



ES-5104PH

## 5 Port Fast Ethernet Switch with 4 PoE+ Ports

The Edimax ES-5104PH is a five Port Fast Ethernet switch with four PoE+ Ports designed for use in home, small or medium sized network environments. It easily connects and supplies power to PoE-enabled devices such as wireless access points, network cameras and IP phones as well as other Ethernet-enabled devices such as computers, printers and network attached storage (NAS). The device's compact size and fan-less design make it an ideal solution for expanding home and small business networks.

### IEEE 802.3at Power over Ethernet (PoE+) Auto Detection

The ES-5104PH features four IEEE 802.3at Power over Ethernet (PoE+) ports which supply up to 30 watts of electricity per port. It can convert standard 100-240V AC power into low-voltage 48 - 55V DC electricity to power IEEE 802.3at compliant network accessories via existing LAN cables. With PoE detection capability, the ES-5104PH is able to verify whether the connected device is IEEE 802.3at compliant. In the event that a PoE device is not detected, only network data will be transmitted through the LAN cable – meaning easy setup and management of network devices such as access points and network cameras.

### Plug & Play, No Installation Required

Just plug Ethernet or PoE enabled devices into the switch. Data and power can be transmitted through existing standard Cat-5e Ethernet cables with no additional cables or configuration required. The ES-5104PH reduces the difficulty, time and cost of network setup.

### Flexible Network Deployment & Energy Efficient

The ES-5104PH PoE+ switch is a fast and effective solution when power outlets are unavailable for your network devices. The switch additionally supports IEEE 802.3az Energy Efficient Ethernet which allows for less power consumption and reduced costs during periods of low data activity.

### Fan-Less Quiet & Compact Design

A fan-less design ensures quiet operation and enables an even more compact design, keeping valuable desk space free in home or small office environments.

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## High Performance

The ES-5104PH switch also supports auto-negotiation and non-blocking wire speed to give you the maximum speed and highest performance possible for each device connected to your network.

## •Auto-Negotiation

Each of the ES-5104PH's ports automatically detect whether connected network devices are running at 10Mbps or 100Mbps and half-duplex or full-duplex mode, and adjusts the speed and mode accordingly ensuring easy and hassle-free operation.

## •Non-Blocking Wire Speed

Forwards and receives traffic seamlessly – each port supports speeds up to 200Mbps in full-duplex mode simultaneously, providing full wire speed to connected devices and allowing you to run a high speed network smoothly.

## Power Saving

Along with the Fast Ethernet speeds critical for next-generation network applications, the ES-5104PH offers environmental efficiency. To comply with the IEEE802.3az standard, the ES-5104PH provides power saving functionality to reduce energy consumption and save costs:

## •Inactive Link Detection

When a network device is shut down and/or an inactive link is detected, the power usage adjustment feature automatically reduces power usage. The switch's power consumption will be dynamically adjusted according to the link status and the number of active network devices.

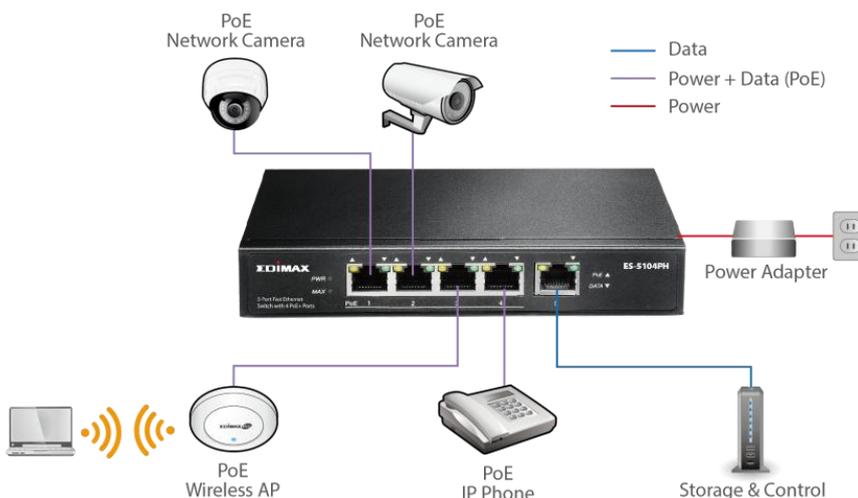
## •Cable Length Detection

Devices equipped with this feature automatically detect the length of connected Ethernet cables and adjust power usage accordingly. The shorter the cable length, the less power it consumes.

## FEATURES

- Five 10/100Mbps Fast Ethernet ports and four PoE+ ports.
- IEEE 802.3af/at PoE compliant (ports 1 - 4) for simplified deployment and installation.
- Up to 30W per PoE port (total power budget: 55W) for powering PoE-enabled devices.
- Auto-detection of powered devices (PD) and power consumption levels.
- 2K MAC address table and jumbo frames support up to 2KB.
- Plug & play, no installation required.
- Fanless quiet operation.
- External power adapter included.

## APPLICATION DIAGRAM



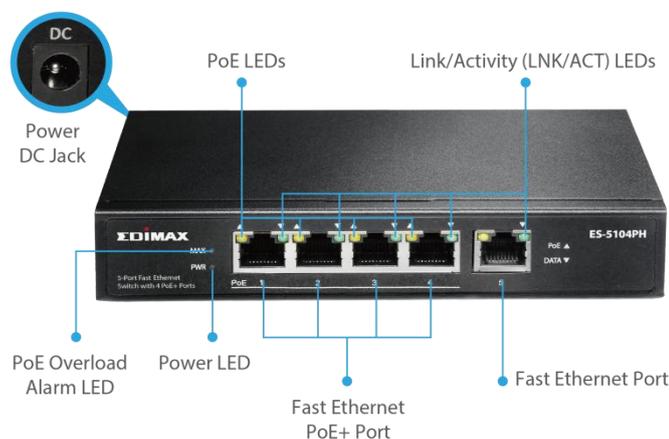
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## TECHNICAL SPECIFICATIONS

Hardware	
Ports	5 RJ-45 10/100Base-T ports 4 PoE+ ports
Transmission Method	Store and forward
LED Indicators	Power: Green LED LNK/ACT: Green LED (Port 1 - Port 5) PoE: Orange LED (Port 1 - Port 4) Max: Orange LED (PoE overload alarm)
Fan	Fanless
Power Input	100-240V AC, 50-60 Hz
Power Consumption	2.8W
Dimensions (L x W x H)	160 x 92.5 x 28mm
Weight	0.34kg
Performance	
Switching Capacity	1G
MAC Address	2K
Buffer Memory	768Kb
Jumbo Frames	2KB
Filtering/Forwarding Rates	100Mbps port - 148,800pps 10Mbps port - 14,880pps
Power over Ethernet	
Standard	IEEE 802.3af, IEEE 802.3at
Power Output	Up to 30W per port
Pin Assignment	1/2(+), 3/6(-)
Power Budget	55W
Environment	
Temperature	Operating: 0 ~ 40°C Storage: -40 ~ 70°C
Humidity (Non-condensing)	Operating: 10 ~ 90% Storage: 5 ~ 90%
Standards Compliance	
Standards	IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3af Power over Ethernet (PoE) IEEE 802.3at Power over Ethernet Plus (PoE+) IEEE 802.3x Full-duplex and flow control IEEE 802.3az Energy efficient Ethernet
Certifications	FCC, CE

## HARDWARE INTERFACE



Maximum performance and actual data rates will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice.  
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