PowerDsine®
Midspans

The Easy, Cost-efficient Way to Supply Power Over Existing Ethernet Infrastructure

Thin Clients

PTZ Cameras

Access Points

IP Video Phones

NEW!
HiPoE™
up to 60W!

Microsemi®

PowerDsine® PoE Capabilities

Ethernet Cable
- Power & Data
- Data
- Power
- Management

Management Station

Ethernet Switch

UPS

PowerDsine Midspan

Active Splitter (optional)

| Network Camera | Thin Client | IP Phone | Wireless LAN Access Point | WiMAX Access Point |
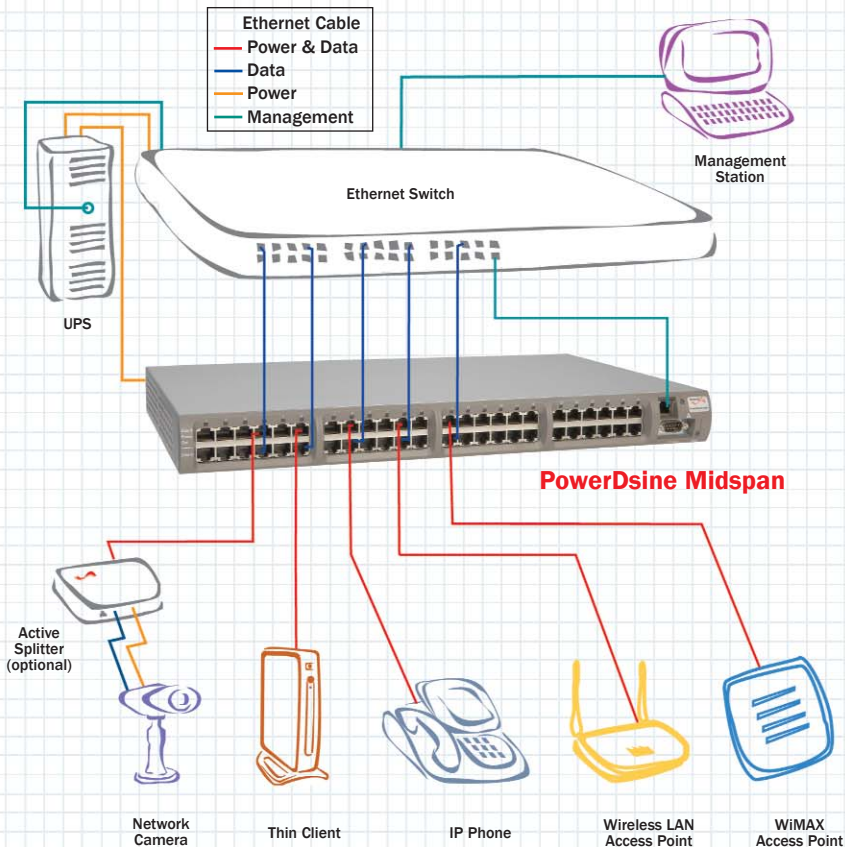
PowerDsine Midspans are compatible with IP Phones, WiMax and WLAN Access Points, Security Cameras, Thin Clients and other terminals from more than 40 manufacturers including Cisco, Avaya, Alcatel, Sony, 3-COM, Proxim, Mitel, Nortel, ShoreTel and many more. For the most up-to-date compatibility information, see the PowerDsine Compatibility Guide on our website: www.microsemi.com

PowerDsine Midspan Families

3001/3001GC Midspan Series
Compact, single-port midspan is an ideal and affordable solution for low port density applications.

Page 4

Page 8

9001G Midspan Series
High Power PoE Midspan delivering up to 30W over 2-pairs.

3500/3500G Midspan Series
IEEE 802.3af PoE Unmanaged 10/100 or Gigabit Midspan for the enterprise market, 19" rack mountable.

Page 5

Page 9

9000G Midspan Series
High Power, Gigabit Midspan with advanced NMS features delivers 36W per port in 6, 12 and 24 port models.

6500 Midspan Series
Business class PoE Managed Midspans with advanced NMS features and lifetime warranty.

Page 6

Page 10

9501G Midspan Series
High Power PoE Midspan delivering up to 60W over 4-pairs.

8000 Midspan Series
High Power PoE Midspans delivering up to 39W per port.

Page 7

Page 13 - 14

Splitters and Dongles
Adapts incompatible devices for power over ethernet.

PowerDsine® Midspans

Providing Easy, Low-Cost Power Over Existing Ethernet Infrastructure

Microsemi's PowerDsine Midspan is the first system on the market to supply reliable, uninterrupted power to IP phones, wireless LAN access points, network security cameras, and other ethernet devices using your existing CAT-5, CAT-5E and CAT-6 LAN cable infrastructure.

Ideal for both new and legacy installations, PowerDsine systems eliminate the time, cost and inconvenience of installing separate power cabling.

This patented technology, when used in conjunction with a centralized Uninterruptible Power Supply (UPS), ensures continuous operation of phones, access points and cameras – even during power failures.

Featuring a range of models, the PowerDsine solution can provide clean reliable power to 1 through 48 devices. Multiple units can be used for large installations.

Recently introduced high power midspans can deliver up to 60W of power to drive WiMax, 802.11n access points, Pan-Tilt-Zoom security cameras, and other devices requiring high power.

- **POWER UP TO 48 TERMINALS**

- **GIGABIT AND HIGH POWER APPLICATIONS**

- **EXCLUSIVE REMOTE SYSTEM MANAGEMENT**

- **FAST, LOW-COST PLUG AND PLAY INSTALLATION**

- **IEEE 802.3AF COMPLIANT**

- **LIFETIME WARRANTY ***

* On select products

Power Range
- Up to 60 Watts of power

Device Compatibility
- IEEE 802.3af Compliant
- IEEE 802.3at Compliant
- VoIP Phones
- Wireless Access Points
- Network Cameras
- High Power Terminals including Thin Clients, WiMax and 802.11n devices

Port Capacity
- 1, 6, 12, 24 and 48-port

Data Rates
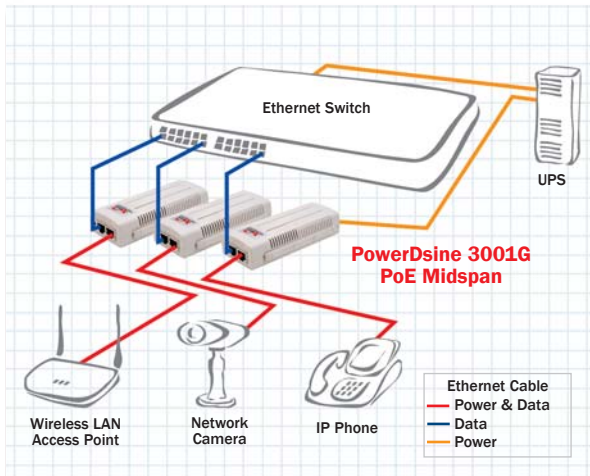- Maintains Switch Data Rates (10/100 and 10/100/1000)

