

ES-5224P

## 24-Port Fast Ethernet PoE+ with 2 Gigabit Combo Ports Web-Smart Switch

The Edimax ES-5224P is a web-smart switch with 24 Fast Ethernet PoE+ ports and 2 Gigabit Combo ports. 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). ES-5224P is designed with easy management, all configuration can be performed through an intuitive browser-based Graphical User Interface. Ideal for small or medium network environments to strengthen the network connection, its standard 19-inch rack-mount brackets allow for integration with the most widely used mounting systems on the market.

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

The ES-5224P features 24 IEEE 802.3at Power over Ethernet (PoE+) ports that supply up to 30 watts of electricity per port. It can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cables to supply power to IEEE 802.3at compliant network accessories. The ES-5224P features PoE+ device detection to verify whether individual, connected devices are IEEE 802.3at compliant or not, so only data will be sent via the LAN cable if the device is not a PoE or PE device. Various PoE products such as Access Points, IP cameras or IP phones are easily connected to the switch, making it the perfect solution when power outlets are difficult to install or existing power outlets are too far from devices.

### Cost-Effective, No Special Networking Cable Required

Reduce your installation time and cost by using a standard Cat-5e Ethernet cable to link between the ES-5224P switch and powered devices (PD). The Ethernet cable will then transmit both data and power, so you won't need all those extra power cables to your powered devices (PD).

### Smart Features Supported

The ES-5224P Web smart features can be managed through a Web Browser. The smart features include simple QoS/CoS applications and basic monitoring tools to improve network efficiency. The ES-5224P also supports bandwidth control and port based VLAN. Through a Web interface, an administrator can set up VLANs to segregate traffic and QoS to prioritize mission-critical data. All of these features offer extra protection on the network edge. Best of all, the password-protected configuration interface can be accessed remotely. It increases the IT manager's mobility.

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## High Performance

The ES-5224P 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-5224P'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-5224P offers environmental efficiency. To comply with the IEEE802.3az standard, the ES-5224P 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.

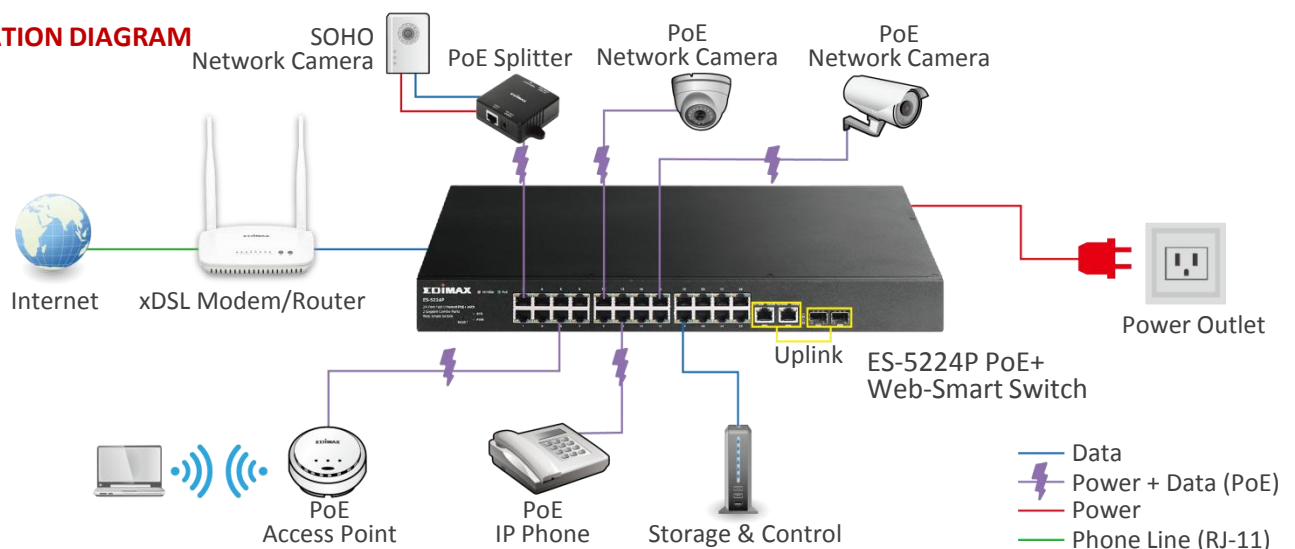
## •Cable Length Detection

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

- Supports 24 10/100Mbps Fast Ethernet PoE+ ports and 2 10/100/1000Mbps combo ports
- Support IEEE 802.3af/at PoE compliant to simplify deployment and installation
- Support PoE up to 30W per port With 400W total power budget
- Automatically detects power devices(PD) and power consumption levels
- IEEE 802.1Q VLAN allows network segmentation to enhance performance and security
- Switch capacity: 4.4Gbps
- Support IGMP Snooping V1 / V2
- Support 4K MAC address table
- 19-inch rack-mountable metal case

