

ES4524M-PoE

L2 Gigabit Ethernet Standalone PoE Switch



Product Overview

The Edge-Core ES4524M-PoE is a Gigabit Ethernet Layer 2/4 Standalone PoE switch featuring 22 10/100/1000 RJ-45 including 2 combo GE ports with PoE. It is ideal for desktop Gigabit Ethernet connectivity and for powering devices such as IP phones, wireless access points, surveillance cameras, etc, and for delivering data and power simultaneously over existing CAT 5 cables. It also has IP clustering management feature support up to 36 switches using a single IP address. The PoE function allows up to 15.4W maximum per port. Therefore, it's a perfect solution for VoIP/wireless or other devices supporting PoE IEEE 802.3af.

Key Features and Benefits

Performance and Scalability

With 48Gbps switching capacity, the ES4524M-PoE delivers wire-speed switching performance on all ports and simultaneously provides up to 15.4 Watts power to each port to devices (PD) which conform to IEEE 802.3af and pre-802.3af devices.

Using the fiber optic module allows users to long distance connections to access remote sites.

Continuous Availability

IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to core networks with rapid convergence to ensure faster recovery from failed links, enhancing overall network stability and reliability.

IEEE 802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and provides load balancing and fault tolerance for uplink connection.

IGMP snooping prevents flooding of IP multicast traffic and limits bandwidth intensive video traffic to only the subscribers.

Comprehensive QoS

Up to 8 aggregation groups are supported, and up to 8 ports per group.

Traffic is prioritized according to 802.1p, DSCP, IP precedence and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.

Asymmetric bidirectional rate-limiting, per port or per traffic class, preserves network bandwidth and allowing maximum control of network resources.

Enhanced Security

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network.

Access Control Lists (ACLs) restrict access to sensitive network resources by denying packets based on source and destination MAC addresses, IP addresses and TCP/UDP ports.

Security Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypt network management information via Telnet and web, providing secure network management.

Private VLAN isolates edge ports to ensure user privacy.

Simple Management

Industry standard Command Line Interface (CLI) via console port or Telnet provides a common user interface and command set for users to manipulate the switch.

Embedded user friendly web interface helps users quickly and simply configure switches.

SNMPv1, v2c, v3 network management is supported as well as four groups RMON for traffic management, monitoring and analysis.

TFTP can be used to backup and restore firmware and configuration files.

PoE Features

Transfer data and up to 15.4 Watts power per port to VoIP phones, wireless access points, surveillance cameras, etc, over existing CAT 5 cables to distances of up to 100 meters. The need for individual power sources is eliminated, saving on costs for power cable installation and avoiding power outlet availability issues later.

The ES4524M-PoE works as a centralized power distributor that can auto-detect power devices and power consumptions.

If the power demand exceeds the switch's maximum power supply, ports can be prioritized to receive power.

ES4524M-PoE Product Specifications



Features

Physical Ports	Management
22 RJ-45 10/100/1000Base-T ports 2 Combo G RJ-45/ SFP ports 1 RS-232 DB-9 console port on the front	Switch Management: <ul style="list-style-type: none">■ CLI via console port or Telnet■ WEB management■ SNMP v1, v2c, v3 Firmware & Configuration: <ul style="list-style-type: none">■ Dual firmware images■ Firmware upgrade via TFTP server■ Multiple configuration files■ Configuration file upload/download via TFTP server Supports RMON (groups 1, 2, 3 and 9) Supports BOOTP, DHCP for IP address assignment Supports STMP Event/Error Log/Syslog (Optional) ECview is a powerful network management software that maximizes the managed capabilities of Edge-Core devices: <ul style="list-style-type: none">■ Topology Management■ Performance Management■ Configuration Management■ Event Management■ SNMP Management
Performance	Mechanical
Switching Capability: 48 Gbps Forwarding Rate: 35.7 Mpps MAC Address Table Size: 8K Packet Buffer Size: 4Mbits	Dimensions (H x W x D): 43 x 440 x 430 mm (1RU) LED Indicators: Port, Uplink, System, Diagnostic
L2 Features	Safety
Auto-negotiation for port speed and duplex mode Flow Control: <ul style="list-style-type: none">■ IEEE 802.3x for full duplex mode■ Back-Pressure for half duplex mode Spanning Tree Protocol: <ul style="list-style-type: none">■ IEEE 802.1D Spanning Tree Protocol (STP)■ IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) VLANs: <ul style="list-style-type: none">■ Supports 256 VLANs entries out of 4K VLAN IDs■ Port-based VLANs■ IEEE 802.1v Protocol-based VLANs■ Private VLAN■ GVRP Link Aggregation: <ul style="list-style-type: none">■ Static Trunk■ IEEE 802.3ad Link Aggregation Control Protocol■ Trunk groups: 3, Up 8 ports per group IGMP Snooping: <ul style="list-style-type: none">■ IGMP v1/ v2 /v3(*) snooping■ IGMP Querier Supports jumbo frames up to 10KB all ports	UL/ CUL ; CSA/CUS (UL60950-1, CSA 22.2.No 60950-1) TUV/GS (EN60950-1) ; CB (IEC60950-1)
QoS Features	Electromagnetic Compatibility
Priority Queues: 4 hardware queues per port Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List Supports WRR and Strict scheduling Bandwidth Control: <ul style="list-style-type: none">■ Ingress rate limiting: metering at 64KB increment■ Egress rate limiting: shaping at 64KB increment (*)	CE Mark FCC Class A VCCI Class A CISPR 22 Class A
PoE Features	Environmental Specifications
IEEE 802.3af compliant Supports up to 15.4W for each port Total power for PoE: Up to 180W	Temperature: <ul style="list-style-type: none">■ IEC 68-2-14■ 0°C to 45°C (Standard Operating)■ -40°C to 70°C (Non-Operating) Humidity: 10% to 90% (Non-condensing) MTBF : 8 Years
Security	Warranty
Supports IEEE 802.1X port-based access control RADIUS authentication TACACS+ Support Access Control Lists L2//3/L4 (100 per system) SSH (v1.5/v2.0*) SSL	Limited lifetime warranty

Ordering Information

Optional Accessories	Product Description
ET4201-SX ET4201-LX ET4201-LHX ET4201-ZX ECview (*)	Small Form Factor Pluggable (Distance: 500m; Wavelength: 850nm) Small Form Factor Pluggable (Distance: 10km; Wavelength: 1310nm) Small Form Factor Pluggable (Distance: 40km; Wavelength: 1310nm) Small Form Factor Pluggable (Distance: 80km; Wavelength: 1550nm) SNMP Network Management Software

* Future Upgradeable