English

Microsemi 9501GO-ET

1-Port, 802.3at Outdoor PoE Midspan

User Installation Guide

Deutsch

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.

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Product Overview

Microsemi PD-9501GO-ET is a 1-Port 802.3at Gigabit PoE Outdoor Midspan that offers a cost effective, IEEE 802.3atTM compliant solution, guaranteeing 60 Watts of power and ensures safe and reliable operation in outdoor environments for standard PoE data terminal. The PD-9501GO-ET supports 10/100/1000Mbps data rates and is powered via wide-range AC input (100-240VAC). The PD-9501GO-ET is IP67 rated and has extended temperature range so it can be installed in an outdoor environment. In a typical installation the PD-9501GO-ET will provide power to outdoor devices such as WLAN AP, WLAN Mesh, or to an IP Camera, etc.

English

PD-9501GO-ET EMC Compliance:

- CE:
  - EN55024, EN61000-4-5 Class 5 (6KV on AC Lines)
  - EN55032 class B
- FCC Part 15 class B
- VCCI

PD-9501GO-ET Safety Compliance:

- UL60950-1
- UL60950-22
- GS Compliance

PD-9501GO-ET Lightning Protection:

- Designed to meet GR-1089-CORE lightning protection requirements
- Designed to meet ITU K.21 lightning protection- Enhanced level

Other Standards and Approvals:

- IEEE 802.3at & IEEE 802.3af (PoE) standards
- RoHS Compliant
- WEEE Compliant
- REACH Compliant

- Dust & Water protection
  - IEC60529, level IP67
  - NEMA 250, level 4x

Note

- Do not use cross-over cable between the PoE Midspan output port and load device.

WARNING

- Take extra care when connecting the AC power inlet terminals, so that 'N', 'L' and 'Ground' are connected to the proper polarity.
- Ensure the AC power is within the allowed range.

Mounting Instructions Installation

Note: Before mounting the PoE Midspan to a fixed location:

- To insure weather-proof connection in order to meet IEC60529 level IP67. PoE Midspan AC power plug needs to be connected to a weather-proof AC power source box.
- There is no “On-Off” switch; simply plug the PoE Midspan into an AC main power source.
- PoE Midspan AC power lines should be connected to the socket-outlet that shall be installed near the equipment and be easily accessible.

Product View

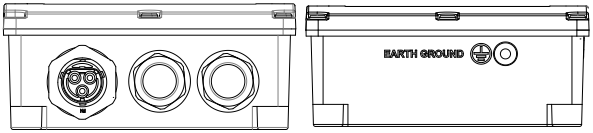


Figure 1

English

Installing the unit

Warning
Earth ground screw must be connected to Earth ground in all types of installations.

Step1: Connect the chassis bolt to earth ground.

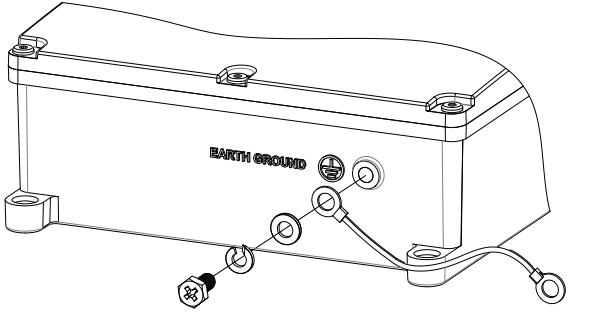


Figure 2

Step 2: There are two options for the installation of PD-9501GO-ET:

A. Wall installation – PoE Midspan unit can be mounted on a wall/bench (all kind of flat surfaces: wood, brick, concrete etc.) using the mounting holes.

B. Pole installation - using optional mount kit (sold separately).

Step 2A: Wall installation

Fasten the PD-9501GO-ET using three screws, see figure 3 (Screw holes are marked 1, 2, 3 & 4):

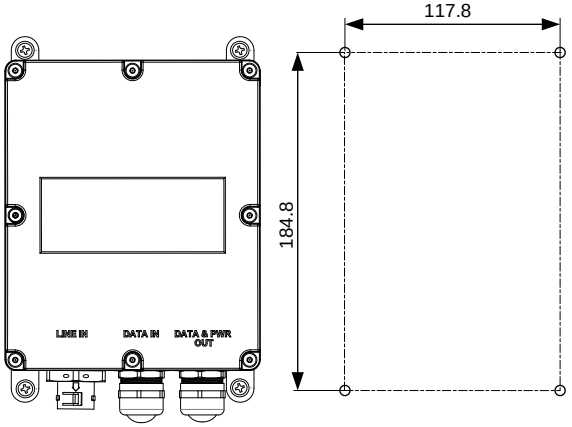
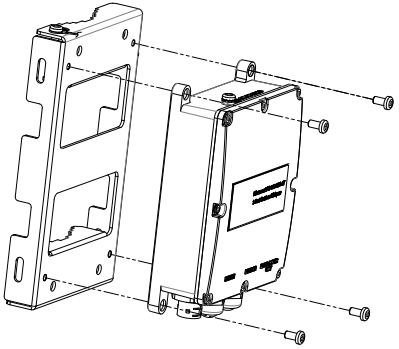


