## Safety Information

Important Safety Information

- PD-3501G-ET should be connected to PoE networks only, without routing to outside plant.
- Only qualified personnel can install or remove PD-3501G-ET.
- AC Power Cord Set:

  - Power cord must have regulatory agency approval for the specific country in which it is used (for example UL, CSA, VDE, etc.).
  - 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 PD-3501G-ET), and on the other end by a plug containing a ground (earthing) contact.
  - 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-ET installed in Australia requires power cords with a minimum wire gauge of 16 AWG (1.0 mm^2).

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

- The AC wall socket-outlet must be near the PD-3501G-ETand easily accessible. You can remove AC power from the PD-3501G-ET by disconnecting the AC power cord from either the wall socket-outlet or the PD-3501G-ETappliance coupler.
- PD-3501G-ET 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!

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

Ordering information:

- Product Name: **PowerDsine 3501G-ET**
- Part Number: **PD-3501G-ET/AC**
- Description: **1-Port 802.3af Gigabit PoE Midspan Extended temperature.**

Document P/N: PD-3501G-ET-AC_UG Rev. 1.0

PowerDsine 3501G-ET 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, consult Microsemi website at:
http://www.Microsemi.com/powerdsine/support/.

Functions and Features

PD-3501G-ET 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.

PD-3501G-ET converts AC power to 50VDC power that is then provided over the Ethernet cable.

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

Extended Operating and Storage Temperature:
- Operating temp - -20C to +55C
- Storage temp - -20C to +85C

Single port PD-3501G-ET can be powered via universal AC input and can provide up to 15.4W.

PD-3501G-ET EMC Compliance:
- FCC Part 15 class B and EN55022 class B
- EN55024
- VCCI

PD-3501G-ET Safety Compliance:
- UL/cUL per 60950-1
- GS Mark

Preliminary Steps
- Ensure AC power is applied to PD-3501G-ET using an operational AC cable with an appropriate ground connection.
- Ensure output Ethernet cable is connected to DATA & POWER OUT port.
- Verify PoE Ready Ethernet compatible device is connected.

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

Installation

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

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

Installing the Unit

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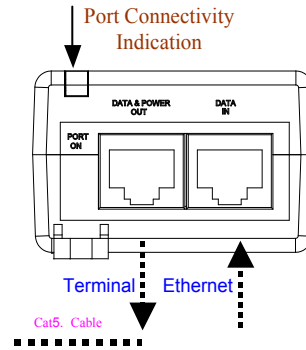

Figure 1: Connecting the PD-3501G-ET

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	-20 to 55°C -4 to 131°F	10 to 90%; (no condensation allowed)
Storage	-20 to 85°C -4 to 185°F	10 to 90%; (no condensation allowed)

Electrical Specifications

Input Voltage	100-240 VAC (50/60Hz)
Maximal Input Current	0.5 Ampere
Available Output Power (max.)	15.4 Watts
Nominal Output Voltage	50VDC

Ethernet Interface

Input (DATA IN): Ethernet 10/100/1000Base-T	RJ45 female socket
Output (DATA & POWER OUT): Ethernet 10/100/1000Base-T, plus 50VDC	RJ45 female socket, with DC voltage on wire pairs, 4-5 (+) & 7-8 (-).

Troubleshooting

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