Cost Benefits
- Low purchase price: Midspan ports cost less than installing new PoE switches.
- Replace switches as needed; buy PoE just once.
- Eliminates the cost of installing AC power cabling and electrical outlets
- Protects your investment in existing infrastructure
- Simple Plug 'n Play installation, no configuration downtime
- Allows a single UPS for all terminals

PowerView Pro™ Management   Pages 11-12
- Sophisticated management using just a PC and web browser
- Safe remote management from anywhere, even from home, using SNMPv3 or the CLI
- Enhance network operation with remote configuration, reboot and full power monitoring and control.
- Centralizes emergency UPS power to all connected devices

PowerDsine® 3001/3001GC

Up to Gigabit PoE for Security Network and Low Terminal Density Installations

PowerDsine 3001G
PoE Midspan

Ethernet Switch

UPS

Wireless LAN Access Point

Network Camera

IP Phone

Ethernet Cable
— Power & Data
— Data
— Power

Overview

PowerDsine's 3001/3001GC Power over Ethernet (PoE) single port Midspan (PoE injector) offers a compact and cost effective, fully IEEE 802.3af compliant solution for security network and other low port density IP Terminal installations.

The 3001 PoE Midspans provide a compact, affordable, safe and reliable power solution over existing Ethernet infrastructure.

PD-3001/3001GC Features

• Cost-effective power distribution for WLAN access point installations
• Safe powering of 802.3af compliant,as well as Pre-standard end-terminals
• Investment protection of existing Ethernet switches and cabling infrastructure
• Saves time and reduces installation costs
• Easy plug-and-play installation
• Several units can be mounted adjacently for powering more than one Ethernet terminal
• Cleans up low-density wireless LAN deployment and eliminates the need for multiple one-port PoE solutions
• Supports Gigabit Ethernet data transmission for applications such as Wi-Max access points, Gig IP phones, and IP cameras

PD-3001/3001GC Specifications

|	
No. of Ports	1
Pass Through Data Rates	10/100/ Mbps (3001) 10/100/1000 Mbps (3001GC)
Power over Ethernet Output	Pin Assignment and Polarity: 4/5 (+), 7/8 (−) Output Power Voltage: 48Vdc User Port Power: 15.4 Watts Max.
Input Power Requirements	AC Input Voltage: 90 to 264 Vac AC Input Current: 0.5A @ 110-220 Vac AC Frequency: 47 to 63 Hz
Dimensions	60 mm (W) x 31 mm (H) x 145 mm (L) 2.36 in. x 1.2 in. x 5.7 in
Weight	1 lbs (450g)
Indicators	System Indicator: AC Power (Green)
	User Indicator: Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 32° to 104°F (0 to 40°C)
	Operating Humidity: Maximum 90%, Non-condensing
	Storage Temperature: −4° to 158°F (−20° to 70°C)
	Storage Humidity: Maximum 95%, Non-condensing
	Operating Altitude: −1000 to 10,000 ft. (−304.8 to 3048 m)
Reliability	MTBF: 100,000 hrs. @25°C
Thermal Rating	14 BTU/Hr (@240VAC)
Warranty	1-year
Regulatory Compliance	IEEE 802.3af (PoE), RoHS Compliant WEEE Compliant, CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B with FTP cabling EN 55022 Class B (Conductive Emissions on Telecommunications Port) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per EN 60950 GS Mark Per EN 60950

Ordering Information

Part Number	Name	Description
PD-3001/AC	PowerDsine 3001	1-port 10/100 Mbps
PD-3001GC/AC	PowerDsine 3001GC	1-port 10/100/1000 Mbps

PowerDsine® 3500/3500G Family

Unmanaged Midspans for the enterprise market, up to Gigabit speed
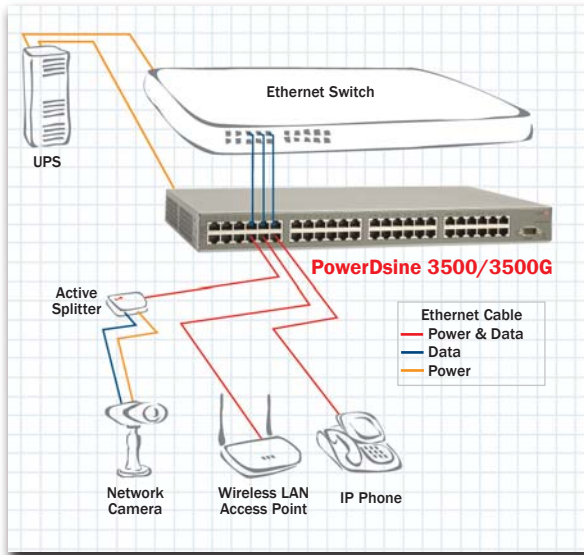
Overview

PowerDsine's 3500/3500G family offers a cost-effective, fully IEEE 802.3af compliant solution to upgrade existing infrastructure with PoE, providing a maximum of 15.4 Watts of power through each port and ensuring safe operation of any standard PoE data terminal. It allows IP telephones, wireless LAN access points, security network cameras and IP terminals to receive power, along with data at up to Gigabit speed, over standard Ethernet cables, leaving network infrastructure completely unaltered.

PD-3500/3500G Features

• A cost-effective solution to upgrade existing infrastructure to PoE
• 3500 supports 10/100 transfer rates
• 3500G supports Gigabit data transfer rates
• Safe & reliable power over existing Ethernet infrastructure
• Safe solution that protects network infrastructure
• Scalable 6, 12 & 24 port models for optimized installation
• Fully 802.3af standard compliant
• Cisco and legacy PoE support

