The Edimax ES-5216P is a web-smart switch with 16 Fast Ethernet PoE+ ports, 8 Fast Ethernet 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-5216P 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-5216P features 16 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-5216P 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-5216P 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-5216P 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-5216P 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.
High Performance
The ES-5216P 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-5216P’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-5216P offers environmental efficiency. To comply with the IEEE802.3az standard, the ES-5216P 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 16 10/100Mbps Fast Ethernet PoE+ ports, 8 10/100Mbps Fast Ethernet 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 260W 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
16-Port Fast Ethernet PoE+ and 8 Fast Ethernet Ports with 2 Gigabit Combo Ports Web-Smart Switch

**TECHNICAL SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Hardware</th>
<th></th>
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</thead>
</table>
| Ports | 8 RJ-45 10/100Base-T Fast Ethernet ports  
16 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 | 260W (Max) |
| Dimensions (L x W x H) | 441 x 310 x 44 mm |
| Weight | 3.95KG |

<table>
<thead>
<tr>
<th>Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching Capacity</td>
<td>4.4Gbps</td>
</tr>
<tr>
<td>MAC Address</td>
<td>4K</td>
</tr>
<tr>
<td>Buffer Memory</td>
<td>352KB</td>
</tr>
<tr>
<td>Jumbo Frames</td>
<td>1536Bytes</td>
</tr>
</tbody>
</table>
| Filtering/Forwarding Rates | 1000Mbps port - 1,488,000pps  
100Mbps port - 148,800pps  
10Mbps port - 14,880pps |

<table>
<thead>
<tr>
<th>Power over Ethernet</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>IEEE 802.3af, IEEE 802.3at</td>
</tr>
<tr>
<td>Power Output</td>
<td>Up to 30W per port</td>
</tr>
<tr>
<td>Pin Assignment</td>
<td>1/2(+), 3/6(-) (End span)</td>
</tr>
<tr>
<td>Power Budget</td>
<td>220W(Max)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Smart Features</th>
<th></th>
</tr>
</thead>
</table>
| 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 |
16-Port Fast Ethernet PoE+ and 8 Fast Ethernet Ports with 2 Gigabit Combo Ports Web-Smart Switch

**ES-5216P**

**TECHNICAL SPECIFICATIONS**

| Environment     | Operating: 0 ~ 40°C  
|                 | Storage: -40 ~ 70°C  
| Humidity (Non-condensing) | Operating: 10 ~ 90%  
|                 | Storage: 10 ~ 90%  

**Standards Compliance**

- 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**

- Power Socket
- Reset Button
- LED Indicators
- 16 X 10/100Mbps RJ-45 PoE+ Ports
- 8 X 10/100Mbps RJ-45 Fast Ethernet Ports
- 10/100/1000Mbps RJ-45 PoE+ Ports
- SFP (Mini-GBIC) Slots

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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