## APPLICATION DIAGRAM



# 24-Port Fast Ethernet PoE+ with 2 Gigabit Combo Ports Web-Smart Switch

**ES-5224P**
**TECHNICAL SPECIFICATIONS**

Hardware	
Ports	24 RJ-45 10/100Base-TX PoE+ ports 2 Combo Gigabit Ethernet/SFP ports
Transmission Method	Store and forward
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP 1000BaseT Cat. 5e UTP/STP
Buttons	Reset button
Led Indicators	Per port: Link/Act, PoE Per unit: Power, system
Power Input	100-240V AC, 50-60 Hz
Power Consumption	400W (Max)
Dimensions (L x W x H)	441 × 310 × 44 mm
Weight	4.04KG
Performance	
Switching Capacity	4.4Gbps
MAC Address	4K
Buffer Memory	352KB
Jumbo Frames	1536Bytes
Filtering/Forwarding Rates	1000Mbps port - 1,488,000pps 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(-) (End span)
Power Budget	330W(Max)
Smart Features	
VLAN	Up to 140 VLANs and 4096 VLAN IDs 802.1Q tag-based VLAN, Port-based VLAN Management VLAN
Port Trunking	IEEE 802.3ad LACP Trunk-static trunk up to 3 trunk groups
IGMP Snooping	IGMP v1/v2 snooping IGMP Snooping queries Block unknown multicast traffic Multicast groups: 256
QoS	Port-based QoS, IEEE802.1p QoS, 4 priority queues, scheduling algorithm
Mirror	Port mirroring both on ingress and egress traffic Many to one
Management	User interface: Web-based management User account: Login account configuration Firmware upgrade: Firmware upgrade by WEB Loop detection/prevention
Security	Rate limit: Rate limit on ingress and egress traffic Broadcast storm control

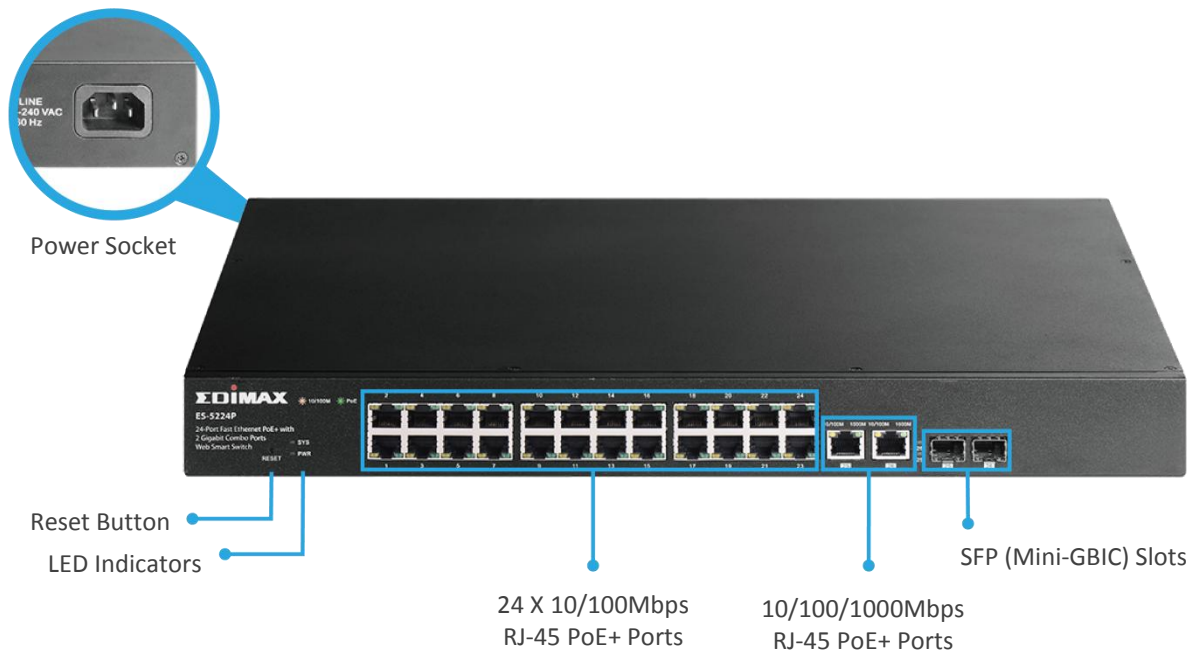
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## TECHNICAL SPECIFICATIONS

Environment	
Temperature	Operating: 0 ~ 40°C Storage: -40 ~ 70°C
Humidity (Non-condensing)	Operating: 10 ~ 90% Storage: 10 ~ 90%
Standards Compliance	
Standards	IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX Fast Ethernet IEEE 802.3ab 1000BaseT Gigabit Ethernet IEEE 802.3z 1000BaseSX/LX IEEE 802.3af Power Over Ethernet (PoE) IEEE 802.3at Power Over Ethernet Plus (PoE+) IEEE 802.3x Full-duplex and flow control IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.1Q VLAN + QoS IEEE 802.1d Spanning tree protocol IEEE 802.1w Rapid spanning tree protocol IEEE 802.1p Class of service, priority protocols
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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