PD-3500G Specifications

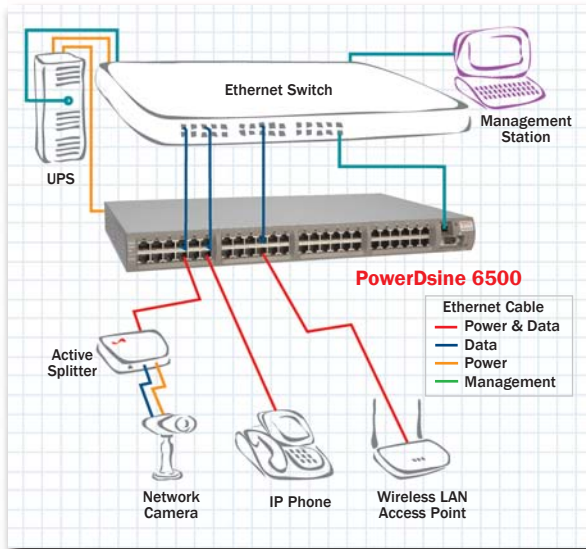|	
No. of Ports	6/12/24
Pass Through Data Rates	10/100 Mbps (3500) 10/100/1000 Mbps (3500G)
Power over Ethernet Output	Pin Assignment and Polarity: 4/5 (+), 7/8 (−) Output Power Voltage: 52Vdc User Port Power: 15.4Watts Aggregate Power: 400Watts
Input Power Requirements	AC Input Voltage: 90 to 264 Vac AC Input Current: 4A @ 110 Vac 2A @ 240 Vac AC Frequency: 50 to 60 Hz
Dimensions	438 mm x 272 mm x 44 mm 17.3 in. x 17.7 in. x 1.73 in
Weight	8.8 lbs (4 kg)
Indicators	System Indicator: AC Power (Green)
	User Indicator: Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 32° to 104°F (0 to 40°C)
	Operating Humidity: Maximum 90%, Non-condensing
	Storage Temperature: −4° to 158°F (−20° to 70°C)
	Storage Humidity: Maximum 95%, Non-condensing
	Operating Altitude: −1000 to 10,000 ft. (−304.8 to 3048 m)
Reliability	MTBF: 100,000 hrs. @25°C
Thermal Rating	170/320 BTU/Hr (@240VAC)
Warranty	1-year
Regulatory Compliance	IEEE 802.3af (PoE), RoHS Compliant WEEE Compliant, CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B with FTP cabling EN 55022 Class B (Emissions) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per EN 60950 GS Mark Per EN 60950

Ordering Information

Part Number	Name	Description
PD-3506/AC	PowerDsine 3506	6-port, 100W total power
PD-3512/AC	PowerDsine 3512	12-port, 200W total power
PD-3524/AC	PowerDsine 3524	24-port, 200W total power
PD-3506G/AC	PowerDsine 3506G	6-port, 100W total power
PD-3512G/AC	PowerDsine 3512G	12-port, 200W total power
PD-3524G/AC	PowerDsine 3524G	24-port, 200W total power
PD-3524G/AC/F	PowerDsine 3524G	24-port, 400W total power

PowerDsine® 6500 Family

Business-class Midspans with Network Management System and lifetime warranty

Ethernet Switch
Management Station
UPS
PowerDsine 6500

Ethernet Cable
Power & Data
Data
Power
Management

Active Splitter
Network Camera
IP Phone
Wireless LAN Access Point

Overview

The PowerDsine 6500 series sets a new standard for highly secure, remotely-managed and safe-to-use Power over Ethernet Midspans (PoE injectors).

PowerDsine 6500 series comprises 6, 12, 24 and 48-port models, making an even wider range of flexible Power over Ethernet installations possible.

PowerDsine 6500 family allows IP telephones, wireless LAN access points, security network cameras and many other types of data terminals to receive power, along with data, over standard Ethernet cables, leaving network infrastructure completely unaltered. With PoE, data and power flow smoothly and safely over a single LAN cable with no interference.

PD-6500 Features

- Safe & reliable power over existing Ethernet infrastructure
- The most cost-effective solution for existing installations
- Remote SNMPv3 or Web-based management
- The highest level of network security
- A safe solution that protects network infrastructure
- Scalable 6,12,24 & 48-port models
- Fully standards-compliant

PD-6500 Specifications

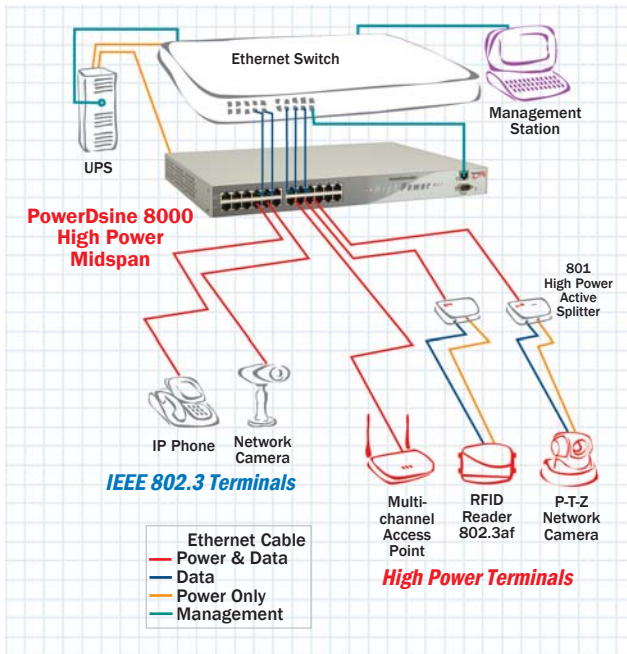|	
No. of Ports	6/12/24/48
Pass Through Data Rates	10/100 Mbps
Power over Ethernet Output	Pin Assignment and Polarity: 4/5 (+), 7/8 (−) Output Power Voltage: 52Vdc User Port Power: 15.4Watts Aggregate Power: up to 400Watts
Input Power Requirements	AC Input Voltage: 90 to 264 Vac AC Input Current: 100W 2A @ 110 Vac, 1A @ 220 Vac 200W 4A @ 110 Vac, 2A @ 220 Vac 400W 5.5A @ 110 Vac, 2.75A @ 220 Vac AC Frequency: 47 to 63 Hz
Dimensions	438 mm x 272 mm x 44 mm 17.3 in. x 10.8 in. x 1.75 in or 1U
Weight	8.8 lbs (4 kg)
Management	PowerView Pro included
Indicators	System Indicator: AC Power (Green)
	User Indicator: Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 32° to 104°F (0 to 40°C)
	Operating Humidity: Maximum 90%, Non-condensing
	Storage Temperature: −4° to 158°F (−20° to 70°C)
	Storage Humidity: Maximum 95%, Non-condensing
	Operating Altitude: −1000 to 10,000 ft. (−304.8 to 3048 m)
Reliability	MTBF: 100,000 hrs. @25°C
Thermal Rating	170/320 BTU/Hr (@240VAC)
Warranty	Limited lifetime
Regulatory Compliance	IEEE 802.3af (PoE), RoHS Compliant WEEE Compliant, CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B with FTP cabling EN 55022 Class B (Emissions) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per EN 60950 GS Mark Per EN 60950

Ordering Information

Part Number	Name	Description
PD-6506/AC/M	PowerDsine 6506	6-port, 100W total power
PD-6512/AC/M	PowerDsine 6512	12-port, 200W total power
PD-6524/AC/M	PowerDsine 6524	24-port, 200W total power
PD-6524/AC/M/F	PowerDsine 6524	24-port, 400W total power
PD-6548/AC/M	PowerDsine 6548	48-port, 400W total power

PowerDsine® 8000 High Power Family
Up to 39 Watts per channel for high power devices

