




# APS104G-EX

60W Ultra PoE input, 4-Port 802.3af/at Output Extension  
Gigabit PoE Extender Switch

## User Guide

## Package Contents

Check the following contents in product package:

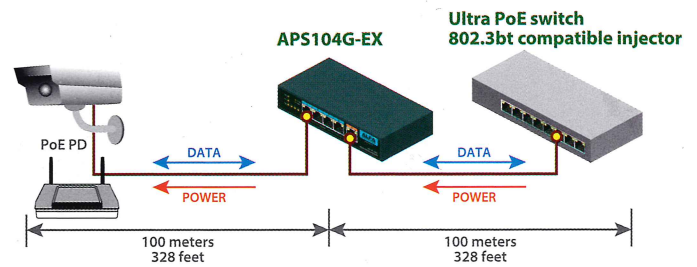
-  • PoE extender switch x 1
-  • User's manual (this file) x 1
-  • Rubber foot x 4

If any part is lost or damaged, please contact our distributor immediately.

## 1. Introduction

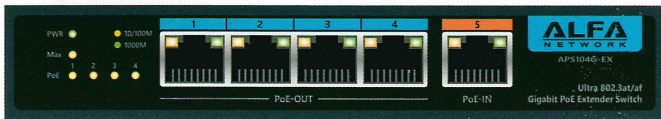
Thank you for choosing APS104G-EX PoE extender switch, APS104G-EX is a 5-Port 10/100/1000Mbps auto-negotiation PoE switch. Port5 is PD port, accepting 802.3bt 60W ultra PoE input, ports(port1- 4) PoE-OUT are 802.3af/at compliant, feeding Max. 15.4/30watt to connected device.

With PoE input, APS104G-EX is capable of adding up to 100-meter data + power extensions in the PoE network. With outstanding performance and built quality, the APS104G-EX PoE extender switch is an ideal choice for saving the cabling cost and expanding existing PoE network coverage in a most efficient manner.



## 2. Overview

### 2.1 Front Panel



#### 2.1.1 LED Indicators

PoE-IN: port 5

LED Indicator	Color	Function
10/100M	Orange	<b>Off:</b> No device is connected to the corresponding port. <b>ON (solid):</b> indicates the port is running on 10/100Mbps <b>Blink:</b> the port is sending or receiving traffic
1000M	Green	<b>Off:</b> No device is connected to the port. <b>ON (solid):</b> indicates the port is running on 1000Mbps <b>Blink:</b> the port is sending or receiving traffic

PoE-OUT: port 1 – port 4

LED Indicator	Color	Function
10/100M	Orange	<b>Off:</b> no device is connected to the port. <b>ON (solid):</b> indicates the port is running on 10/100Mbps <b>Flashing:</b> network data sending and receiving on this port
1000M	Green	<b>Off:</b> No device is connected to the port. <b>ON (solid):</b> indicates the port is running on 1000Mbps <b>Flashing:</b> the port is sending or receiving traffic

Functionality Indicator

LED Indicator	Color	Function
PWR	Green	<b>Off:</b> No Power supply. <b>ON:</b> PoE extender switch is powered ON.
PoE	Orange	<b>Off:</b> no PoE powered device (PD) connected. <b>ON (solid):</b> there is a PoE PD connected to port, PoE power is fed successfully. <b>Flashing:</b> abnormal PoE power supply.
Max	Orange	<b>Off:</b> indicate the usage of PoE power budget is less than 80%. <b>Light:</b> indicate the usage of PoE power budget is over 80%, No sufficient power may be supplied if additional PD are connected. <b>Blink:</b> indicate the usage of PoE power budget is over 100%.

**NOTE** Max. LED indicator only functions when using 802.3bt PoE input.

### 2.2. Rear Panel

The rear panel of the PoE extender switch indicates a DC inlet power socket.



**NOTE** APS104G-EX supports DC power supply (48 – 55V DC), please contact our distributor for this optional purchase.

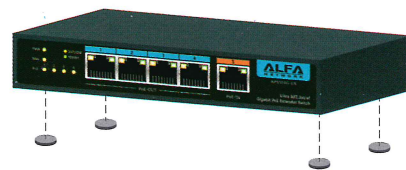
## 3. Product Installation

### 3.1. Precaution before Installation

Find a flat horizontal surface — such as a table, desk or shelf.

Make sure the selected location is:

- No sunlight to it or near a heater or heating vent.
- Not cluttered or crowded. A least 2 inches (5 cm) of clear space on all sides is suggested to be reserved for switch installation.
- Well ventilated (especially if it is placed in a chassis).



**NOTE**

- Do not place the switch near water or any damp area. Prevent water or moisture from entering the switch chassis.
- Do not place the switch on an unstable case or desk. The switch might be damaged severely in case of a fall;
- Make sure that the operating voltage is the same one labeled on the switch.
- Do not open the chassis while the switch is operating or when electrical hazards are present to avoid electrical shocks.

