

1. Introduction

To achieve best performance of a Wireless LAN, the location of Access Point (AP) must be carefully chosen. In most cases, finding a power supply for AP is a common obstacle. Power over Ethernet (PoE) technology provides the ideal power solution to help overcome these obstacles.

In Ethernet, four pairs of C5 or C5E twisted pairs are used as the medium for transmission. The actual data transmission, however, only takes up two pairs of wires (pairs 1-2 and 3-6). PoE technology utilizes the remaining pairs (pairs 4-5 and 7-8) to conduct electricity.

2. Function

Power Sourcing Equipment (PSE) transforms AC to DC. It has a maximum output power of 16W, fluctuation of 60mV with a tolerance of $\pm 3\%$. When it overflows, overloads, short-circuits, or overheats, the PSE automatically turns off the power, and restarts after these problems are removed.

PSE applies single chip control management and uses compatible programs. Technical parameters are as follows:

- 1. This device complies with IEEE 802.3af
- 2. When PSE detects that it connects to a device which uses no electricity, the power supply will be turned off automatically.
- 3. PSE monitors circuit status at all times. Once it detects that it connects to an electronic device that has a range between 1-16W, it automatically provides electricity to it. When it is lower than 1W, electricity will not be supplied.
- 4. PSE protects circuits from problems such as short-circuit, overload, and electricity receiving device damage by turning off the power once a problem occurs. Normal power supply will be resumed once these problems are eliminated.

3. Parameter

- a. Input : 100-240V AC 50/60Hz 0.4A Output: 48V 16W (Max)
- b. Data : 1/2&3/6 Power : 4/5+ & 7/8- (48V)
- c. Data In : Connects PC/HUB/Switch
- d. Weight : 0.16kg
- e. Dimensions: 108mm x 74mm x 33mm
- f. Case of material : ABS 94V-0
- g. Ethernet Cable Data rate: 10/100Mbps TIA/EIA 568 Cat. 5 Connector: RJ-45
- h. Operating Temperature 0 °C to 40 °C
- i. Storage Temperature -40 °C to 70 °C
- j. Operating Humidity

10% to 80% RH k. Storage Humidity 5% to 90% RH

I. CE FCC UL

4. Attention

- a. LAN cable must be RJ45 compatible with accurate wiring positions (568A or 568B); otherwise it may damage the PSE/PD.
- b. Outdoor use is not recommended.
- c. To prevent electrical shock, do not take apart the equipment during the use. To avoid damages to safety device inside the equipment, non-professional personnel should not take apart the equipment at any time.

5. Dimension





Unit:mm

6. LED Indicators for PSE

- A : LNK (Green) : Connection Indicator
 - On => good
 - Off => no good
- B : ACT (Green) : Power Indicator
- On => good
- Off => no good
- Blind => currently supplying power
- C : ERR (Red) : Error Indicator (Short-circuit, overload, or electricity receiving device damage)

On => Error

Off => good

7. Radio Frequency Energy, Certifications

Shielded cables must be used with this equipment to maintain compliance with radio frequency energy emission regulations and ensure a suitably high level of immunity to electromagnetic disturbances.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation

WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. The wheelie bin symbol shown indicates that this product must not be disposed of with household waste. Instead the product must be recycled in a manner that is environmentally friendly. For more information on how to dispose of this product, please contact your local recycling centre or your household waste disposal service. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland

X

Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24.März 2006 an das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.