Safety Information

Important Safety Information

- The PD-3501G should be connected to PoE networks only, without routing to the outside plant.
- Only qualified personnel can install or remove the PD-3501G.
- AC Power Cord Set:
  - The power cord must have regulatory agency approval for the specific country in which it is used (for example UL, CSA, VDE, etc.).
  - The power cord must be a three-conductor type (two current carrying conductors; one ground conductor) terminated on one end by an IEC 60320 appliance coupler (for connection to the PD-3501G), and on the other end by a plug containing a ground (earthing) contact.
  - The power cord must be rated for a minimum of 250 VAC RMS operation, with a minimum rated current capacity of 5 amps (or a minimum wire gauge of 18 AWG (0.75 mm^2).

: A PD-3501G installed in Australia requires power cords with a minimum wire gauge of 16 AWG (1.0 mm^2).

: The PD-3501G "DATA IN" and "DATA & POWER OUT" ports are shielded RJ45 data sockets. They **cannot** be used as Plain Old Telephone Service (POTS) telephone sockets. Only RJ45 data connectors can be connected to these sockets.

- The AC wall socket-outlet must be near the PD-3501G and easily accessible. You can remove AC power from the PD-3501G by disconnecting the AC power cord from either the wall socket-outlet or the PD-3501G appliance coupler.
- The PD-3501G DATA IN and DATA & POWER OUT interfaces are qualified as Safety Extra-Low Voltage (SELV) circuits according to IEC 60950-1. These interfaces can only be connected to SELV interfaces on other equipment.

WARNINGS!

- The PD-3501G should only be connected to the IP device with which it was bought. Using the PD-3501G with other IP devices can cause damage to the IP device.
- Read the installation instructions before connecting the PD-3501G to its power source.
- Follow basic electricity safety measures whenever connecting the PD-3501G to its power source.
- A voltage mismatch can cause equipment damage and may pose a fire hazard. If the voltage indicated on the label is different from the power outlet voltage, do not connect the PD-3501G to this power outlet.
- The unit can be used only in Restricted Access Locations.



Recycling and Disposal

Disposal instructions for old products. The WEEE (Waste Electrical and Electronic Equipment) national environmental initiatives has been put in place to ensure that products are recycled using best available treatment, and recovery and recycling techniques to ensure human health and high environmental protection. Your product is designed and manufactured with high quality materials and components which can be recycled and reused. Do not dispose of your old product in your general household waste bin. Inform yourself about the local separate collection system for electrical and electronic products marked by this symbol:



Use one of the following disposal options :

1. Dispose of the complete product (including its cables, plugs and accessories) in the designated WEEE collection facilities.

2. If you purchase a replacement product, return your older product (including all components) back to the retailer. The retailer should accept it as required by the national WEEE legislation.

Note: Unless otherwise noted, references to the PD-3501G/AC in this document refer to both the PD-3501/AC and the PD-3501G/AC.

Ordering information:

1-Port 802.3af Gigabit PoE Midspan:

- Product Name: Microsemi 3501G
- Part Number: PD-3501G/AC

1-Port 802.3af PoE Midspan

- Product Name: **Microsemi 3501**
- Part Number: **PD-3501/AC**

Document P/N: 06-0066-056 Rev. B00

Microsemi

Microsemi 3501G User Guide

1-Port 802.3af Gigabit PoE Midspan

Notice

It is Microsemi's policy to improve its products as new technology, components, software, and firmware become available. Microsemi, therefore, reserves the right to change specifications without prior notice.

Technical Support

If you encounter problems when installing or using this product, please consult the Microsemi website at: http://www.Microsemi.com

For technical support, call: +972-9-775-5123
In the USA: 1-877-480-2323

Email: sales.support@microsemi.com

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Functions and Features

The PD-3501G Power over Ethernet (PoE) is a Single Port Midspan that offers a compact and cost effective power solution for IP phones, WLAN access points, network cameras and other IP terminal installations.

The PD-3501G converts AC power to 48VDC power is then provided over the Ethernet cable.

The PD-3501 supports 10/100 Mbps pass through data rates while the PD-3501G supports up to 10/100/1000Mbps pass through data rates.

The single port PD-3501G can be powered via universal AC input.