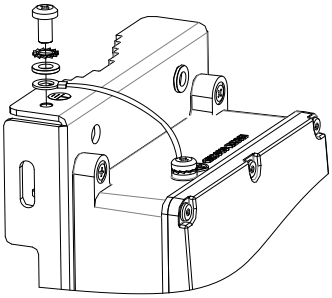
Figure 3

Step 2B: Pole installation using optional mount kit (sold separately)

1.



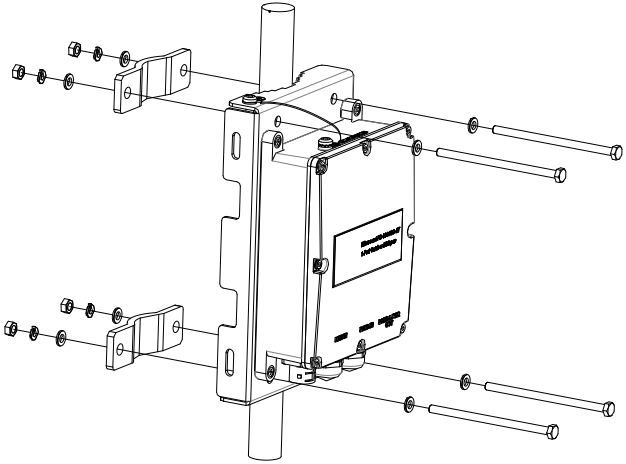
2.



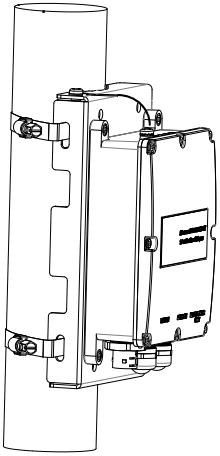
Warning: Mounting bracket must be connected to earth ground!

English

Step 3A: Pole of **1” (25.4mm) < ø < 3” (76.2mm)**

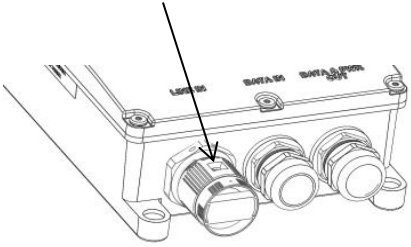


Step 3B: Pole of- **3" (76.2mm) < ø < 8" (203.2mm)**



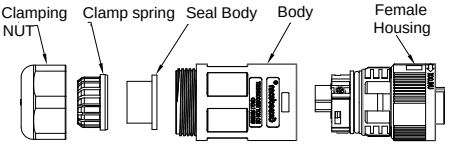
English

1. **Insert Screwdriver, press and rotate counter-clockwise to unlock**
2. **Pull cap away from unit**

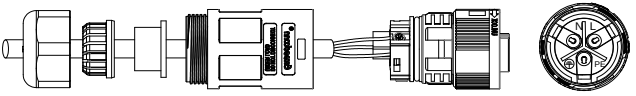


Step 4: AC Cable installation instruction:
Tools: Wire stripper, Solid Wrench No.30 or Monkey Wrench wide than 3cm.
Note: Please use certified outdoor cable with thickness diameter of 6-10mm with 18AWG Max gauge and 300V insulation rating.

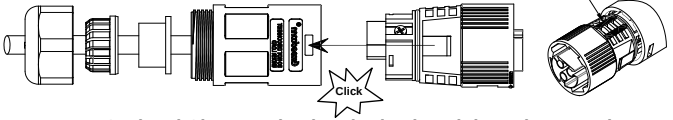
1. Connector Parts:



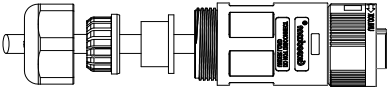
2. Insert the cable through the parts, crimp and screw the wire leads using 0.8 N*m torque



3. Push Housing into Body according to lead rails



4. Insert Seal and Clamp spring into body, then tighten the nut using 4N•m torque



5.