Ethernet Switch

Management Station

UPS

PowerDsine 8000 High Power Midspan

801 High Power Active Splitter

IP Phone   **Network Camera**

IEEE 802.3 Terminals

Multi-channel Access Point   **RFID Reader 802.3af**   **P-T-Z Network Camera**

High Power Terminals

Ethernet Cable
- Power & Data
- Data
- Power Only
- Management

PD-8000 Specifications

|	
Number of Ports	1/6/12
Data Rates	10/100 Mbps
High PoE Output	Powering on 4 pairs simultaneously Pin Assignment and Polarity: 4/5 (+), 7/8 (−) and 1/2 (−), 3/6 (+)
8006/8012:	Output Voltage (typ.): 55.5Vdc Port Power (typ.): up to 39W (using Power management) Available Power: 200 W
8001:	Output Voltage (typ.): 55.5Vdc Port Power (typ.): 32W
Input Power 8001:	0.7 A at 110 Vac; 0.4 A at 220 Vac AC Frequency: 47 to 63 Hz
8006/8012:	AC Input Current: 4 A at 110 Vac; 2 A at 220 Vac
8006/8012/8001:	AC Input Voltage: 90 to 264 Vac
Dimensions 8001:	1.75 X 4.17 X 5.5 in. (h/w/d) 4.4 X 10.6 X 14.0 cm (h/w/d)
8006/8012:	1.75 x 17.0 x 11.9 in. (h/w/ d) 4.4 x 43.8 x 30.2 cm (h/w/d)
Management	PowerView Pro included
Weight	**8006/8012**: 8.8 lbs (4 kg) **8001**: 1.0 lbs (350 g)
Indicators	**8006/8012**: AC Power (Green/Orange) DC Power (Green/Orange) Channel Power (Green)
	8001: AC Power (Green) Power on Spare (Green) Power on Data (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 32° to 104°F (0 to 40°C)
Operating Humidity:	Maximum 90%, Non-condensing
Storage Temp:	−4° to 158°F (−20° to 70°C)
Storage Humidity:	Maximum 95%, Non-condensing
Operating Altitude:	−1000 to 10,000 ft. (−304.8 to 3048 m)
Reliability	MTBF: 100,000 hrs. @25°C
Thermal Rating	**8006/8012**: 170/320 BTU/Hr (@240VAC) **8001**: 28 BTU/Hr (@240VAC)
Warranty	Limited Lifetime
Regulatory Compliance	IEEE 802.3af (PoE), RoHS Compliant WEEE Compliant, CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B with FTP cabling EN 55022 Class B (Emissions) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per EN 60950 GS Mark Per EN 60950

HiPoE HIGH POWER

Overview

The 8000 Midspan series is a unique solution for heavy power consumers such as multi-band WLAN access points, Pan-Tilt-Zoom network cameras, RFID readers and Video IP phones. Up to 39W of power is carried using all 4-pairs of the Ethernet cable to avoid any potential thermal effects on the infrastructure.

The 8000 Family also can safely operate standard PoE terminals by limiting the maximum power on those specific ports to 15.4 watts, and using 2-pairs only.

With PowerView Pro management, the 8006/12 series offers an advanced and secure network management using either web browser or SNMP station.

PD-8000 Features

- Delivers up to 39 watts per port over 4 pairs
- Safe & reliable High Power over Ethernet solution
- Designed to meet IEEE 802.3af standard when connected to standard terminals
- Remote SNMPv3 and Web management
- High level of network security
- Scalable 1, 6 & 12-port models

Ordering Information

Part Number	Description
PD-8001/AC	1 Port High Power over Ethernet Midspan
PD-8006/AC/M	6 Port High Power over Ethernet Midspan
PD-8012/AC/M	12 Port High Power over Ethernet Midspan

Accessory	Description
PD-AS-801/12	4-pairs High Power Splitter

PowerDsine® 9001G Midspan
High Power, 802.3at Draft 4.1 Compliant, Single Port, Gigabit Midspan
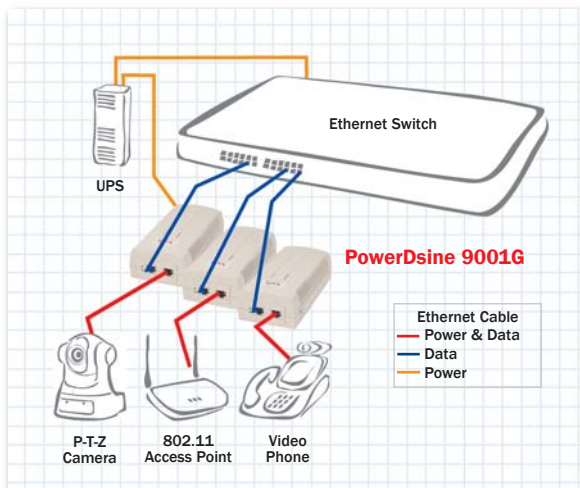
Overview

The PowerDsine 9001G is a single port, high-power solution for remote powering of current and emerging high power applications.

Generating up to 30W, the 9001G enables remote power for a new range of applications including 802.11n Access Points, pan-tilt-zoom (PTZ) cameras and video-phones. It complies to IEEE 802.3af PoE standard parameters, and to the latest draft of IEEE802.3at. It can power both existing 10/100Base-T network devices and emerging wireless 1000Base-T devices such as Wi-MAX and wireless IEEE 802.11n access points.

PD-9001G Features

- Up to 30W of Power on 2-pairs
- IEEE 802.3at-Draft 4.1 Compliant with 2-event classification
- IEEE 802.3af backward compatible
- Compatible With All IEEE 802.3af or Legacy Cisco-Powered Devices
- Safe: Low Power Devices Receive Only the Power They Need
- Safe and Reliable Power to WLAN Access Points
- Automatic Detection and Protection of Non–standard Ethernet Terminals
- Supports 10/100/1000Base-T applications
- Compact Design Fits Easily in WLAN Access Point Installations

