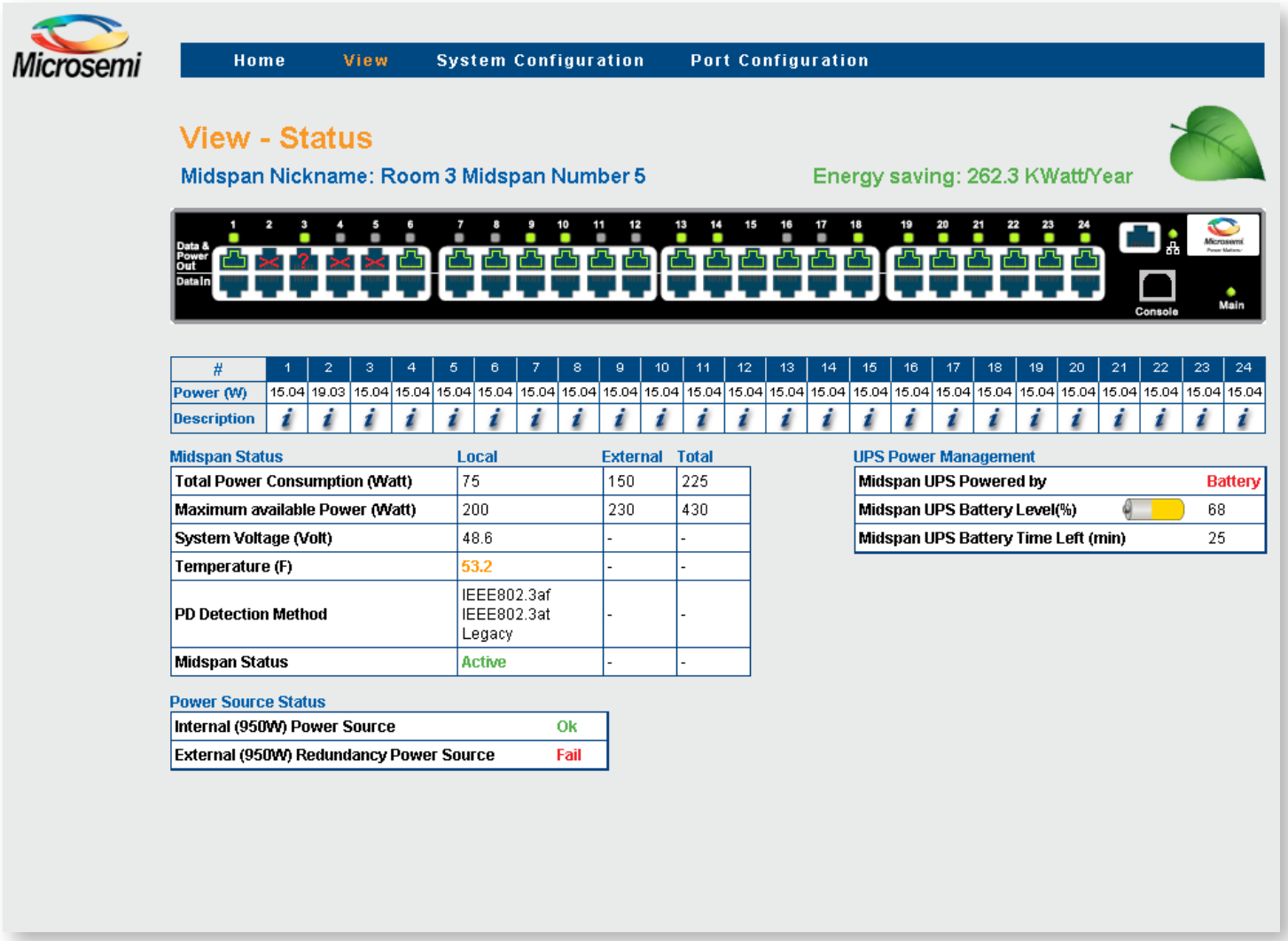


Accessories

Family	Product Number	Description
	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 (2-pairs 30W or 4-pairs 60W). The PoE Tester also identifies the existence and type of Power Sourcing Equipment (either Endspan* or Midspan) in your network.
 802.3af Active Splitter	PD-AS-601/5	Power conversion from 48V to 5V output, 2 x DC jacks: round 3.4x1.35mm and 5.5 x 2.5mm
 802.3at Active Splitter	PD-AS-951/12-24	Power conversion from 48V to 12V or 24V DC output (user selectable), 4 pairs, for use with PD-9500G family
	PD-AS-951/18	Power conversion from 48V to 18V output (user selectable), 4 pairs with open DC wires, for use with PD-9500G family
	PD OUT/MBK	The Microsemi outdoor mounting bracket, PD-OUT/MBK/G & PD-OUT/MBK/S is designed for wall mount installations as well as small and large poles (up to 8" diameter) installations.
	PD OUT/SP11	High quality surge protection device designed to protect indoor Ethernet networks from lighting that may come from outdoor environment through the Ethernet cable, Supports data rates of up to 1Gbps, Protects up to 10KV surge, All eight lines protected including PoE, Waterproof—IP66 rated, UL Certified, Can be wall or pole mounted
 PoE Extender	PD-PoE Extender	1-port, extends PoE range by additional 100m, 802.af/802.at output power. Combine with PD-3504G or PD-9004G to effectively power edge-based Ethernet devices.

PowerView Pro Management

The PowerView Pro Management is a highly secure Web based SNMP remote network management system that you can find in most of our multiport midspans and switch solutions.



Key Features

- Comes standard in PD-6500, PD-9000, PD-9500, PD-9600 families* as well as our PDS-102 and PDS 104 switches
- SNMPv3 and web-based management
- Supports both IPv4 and IPv6 addressing
- Monitors statistics, usage, and availability
- Monitors battery life in UPS and manages flow to critical and non-critical devices
- Allows devices to be remotely rebooted