PD-3501G EMC Compliance:

- FCC Part 15 class B and EN55022 class B
- EN55024
- VCCI

PD-3501G Safety Compliance:

- UL/cUL per 60950-1 2nd Ed.
- GS mark

Preliminary Steps

- Ensure that AC power is applied to the PD-3501G, using an operational AC cable with an appropriate ground connection.
- Ensure that output Ethernet cable is connected to the DATA & POWER OUT port.
- Verify that power ready Ethernet compatible device is connected.

WARNING

Do not use cross over cable between the PD-3501G output port and the load device

Installation

The PD-3501G can be placed on a desktop.

: Before placing the PD-3501G:

- Do not to cover PD-3501G or block the airflow to the PoE with any foreign objects. Keep the PD-3501G away from excessive heat and humidity and free from vibration and dust.
- Ensure that the cable length from Ethernet network source to the terminal does not exceed 100 meters (330 feet). The PoE is not a repeater and does not amplify the Ethernet data signal.
- Use a splitter if desired; ensure that the splitter is connected close to the terminal and not on the PD-3501G!
- No "on-off" switch exists; simply plug the PD-3501G into an AC power source.

Installing the Unit

Refer to Figure 1.

1. Connect the PD-3501G to an AC outlet (100 - 240VAC), using a standard power cord.
2. Connect the DATA IN jack (input) to the remote Ethernet network switch's Patch panel and the DATA & POWER OUT jack (output) to the terminal.

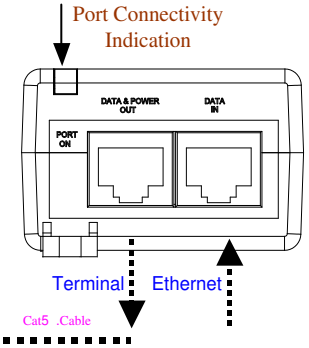


Figure 1: Connecting the PD-3501G

Indicators

Port LED	Indicated Behavior
Yellow On	Power is on (power is active)
Green On	A remote terminal is connected
Green Blinking	Overload state or short-circuit

Specifications

Environmental Specifications

Mode	Temperature	Humidity
Operating	0 to 40°C 32 to 104°F	10 to 90%; (no condensation allowed)
Storage	-20 to 70°C -4 to 158°F	10 to 90%; (no condensation allowed)

Electrical Specifications

Input Voltage	100-240 VAC (50/60 Hz)
Maximal Input Current	0.43 Ampere
Guaranteed Output power	15.4 Watts
Nominal Output Voltage	48VDC

Ethernet Interface

Input (DATA IN): Ethernet 10/100/1000Base-T	RJ45 female socket
Output (DATA & POWER OUT): Ethernet 10/100/1000Base-T, plus 48VDC	RJ45 female socket, with DC voltage on wire pairs, 4-5 (+) & 7-8 (-).

*

Troubleshooting

Symptom	Corrective Steps
PD-3501G does not power up	1. Verify that a reliable power cord is used. 2. Verify that the voltage at the power inlet is between 100 and 240 VAC. 3. Remove and re-apply power to the device and check the indicators during power up sequence.
The PD does not operate	1. Verify that the PD-3501G detects a PD. 2. Verify that the PD is designed for PoE operation. 3. Verify that you are using a standard Category 5/5e/6, straight-wired cable, with four pairs. 4. If an external power splitter is in use, replace it with a known-good splitter. 5. Ensure input Ethernet cable is connected to the DATA IN port. 6. Verify that the PD is connected to the Data & Power port. 7. Try to reconnect the same PD into a different PD-3501G. If it works, there is probably a faulty port or RJ45 connection. 8. Verify that there is no short over any of the twisted pair cables or over the RJ45 connectors.
The end device operates, but there is no data link	1. Verify that the port indicator on the front panel is continuously lit. 2. If an external power splitter is in use, replace it with a known-good splitter. 3. Verify that for this link, you are using standard UTP/FTP Category 5 straight (non-crossover) cabling, with all four pairs. 4. Verify that the Ethernet cable length is less than 100 meters from the Ethernet source to the load/remote terminal. 5. Try to reconnect the same PD into a different PD-3501G. If it works, there is probably a faulty port or RJ45 connection.