PD-9001G Specifications

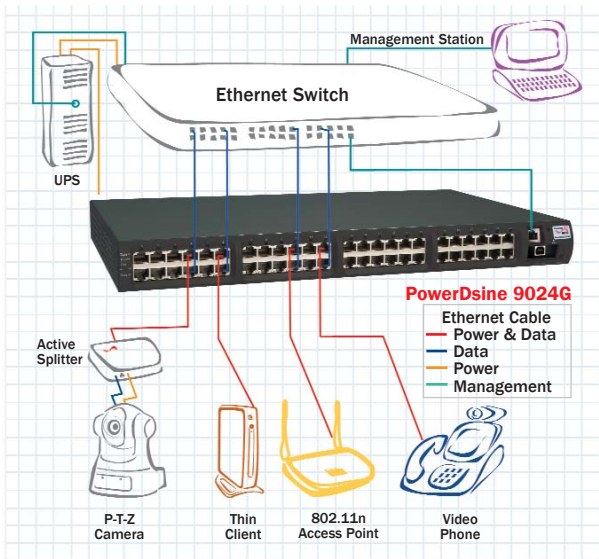|	
No. of Ports	1
Pass Through Data Rates	10/100/1000 Mbps
Power over Ethernet Output	Pin Assignment and Polarity: 4/5 (+), 7/8 (–) Output Power Voltage: 55Vdc User Port Power: 30Watts
Input Power Requirements	AC Input Voltage: 100 to 240 Vac AC Input Current: 0.8A @ 100-240 Vac AC Frequency:　50 to 60 Hz
Dimensions	87.9 mm x 51.3 mm x 166 mm 3.46 in. x 2.0 in. x 6.53 in
Weight	.771 lbs (350g)
Indicators	System Indicator: AC Power (Green)
	User Indicator: Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 14º to 113ºF -(-10 to 45ºC)
	Operating Humidity: Maximum 90%, Non-condensing
	Storage Temperature: 32º to 104ºF (0º to 40ºC)
	Storage Humidity: Maximum 95%, Non-condensing
	Operating Altitude: –1000 to 10,000 ft. (–304.8 to 3048 m)
Reliability	MTBF: 100,000 hrs. @25ºC
Thermal Rating	27 BTU/Hr (@240VAC)
Warranty	1-year
Regulatory Compliance	IEEE 802.3af (PoE), RoHS Compliant WEEE Compliant, CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B EN 55022 Class B (Emissions) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per EN 60950-1 GS Mark Per EN 60950-1

Ordering Information

Part Number	Name	Description
PD-9001G/AC	PowerDsine 9001G	High Power 30W 1-port Gigabit PoE, AC input

PowerDsine® 9000G High Power Family

36W/Port Gigabit Midspan for High Power & 802.3at Terminals

Management Station

Ethernet Switch

UPS

PowerDsine 9024G

Active Splitter

Ethernet Cable
- Power & Data
- Data
- Power
- Management

P-T-Z Camera — **Thin Client** — **802.11n Access Point** — **Video Phone**

Overview

The PowerDsine 9000G Family is designed specifically to power 802.11n and 802.3at Access Points, PTZ and Dome network cameras, Video Phones, Thin Clients and other Ethernet end terminals that require high power. The PowerDsine 9000G Family includes 6, 12, and 24-port models and are fully backward compatible and safe to use with any 802.3af terminal such as VoIP Phones, IP Cameras and WLAN Access Points. With PowerDsine PoE Midspans, data and power flow smoothly and safely over a single LAN cable with no interference, leaving your network infrastructure completely unaltered.

For secure remote management, all PD-9000G models include PowerView Pro management software supporting IPv4 and IPv6 addressing.

PD-9000G Features

- High Power over 2-pairs -- 36W per port
- IEEE 802.3at Draft 4.1 compliant
- Supported data rates: 10/100/1000BaseT
- Scalable 6, 12 & 24-port models
- Power redundancy:
  - Mutual midspan-to-midspan backup
  - DC backup via external PowerDsine RPS products
- PowerView Pro secure, remote SNMPv3 and Web-based management
- Supports both IPv4 and IPv6 addressing
- PoE 802.3af backward compatible
- Powers all pre-standard 802.11n APs (including Cisco)


PD-9000G Specifications

No. of Ports	6/12/24
Pass Through Data Rates	10/100/1000 Mbps
Power over Ethernet Output	Pin Assignment and Polarity: 4/5 (+), 7/8 (−) Output Power Voltage: 55Vdc User Port Power: 36W Typ. Aggregate Power: 450W, 1000W
Input Power Requirements	AC Input Voltage: 100 to 240 Vac DC Input: 55V (RPS or another 9000 midspan)
	AC Input Current:
450W Units:	5.5A @ 110 Vac; 2.75A @ 220 Vac
1000W Units:	12A @ 110 Vac; 6A@220 Vac AC Frequency: 50 to 60 Hz
Dimensions	438 mm x 272 mm x 44 mm 17.3 in. x 10.8 in. x 1.75 in or 1U
Weight	14.3 lbs (6.5 kg)
Management	PowerView Pro included
Indicators	System Indicator: AC Power (Green)
	User Indicator: Channel Power (Green/Orange)
Connectors	PoE ports and management port: Shielded RJ-45, EIA 568A and 568B Console Port: USB Connector Type B DC Connector: DC Block Terminal RPS Com Connector: HD-D-sub-15
Environmental Conditions	Operating Ambient Temperature: 32° to 104°F (0 to 40°C)
	Operating Humidity: 10% to 90%, Non-condensing
	Storage Temperature: −4° to 158°F (−20° to 70°C)
	Storage Humidity: 5% to 95%, Non-condensing
	Operating Altitude: −1000 to 10,000 ft. (−304.8 to 3048 m)
Warranty	Limited lifetime (see Terms and Conditions)
Regulatory Compliance	IEEE 802.3af, IEEE 802.3at Draft 4.1, RoHS Compliant, VCCI, CE, C-Tick
Electromagnetic Emission & Immunity	FCC Part 15, Class B with FTP cabling EN 55022 Class B (Emissions) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per IEC60950-1 GS Mark Per IEC60950-1

Ordering Information

Part Number	Name	Description	
PD-9006G/ACDC/M	PowerDsine 9006G	6-port	450W
PD-9012G/ACDC/M	PowerDsine 9012G	12-port	450W
PD-9024G/ACDC/M	PowerDsine 9024G	24-port	450W
PD-9024G/ACDC/M/F	PowerDsine 9024G	24-port	1000W
PD-RPS-450	PowerDsine RPS 450	450W	
PD-RPS-1000	PowerDsine RPS 1000	1000W	
PD-RPS-Cables	Backup Cables Set		

PowerDsine® 9501G Family

High Power, Gigabit Single Port PoE Midspan
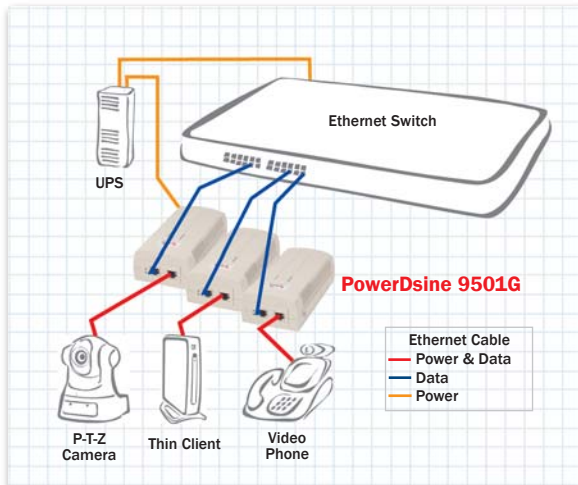
Overview

The PowerDsine 9501G is a single port, high-power solution for remote powering of current and emerging high power applications.