- Schedules on/off in periods of non-use as well as reboots to increase network efficiency and uptime

* Multiport devices only

PoE Systems Selection Guide

PoE Midspans for Indoor Installations

Watts per Port	Product Number	Number of Ports	Remotely Managed	10Gigabit	Input	Other
15.4W	PD-3501G/AC	1			AC	
15.4W	PD-3504G/AC	4			AC	
15.4W	PD-6506G/AC/M	6	X		AC	
15.4W	PD-6512G/AC/M	12	X		AC	
15.4W	PD-6524G/AC/M/F	24	X		AC	400W total power
30W	PD-5501G/12-24VDC	1			DC	
30W	PD-9001GR/AT/AC	1			AC	
30W	PD-9004G/AC	4			AC	
30W	PD-5524G/ACDC/M	24	X		AC & DC	450W total power
30W	PD-9006G/ACDC/M	6	X		AC & DC	
30W	PD-9012G/ACDC/M	12	X		AC & DC	
30W	PD-9024G/ACDC/M/F	24	X		AC & DC	1000W total power
30W	PD-9001-10G/AC	1		X	AC	
60W	PD-9501-10G/AC	1		X	AC	
60W	PD-9501GR/AC	1			AC	
60W	PD-9501G	1			AC & DC	AC, 24VDC, 48VDC and 24VAC input options
60W	PD-9506G/ACDC/M	6	X		AC & DC	
60W	PD-9512G/ACDC/M	12	X		AC & DC	
60W	PD-9524G/ACDC/M	24	X		AC & DC	1000w total power
95W	PD-9601G/AC	1			AC	
95W	PD-9606G/ACDC/M	6	X		AC & DC	
95W	PD-9612G/ACDC/M	12	X		AC & DC	1000w total power

PoE Midspans for Outdoor Installations

30W	PD-9001GO	1			AC & DC	AC and 12-24VDC input power options
30W	PD-9001GR/SP	1			AC	
60W	PD-9501GO	1			AC & DC	AC, 12-24VDC and 48VDC input power options
60W	PD-9501GR/SP	1			AC	
90W	PD-9601GO/AC	1			AC	

PoE Switches and Hubs for Outdoor Installations

30W	PD-9002GHO/AC	2			AC	
30W	PDS-102GO/AC	2	X		AC	
60W	PDS-104GO/AC	4	X		AC	

PoE Midspans for Industrial Installations

30W	PD-9001GI/DC	1			DC	
60W	PD-9501GI/DC	1			DC	

Microsemi is continually adding new products to it 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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Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense & security, aerospace and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, Calif., and has approximately 3,600 employees globally. Learn more at www.microsemi.com.

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