

Switch Fast Ethernet 10 ports

Unmanaged | 8 x PoE | 2 x uplink | TVCC | VLAN | PoE Watchdog



Introduction

Read this installation guide carefully before using the product. This manual provides basic information on safe use, installation instructions and correct operation of the device. The device described in this manual is intended only for the use for which it was expressly designed. Any other use is to be considered as improper and dangerous use. Keep this instruction sheet.

Product Overview

The unmanaged Fast Ethernet switch comes with 10 x 10/100Mbps auto-negotiation RJ45 ports.

- 8 ports (1~8) are PoE IEEE 802.3at / 802.3af 10/100Mbps
- 2 10/100Mbps uplink ports

Single port with PoE supports up to 30W. All PoE ports together reach up to 105W.

PoE ports are able to automatically detect and power up devices compatible with IEEE 802.3at / 802.3af standards.

The switch supports automatic detection of PoE equipment and port power prioritization.

With the PoE function, an additional power supply unit is not required for the connected devices (IP cameras, Access Points, etc.) and allows the transmission of data and electricity via a single CAT5 or higher category Ethernet cable.

The CCTV function allows you to carry PoE power and data up to 250 meters.

VLAN (Virtual Local Area Network) is a technology that can improve the network environment and reduce its maintenance costs. Only hosts of the same VLAN can communicate with each other.

The PoE Watchdog (PD Alive) function is designed to detect the malfunction of a PD (Powered Device) device such as a camera that has caused the communication to stop. The function restarts the hardware by removing and restoring power. If the connected camera draws power but does not generate data traffic, it will restart automatically.

Plug&Play technology allows you to immediately take advantage of the advantages of a wired and fast connection.

Easy to manage and maintain, it is the ideal choice for designing small, high-performance networks in a simple way.

The sturdy metal chassis helps dissipate heat, and the fanless design ensures quiet operation.

It is designed to save energy with support for Energy Efficient Ethernet (IEEE802.3az) function.

It is a tool with excellent performance and meets the network and access requirements of enterprises, communities, hotels, offices, campuses, etc.

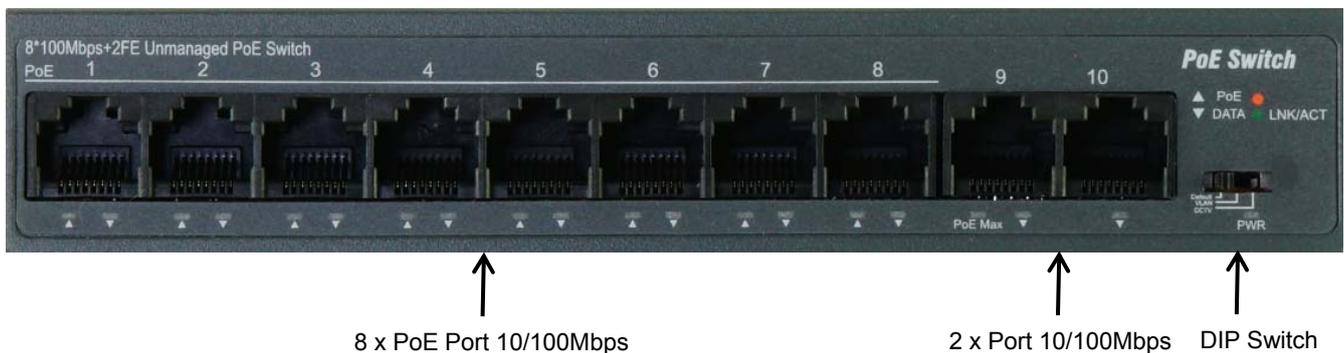
Safety information

To avoid personal injury and damage to the instrument caused by electric shock, users must pay attention to the following safety tips.

- Use in dry and ventilated environment, free from corrosive gas and strong electromagnetic interference.
- Use in rooms with humidity below 90%. Install appropriate devices whenever possible.
- Handle the device with care to avoid violent vibrations, which may affect performance.
- Do not expose the instrument to direct sunlight or extremely high temperatures.
- Grounding of the switch must comply with the grounding requirements described in this manual
- The voltage must be stable to avoid abnormal operation of the switch caused by mutation, fluctuation of power supply voltage and other phenomena.
- keep an adequate distance between the switch and other devices. Do not overlap other devices.
- The connection wire between the switch and the distribution box should be standardized and reasonable, the jumper wire of the distribution chassis (box) should be concise and clear to avoid the phenomenon of parallel lines and wires.
- If there is any abnormality or malfunction, the user must stop using it.
- To avoid the danger of electric shock, do not open the case without permission.
- In case of failure, contact the authorized technician.
- Use a three-prong grounded outlet and make sure the PGND wire of the outlet is reliably grounded.
- Ensure enough space for switch heat dissipation and ventilation. Do not place objects on top of the switch.

Product appearance

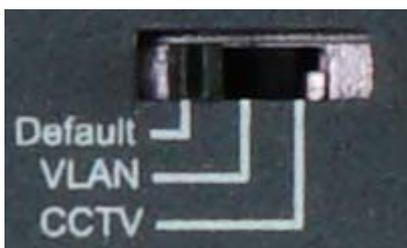
Front panel



The front panel consists of 10 x 10/100Mbps adaptive RJ45 ports and associated indicators.

- 8 x PoE Port 10/100Mbps
- 2 x Port 10/100Mbps
- 1 x selector "Default - VLAN - CCTV"

DIP Switch



DEFAULT: communication is standard, ports 1~10 can transfer data.

VLAN: in this mode ports 1~8 are isolated from each other but can connect to ports 9-10. Please connect ports 9-10 to the central switching device.