Generating a maximum of 60W, the PD-9501G enables remote power for a new range of applications including pan-tilt-zoom (PTZ) cameras, video-phones and thin-clients. It complies to IEEE 802.3af/at PoE standard parameters, while doubling the available power. It can power both existing 10/100Base-T network devices and such emerging wireless gigabit devices as Wi-MAX and remote distance wireless IEEE 802.11n access points.

PD-9501G Features

- Up to 60W of Power on 4-pairs
- IEEE 802.3af Compliant--With Higher Power
- Compatible With All IEEE pre 802.3at, 802.3af and Legacy Powered Devices
- Safe: Low Power Devices Receive Only the Power They Need, 2-pair PDs receive power on 2-pairs
- Safe and Reliable Power over Ethernet
- Automatic Detection and Protection of Non–standard Ethernet Terminals
- Supports 10/100/1000BaseT applications
- Compact Design Fits Easily in WLAN Access Point Installations

9501G Specifications

No. of Ports	1
Pass Through Data Rates	10/100/1000 Mbps
Power over Ethernet Output	Pin Assignment and Polarity: Data Pairs 1/2 (–) and 3/6 (+) Spare Pairs 7/8 (–) and 4/5 (+) Output Power Voltage: 54-57Vdc User Port Power: 60Watts Max.
Input Power Requirements	AC Input Voltage: 100 to 240 Vac AC Input Current: 1.2A @ 100-240 Vac AC Frequency: 50 to 60 Hz
Dimensions (W x H x L)	87.9 mm x 51.3 mm x 166 mm
Weight	.881 lbs (400g)
Indicators	System Indicator: AC Power (Green) Channel Power (Green and Orange)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 14º to 113ºF (-10º to 45ºC) @60W 14º to 131ºF (-10º to 55ºC) @30W
	Operating Humidity: Maximum 90%, Non-condensing
	Storage Temperature: –4º to 158ºF (–20º to 70ºC)
	Storage Humidity: Maximum 95%, Non-condensing
	Operating Altitude: –1000 to 10,000 ft. (–304.8 to 3048 m)
Reliability	MTBF: 100,000 hrs. @25ºC
Warranty	1-year
Regulatory Compliance	IEEE 802.3af (PoE), Pre IEEE 802.3at (including 2-event), RoHS Compliant, WEEE Compliant, CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B EN 55022 Class B (Emissions) EN 55024 (Immunity), VCCI
Safety Approvals	UL/cUL Per EN 60950-1 GS Mark Per EN 60950-1

Ordering Information

Part Number	Name	Description
PD-9501G/AC	PowerDsine 9501G	High Power 1-port 4-pair, AC input

PowerView Pro™ Management
Highly Secure Web-based/SNMP Remote Network Management System

The View Status screen is the primary Midspan monitoring tool.

Capabilities

PowerDsine PowerView Pro is a secure Web/SNMP management application designed to simplify power monitoring and control of PowerDsine Midspans via a local or remote computer. PowerView Pro provides direct on-line power supervision, configuration, monitoring and diagnostics of PowerDsine products. The manager can be accessed from any computer by WEB browser such as Internet Explorer/Netscape, from an SNMPv2c/SNMPv3 management station, or via the Command Line Interface (CLI) using Telnet/SSH, or RS232 Terminal.

The SNMP capabilities of this management application can run on various network management stations such as HP OpenView, IBM Tivoli, Cassel rock SNMPc or any SNMP-capable software application. A built-in web server enables management of all Midspans deployed in the network.

Features

- Configuration and real time monitoring using graphical representations of remote device or Command Line Interface (CLI)
- System status display of all PoE ports and Midspan for power consumption and status
- Easy Manual activation/deactivation of PoE ports to reset power to devices
- Automatic activation/deactivation of PoE ports based on weekly or daily schedule
- Limit maximum power provided for PoE devices
- Monitor UPS status and battery level
- Critical/ High/Low PoE port priority
- Extend PoE devices operation time during power failure
- Automatic deactivation of low priority ports when UPS battery is low
- Easy software update during run time without affecting active PoE ports
- HTTP - Web based friendly configuration interface
- SSL - Secured WEB based configuration
- SNMP - Simple Network Management Protocol
- SNMP v2c/v1 and secured plus encrypted SNMPv3
- RFC3621 Power over Ethernet (PoE) SNMP MIBs
- Private MIB extension for RFC3621 PoE MIB
- Telnet - Remote terminal over Ethernet Network
- SSH - Remote encrypted terminal over Ethernet Network
- RADIUS - authentication and accounting for WEB / Telnet / SSH remote WEB users
- SysLog Server - Log events sent to remote SysLog Serve