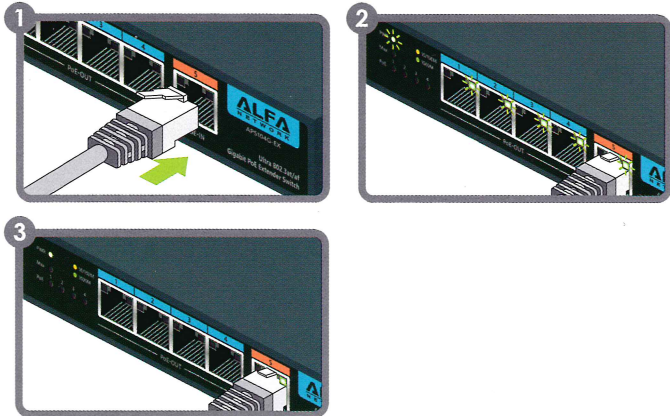


### 3.2 Powering on the PoE Extender Switch

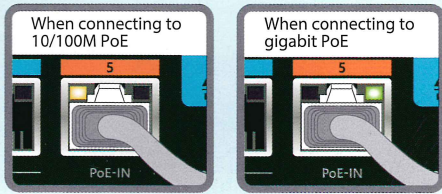
#### ● PoE powered

**Step 1:** Connect a Cat.5e/6 UTP cable from 802.3bt compliant Power Source Equipment (PSE), such as ultra PoE switch, ultra PoE injector to port 5 "PoE-IN" port.

**Step 2:** When plugging in, all gigabit LED indicator (green) will flash once, then go off. After device initialization, "PWR" LED on front panel and network speed (10/100M or gigabit) LED on port 5 will be ON.



#### ! NOTE

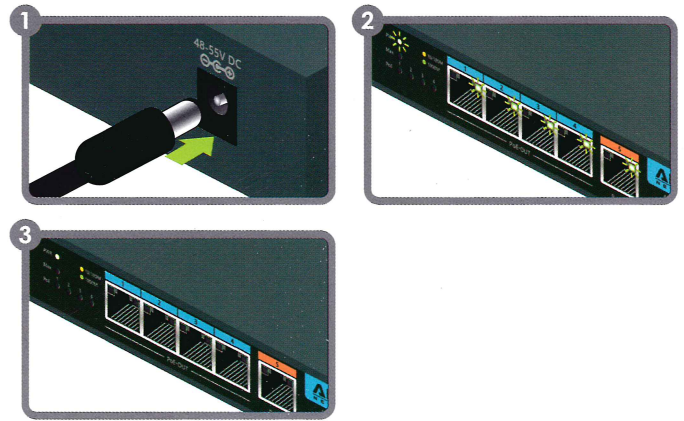


4

#### ● DC Adapter Powered (Optional)

The PoE extender switch supports 48V-55V DC input as power source. Powering on the switch, it will initialize and its LED indicators will respond as follows:

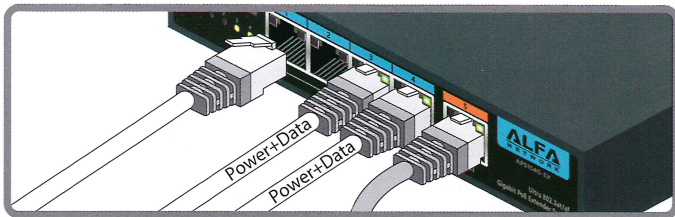
- When plugging in DC adapter, the PWR LED indicator will light up.
  - All gigabit LED indicator (green) will flash once, then go off.
- After device initialization, "PWR" LED on front panel will be ON.



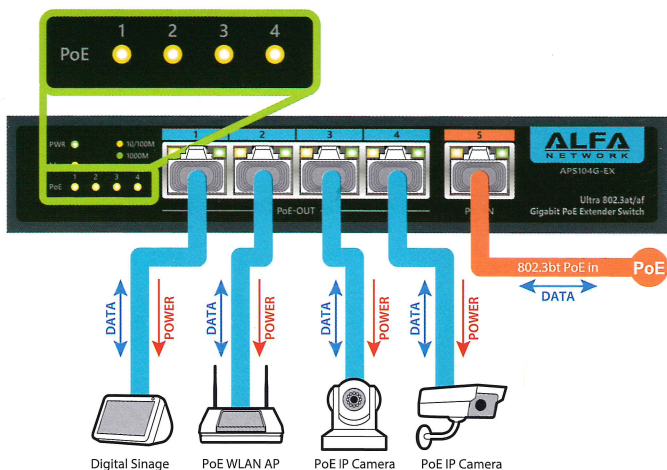
5

### 4 Feeding Power to 802.3af/at PoE Compatible Device (PD - Powered Device)

**Step 1:** Connect Cat.5e/6 cable to remote 802.3af/at compliant Powered Device (PD) from port 1 to port 4 on the PoE extender switch.



**Step 2:** The "PoE" LED will be ON after power is fed to connected device.



6

#### ! NOTE

1. For PoE power output, APS104G-EX supports standard PoE (IEEE 802.3af, and 802.3at ) output.
2. Never connect any non-standard PoE device to PoE-OUT ports on PoE extender switch, there will be no power fed to connected device, and communications cannot be made. If remote device is not IEEE 802.3af/at PoE compatible, the PoE LED indicator will not lit, and power is not fed to device.
3. DO NOT connect any PoE power source equipment (PSE) to port 1 to port 4 on PoE extender switch; it may damage device permanently.
4. PoE Max. LED indicator will be turned ON when overall power consumption reaches 80% (when using 802.3bt PoE input).

#### FC

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.

#### FCC Class B Notice:

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 radio/television technician for help.

#### Modifications:

Any modifications made to this device that are not approved by ALFA Network Inc. may void the authority granted to the user by the FCC to operate this equipment.

#### CE

This ALFA Network product complies with CE Compliance Class B.



According to the requirement of the WEEE legislation the following user information is provided to customers for all branded ALFA Network products subject to the WEEE directive.

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

For more product information, please visit our website for latest product news, and updates.

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