CCTV: this feature carries PoE power and data up to 250 meters (10 Mbps).

Note: After changing the mode, there is no need to restart manually.

LED indicator

The LED indicator is used to indicate the different working status of the switch, so that we can check whether the switch is working properly in time.

LED	Color	Function
Power	Green	Off: No power. Light: Indicates that the switch is powered.
LNK/ACT	Green	Off: No device is connected to the corresponding port. Light: The port is successfully connected to the 10/100 Mbps network device. Flashing: Indicates that the switch is (actively) sending or receiving data on that port.
PoE	Orange	Off: No PoE powered device (PD) connected. Light: There is a PoE PD connected to the port, it supplies power correctly. Flashes: Abnormal power supply to the port.
Max	Green	Off: PoE power is less than 80% of total power. Light: PoE power greater than 80%.

Rear panel



It is present on the back panel

- the power port (use only the supplied power supply)
- the grounding screw for lightning protection

Technical specifications

<ul style="list-style-type: none"> ▪ Standards and protocols: IEEE802.3, IEEE802.3u, IEEE802.3az, IEEE802.3x ▪ Standard PoE: IEEE802.3af, IEEE802.3at ▪ Interface: <ul style="list-style-type: none"> ▪ 8 x 10/100Mbps RJ45 PoE ▪ 2 x 10/100Mbps RJ45 ▪ Network media (cable): <ul style="list-style-type: none"> ▪ 10BASE-T: UTP category 3, 4, 5 cable(≤100m) ▪ 100BASE-TX: UTP category 5, 5e cable(≤100m) ▪ Function: Auto-MDI/MDIX ▪ LED indicator: PWR, LNK/ACT, PoE, Max ▪ Fan quantity: fanless ▪ TVCC ▪ VLAN ▪ PoE Watchdog ▪ Plug & Play ▪ Type of installation: desktop or wall ▪ Input voltage: 54V/2A 108W ▪ Budget PoE singol port: AF: 15.4W, AT: 30W ▪ Budget PoE whole device: 105W ▪ Jumbo Frame: 1536 Bytes 	<ul style="list-style-type: none"> ▪ MAC address table: 1.000 ▪ Packet Buffer: 448K bit ▪ Transfer mode: Store and forward ▪ Packet Forward Speed: 1.488 Mpps ▪ Switching capacity: 2 Gbps ▪ Electrostatic Standard: Contact 6kV, Air 8kV ▪ Surge Protection: Difference module ±2KV, Common mode ±4KV ▪ MTBF: >50.000 hours ▪ Dimensions (L*W*H): 168*86*32mm ▪ Machine wheight: <1kg ▪ Operation Temperature: 0°C ~ 40°C ▪ Storage Temperature: -40°C ~ 70°C ▪ Operation Humidity: 10% ~ 90% non-condensing ▪ Storage Humidity: 5% ~ 90% non-condensing ▪ Contents of the package: <ul style="list-style-type: none"> ▪ 1 x Switch ▪ 1 x Power supply ▪ 1 x Power cord ▪ 1 x User Manual
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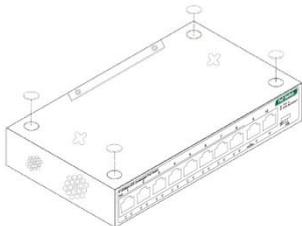
Note before use

Before installation, ensure that the appropriate work environment is available, including power requirements, adequate space, proximity to other equipment to be connected, and other equipment in location.

Please confirm the following installation requirements:

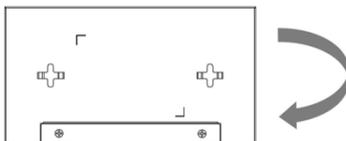
- Ensure the stability of the workbench and good grounding;
- Check if the cables and connectors required for installation are present (less than 100m).
- Operating environment and temperature: 0°C to 40°C relative humidity: 5% to 90%.

Desktop installation



Place the bottom of the switch face up on a sufficiently large and stable surface. Tear off the adhesive paper attached to the surface of the feet and stick them to the gaps of the bottom of the switch chassis to prevent external vibration. Carefully place the switch flat on the workbench.

Wall mounted installation



Install the switch by following the steps: fix two screws on the wall to align the two fixing holes on the switch, as shown in the figure below, and hang the switch smoothly on the screws.

Disclaimer

Alpha Elettronica S.r.l. reserves the right to make technical/dimensional changes to improve the features and the performance of the product without prior note.

Warranty

This device is covered by a 24 months warranty from the purchase date in case of any defect on the materials or during the production. The warranty is not valid in case of improper use or misuse or alteration of any kind. The product must be returned to the retailer in order to arrange the repair. The warranty is valid only in case the damaged product is sent back with the invoice or receipt.

Product conformity - CE compliance

This equipment carries the CE mark and complies with the following Directives:



Directive 2014/35/EU for Electrical Safety

Directive 2014/30/EU for Electromagnetic Compatibility

Directive 2011/65/EU, 2015/863/EU on the restriction of the use of hazardous substances in electronic devices (RoHS)

Directive 2012/19/EE on waste electrical and electronic equipment (WEEE).

For more information visit the website www.alphaelettronica.com

The user is prohibited from making changes or modifications of any kind to the device. Variations or modifications will cancel the conformity of the product in relation to the above standards.

Instructions for the disposal



According to the Directive 2012/19/EU (Legislative Decree 49/2014 EN62321:2009) and European Law 2018 - Law 3 May 2019, n. 37, the mark of the crossed bin on the product indicates that at the end of its life this product must be handled separately from household waste. It must be disposed of in a responsible manner to a collection point in order to enter the recycling process. For any information about the collecting points please contact the local authority or the local recycling areas.