Benefits Overview

- Secure WEB (SSL/HTTPS), terminal (SSH), SNMP (SNMPv3) offers complete secured network management solution
- Detailed PoE power monitoring allows easy identification of devices which exceed normal power consumption
- Easy remote recovery of PoE devices by turning Off and On power to remote device
- Weekly/daily schedule automatic deactivation of PoE devices, such as Wireless Access points or IP Telephones during non-working hours, decrease the probability of hacking the company network or unauthorized toll calls and can be manually overridden
- Monitoring Uninterruptible Power Supplies (UPS) status and battery level together with PoE port priority extends the time UPS can provide power during power failure by automatically shutting down low priority PoE devices whenever the UPS battery level becomes low
- Integration with SNMP Network management stations provide easy monitoring of remote PoE devices
- SNMP Trap/Notification reports immediately to IT manager whenever new PoE device was connected to the company network or an existing device is removed
- RADIUS authentication simplify the maintenance for IT administrators
- RADIUS accounting allows easy logging of remote users
- Regular user & Administrator access privileges are differentiated and defined in configuration
- Software updates without temporary power shutdown of PoE devices such as IP telephones, and Access points offers easy maintenance during normal working hours
- Upload/download of configuration database simplify IT manager maintenance
- SysLog event reports provide human-readable event reports for those who prefer not to rely on SNMP reports
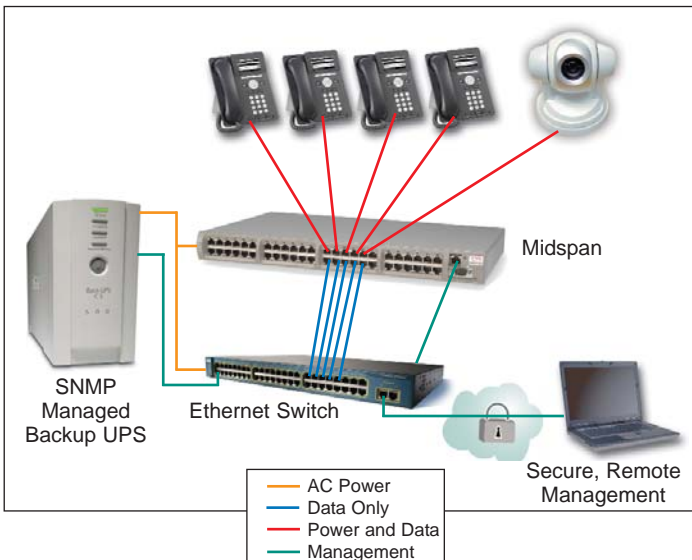
Port Configuration Enable/Disable. Each port may be individually enabled/disabled, or all ports may be enabled/disabled in one action.
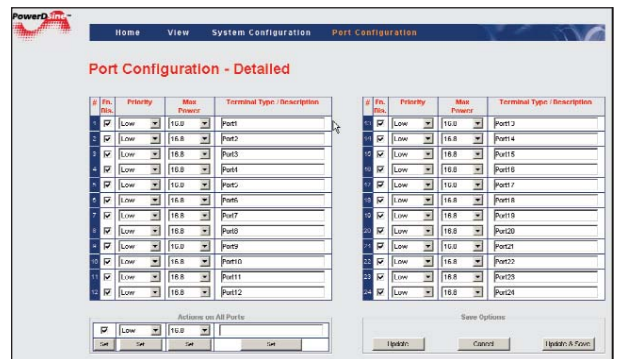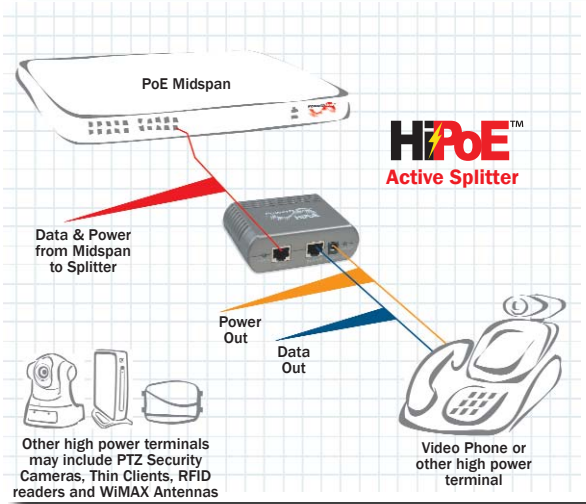

Port Configuration Detailed Screen. Allows precise control of all ports: (1) Activate/shut down individual ports, (2) Allocate maximum power per port (except 80xx), (3) Set priority for each port, (4) Define port description and terminal type.
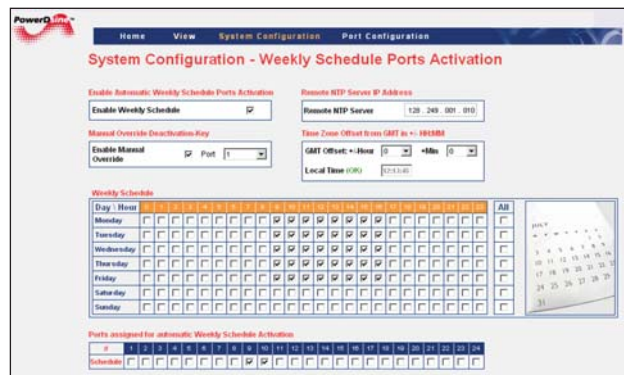
Dynamic UPS Management Screen. PoE ports can be given priority and power limits in anticipation of a power failure and reduced battery power levels. PowerView Pro will automatically shut down pre-defined ports when conditions warrant.

Midspan

SNMP Managed Backup UPS

Ethernet Switch

Secure, Remote Management

— AC Power
— Data Only
— Power and Data
— Management

PowerDsine® 701 High Power Splitter

High power splitter adapts incompatible 12V, 18V, & 24V devices to PoE

PoE Midspan

HiPoE™
Active Splitter

Data & Power from Midspan to Splitter

Power Out

Data Out

Other high power terminals may include PTZ Security Cameras, Thin Clients, RFID readers and WiMAX Antennas

Video Phone or other high power terminal

PD-701 Specifications

Connectors	2 x RJ-45, shielded, EIA 568A and 568B DC Jack (On Unit) O.D x I.D = 2.5 x 6.4 ø mm DC Jack (Ext. Cable #1) O.D x I.D = 5.5 x 2.5 ø mm DC Jack (Ext. Cable #2) O.D x I.D = 3.4 x 1.4 ø mm
Data Rate	10/100/1000 Mbps
Electrical	Pin Assignment & Polarity: 3/6 (+),1/2 (-) or 4/5 (+),7/8 (-)
	Voltage: 44-57 Vdc Input power: 30W max

	Output power: 24W max
	Output current: 2A @ 12V
	   1.33A @ 18V
	   1A @ 24V

Dimensions & Weight	
	31 mm H x 94 mm W x 73 mm D (1.12 in x 3.7 in x 2.87 in) 112 gram (0.247 lbs)
Indicators	Input Power Indicator: Orange LED Output Power Indicator: Green LED
Environmental	Operating Temp.: 0 to 40ºC (32º to 104ºF) Storage Temp.: -20º to 70ºC (-4º to 158ºF)
	Operating Humidity: 10 to 90%, non-condensing Storage Humidity: 5 to 95%, non-condensing
Thermal Rating	19 BTU/Hr (@ Full Load)
Reliability	MTBF: 100,000 hours @ 25ºC
Electromagnetic Emissions & Immunity	FCC Part 15 Class A FTP, Class A UTP EN55022 (CISPR 22) Class A EN55024 (CISPR 24)
Regulatory Compliance	CE
Warranty	1-year

Overview

PowerDsine's PD-AS-701 High-Power active splitters enable data terminals that were not originally designed to accept power from the Ethernet, to be powered by HiPoE (High Power over Ethernet) switches and midspans.

The PD-AS-701 High Power series (12v, 18v and 24v) can power devices such as WiMAX CPEs, small WiMAX base-stations, 802.11n Access-Points, Thin-Clients, PTZ (Pan/Tilt/Zoom) IP Cameras, Video-Phones and more.

The High Power Adaptive Splitter Solution

Many contemporary terminals are designed and deployed without the ability to accept power via their LAN input. Such devices can only accept power through their DC jack while their RJ45 input accepts only data. Moreover, such devices might only accept voltage levels lower than the PoE standard minimum voltage (44v in IEEE802.3af / 50v in 802.3at). Using the PD-AS-701 high power splitter, these terminals immediately become HiPoE-ready without any modification required on their side.