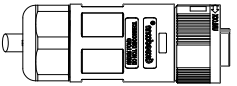


Figure 4

Step 5: RJ45 Ethernet Cable Assembly

Note: Please use outdoor certified cable with thickness diameter of 4-8mm

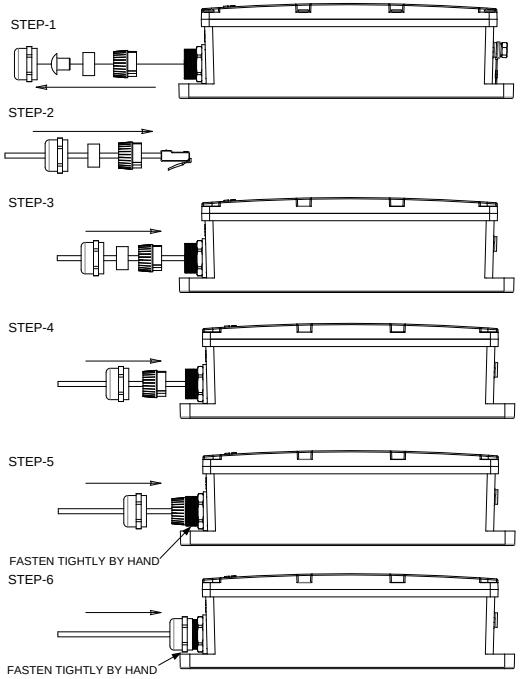


Figure 5

Step 6: Connect **"DATA IN**" jack (input) to the remote Ethernet network and "**DATA PWR OUT**" jack (output) to the terminal.

Step 7: Verify connection to main AC power.

Notes:

- 2 ports RJ45 male plug waterproof cap covers are supplied with the PoE Midspan.
- AC in plug is supplied with the PoE Midspan.
- Ethernet cable and RJ45 male connectors are not supplied with the PoE Midspan.
- For non AF/AT compliant unit - use a splitter; ensure splitter is connected close to the terminal and not on the Midspan.
- **This unit is designed for outdoor use.**

Troubleshooting

Symptom	Corrective Steps
Unit does not power up	1. Verify a reliable power cord is used. 2. Verify voltage at the power inlet is between 100- 240VAC. 3. Remove and re-apply power to the device.
PD does not operate	1. Verify that the unit detects a PD. 2. Verify that the PD is designed for PoE operation. 3. Verify that a standard Category 5/5e/6 cable is in use – 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 the "DATA IN" port. 6. Verify that the PD is connected to the "DATA & PWR OUT" port. 7. Try reconnecting the same PD, there's probably a faulty RJ45 connection. 8. Verify 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	9. If an external power splitter is in use, replace it with a splitter known as good. 10. Verify that for this link, you are using standard UTP/FTP Category 5 straight (non-crossover) cabling, with all four pairs. 11. Verify Ethernet cable length is less than 100 meters from Ethernet source to the remote terminal.

English

Safety Information

- Installation and removal of the PoE Midspan must be carried out by qualified personnel only.
- The PoE Midspan "DATA IN" and "DATA PWR 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.
- Read the installation instructions before connecting the PoE Midspan to its power source.
- Follow basic electricity safety measures whenever connecting the PoE Midspan 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 PoE Midspan to this power outlet!
- All wiring and connections shall be in accordance with NFPA 70 (NEC)
- This product is not intended to become a permanent part of the building structure.
- Power supply cord must not be attached to the building surface or run through walls, ceilings, floors and similar openings in the building structure.
- Measures must be taken to prevent physical damage to the power supply cord, including proper routing.

Recycling and Disposal

Disposal instructions for old products. The WEEE (Waste Electrical and Electronic Equipment) national environmental initiatives have been put in place to ensure that products are recycled using best available treatment, 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 :

- Dispose of the complete product (including its cables, plugs and accessories) in the designated WEEE collection facilities.
- If you purchase a replacement product, hand your complete old product back to the retailer. He should accept it as required by the national WEEE legislation.

English

Specifications

Environmental Specifications

Mode	Temperature	Humidity
Operating	-40°C to 65°C @ 60W (-40°F to 149°F)	10 to 95% (no condensation allowed)
Storage	-40 to 85°C (-40°F to 185°F)	10 to 95% (no condensation allowed)

Electrical Specifications

Input Voltage	100-240VAC (50-60Hz)
Input Current (100-240VAC)	1.4A Ampere (max)
Available Output Power (max.)	60 Watts
Nominal Output Voltage	54VDC

Interface

Input (Data In): Ethernet 10/100/1000Base-T	RJ45 female socket
Output (DATA PWR OUT): Ethernet 10/100/1000Base-T, plus 54VDC	RJ45 female socket, with DC voltage on wire pairs: (-)1-2, 7-8 & (+)3-6, 4-5
AC Power IN	3 Pins AC power in – Line, Neutral and Earth Ground

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Ordering information:

- *Part Number:* ***PD-9501GO-ET/AC***
- *Description: Single-port, Outdoor 60W PoE Midspan, IEEE802.3at Compliant, Extended temp range , worldwide use*

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