The splitter is identified as a powered device (PD) in front of the powering unit (Midspan or Switch) and after being detected and powered, it physically splits the data and power streams, arriving over a single cable, into two separate cords (LAN & DC) which go directly to the data terminal. Voltage regulation is also performed to the level required by the terminal (12V or 18V or 24V).
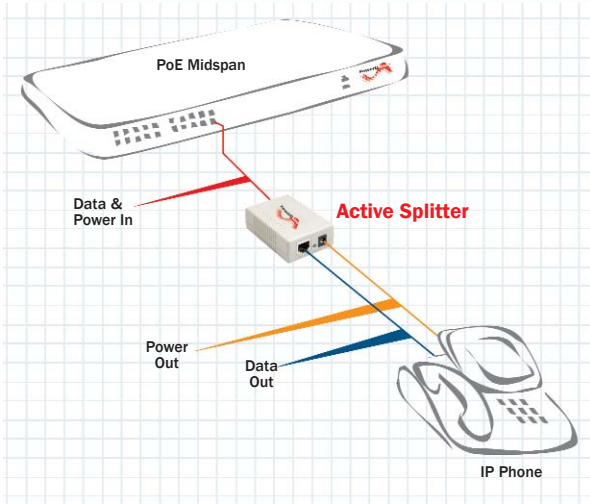
Ordering Information

Part Number	Description
PD-AS-701/12	12V HiPoE Splitter
PD-AS-701/18	18V HiPoE Splitter
PD-AS-701/24	24V HiPoE Splitter

PowerDsine® Splitters and Dongles

Splitter adapts incompatible devices to PoE

Overview

Although a standard defining PoE already exists (IEEE 802.3af), many contemporary terminals are designed and deployed without the ability to accept power via their LAN input — a basic requirement of the standard. Such devices can only accept power through their DC jack while their RJ45 input accepts only data. Moreover, such devices might only accept voltage levels lower than the standard's 48 volts dc.

Using a PowerDsine active or passive splitters or dongles, terminals immediately become PoE—ready without any modification required on their side.

Features

• Switch/Midspan Support: Accepts power from either PoE switch or a Midspan.
• Voltage Regulation: Converts the standard 48 Volts to a lower voltage level, to match the terminal's specification.
• Simple Installation: Easily installed with no need for system reconfiguration.

Specifications

Connectors	2 x RJ-45, shielded, EIA 568A and 568B
PD-AS-601/5, PD-AS-601/12 and PD-AS-801/12:	
	DC Jack O.D x I.D = 5.5 x 2.5¢ x 1 mm
	DC Jack O.D x I.D = 5.5 x 3.3¢ x 1 mm
PD-AS-601/18:	DC Jack O.D x I.D = 5.5 x 2.1¢ mm x 13 mm
	DC Jack O.D x I.D = 5.5 x 2.5¢ mm x 13 mm
Data Rate	
PD-AS-601 and PD-AS-801: 10/100	
PD-PS-401G:	10/100/1000
Input Power Requirement	Pin Assignment & Polarity: 3/6 (+),1/2 (-) or 4/5 (+),7/8 (-)
	Voltage: 48 Vdc Input power: 13.5W max
PD-AS-601/5/12:	Output power: 10W max Output current: 2A@5V; 0.8A@12V
PD-AS-601/18:	Output power: 7W max Output current: 0.38A@18V
PD-AS-801:	Output power continuous: 22W max Output power peak: 26W (up to 10 sec.) Output current: 1.83A@12V
Dimensions & Weight	
PD-AS-601/5 and PD-AS-601/12:	
	55 mm x 80.8 mm x 24.7 mm (2.2 in x 3.2 in x 1 in) 100 gram (0.2205 lbs)
PD-AS-601/18 and PD-AS-801/12:	
	75 mm x 120 mm x 33 mm (3 in x 4.8 in x 1.26 in) 220 gr (0.485 lbs), with DC cable
Indicators	Power Indicator: Green LED (PD-AS-601/5/12)
Environmental	Operating Temp.: 0 to 40ºC (32º to 104ºF) Storage Temp.: -20º to 70ºC (-4º to 158ºF) Operating Humidity: 10 to 90%, non-condensing Storage Humidity: 5 to 95%, non-condensing
Thermal Rating:	11 BTU/Hr (@ 5/12V)
Reliability	MTBF: 100,000 hours @ 25ºC
Electromagnetic Emissions & Immunity	FCC Part 15 Class A EN55022 (CISPR 22) Class A EN55024 (CISPR 24)
Regulatory Compliance	CE
Warranty	1-year

Ordering Information

Part Number	Description
PD-AS-601/5	5V Active Splitter
PD-AS-601/12	12V Active Splitter (up to 10W*)
PD-AS-601/18	18V Active Splitter
PD-AS-801/12	12V High Power Active Splitter
PD-PS-401G/Cisco	HiPoE Passive Dongle for Cisco 802.11n APs
PD-PS-401/RA-NRTL	Passive Dongle for Nortel

* For above 10W, use PD-AS-401/12

PoE Tester

Check your RJ-45 outlet for power using the PowerDsine® PoE Tester

PowerDsine PoE Tester

Overview

The PoE Tester checks your RJ-45 outlet for power and identifies its source, Midspan or Endspan, i.e. IEEE 802.3af standard compliant Midspans/Switches and Cisco pre-standard Proprietary In-line Switches.

A PoE system is comprised of a PSE (Power Sourcing Equipment) and a PD (Powered Device). The PSE may either be an End-span (i.e. a layer 2 Ethernet Switch with integrated PoE) or a Midspan. The PD is a PoE-enabled terminal, such as IP phone, Wireless LAN access point and Network Security Camera.

Features

- Tests RJ-45 outlet for power
- Indicates the type of power source, including:
    - IEEE 802.3af midspans and switches
    - Cisco pre-standard in-line switches
    - High Power midspans
- Compact design specifically tailored for system integrators and installers
- Plug and play, simple to use

PD-Tester Specifications

Input	RJ-45 connector Category 5/5e/6 cable with RJ-45 connectors
Dimensions	24 mm x 76 mm x 22 mm .94 in. x 2.99 in. x .87 in.
Weight	.5 oz. (15 grams)
Indicators	Midspan LED Display (Blue)
	Endspan LED Display (Blue)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	Operating Ambient Temperature: 32° to 104°F (0 to 40°C)
	Operating Humidity: Maximum 90%, Non-condensing
	Storage Temperature: –4° to 158°F (–20° to 70°C)
	Storage Humidity: Maximum 95%, Non-condensing
	Operating Altitude: –1000 to 10,000 ft. (–304.8 to 3048 m)
Warranty	1-year
Regulatory Compliance	CE
Electromagnetic Emission & Immunity	FCC Part 15, Class B with FTP cabling EN 55022 Class B (Emissions) EN 55024 (Immunity)
Safety Approvals	UL/cUL Per EN 60950 GS Mark Per EN 60950

Ordering Information

Part Number	Name	Description
PD-Tester	PD Tester	Power over Ethernet Tester for RJ45 Outlet

Microsemi.

www.microsemi.com