

ES4512C L2/L4 Gigabit Ethernet Standalone Switch



The Edge-Core ES4512C switch is a high performance managed L2/L4 Gigabit switch that provides an ideal solution for Enterprise Gigabit applications and size networks.

Product Overview

The Edge-Core ES4512C is a high performance managed L2/L4 Gigabit switch that provides an ideal solution for Enterprise Gigabit applications. With 8 10/100/1000Mbps Gigabit Ethernet ports plus 4 Combo ports with full L2/L4 features, the ES4512C is designed to meet the needs of the most demanding departmental and Enterprise connectivity applications.

The Edge-Core ES4512C is a high-density Gigabit Switching system with compact design, in 1U height, and reliable performance. This cost effective, intelligent Gigabit switch is fully manageable, making it a good choice for networks of the bigger enterprise size. The switch optimizes and controls data flow through the use of advanced quality of service and security algorithms, helping to ensure that mission-critical traffic reaches the intended users securely every time.

Key Benefits

Great Fault-Tolerance

Spanning tree is a link management protocol that provides path redundancy while preventing undesirable loops in the network. ES4512C delivers not only IEEE802.1D protocol (Spanning Tree), but also Accton proprietary Fast Mode Spanning Tree, IEEE802.1s* (Multiple Spanning Tree) and IEEE802.1w* (Rapid Spanning Tree). Besides of Spanning Tree for Fault-Tolerance, ES4512C also provides a redundant power supply inlet in the rear panel for power-fault-tolerance to ensure a reliable system.

Advanced Network Security Mechanism

As networks grow and branch out to remote locations, network security increases in importance and administration complexity. Customers need to protect networks and network services from unauthorized access by remote users. The Edge-Core ES4512C provides multiple security algorithms such as Port Security, SSL, Web management Encryption, RADIUS and TACACS+ to protect data communication to ensure data privacy.

Eliminate Network's Bottleneck

To secure the bandwidth for highly bandwidth demanded traffic, ES4512C offers not only basic IEEE 802.3ad Link Aggregation, but also Cisco's Ether-Channel for static trunk. Users can choose the way they prefer or used to configure the system. This is a user-friendly design to meet customer's preference.

Flexible System Management

The Edge-Core ES4512C offers high performance at a very attractive price. It boost layer-2 switching performance and eliminates network bottlenecks with wire-speed switching capability. In addition to wire-speed switching, it also offers rich software feature sets to manage and secure the whole network communication.

Specifications

Physical Ports

- 8 10/100/1000Base-T ports (RJ45)
- 4 Gigabit combo port (RJ45/SFP)
- 1 Redundant Power Connector (DC)

Switching Features

- 10/100/1000BASE-TX ports support auto-sensing, auto-negotiation.
- Supports Jumbo frame up to 9KB
- Supports up to 16K MAC address entries
- Supports Flow Control supported:
 - Provides IEEE802.1x for full duplex mode
 - Back-Pressure flow control half duplex mode
- Provides store-and-forward forwarding scheme
- Provides HOL (Head of Line) blocking prevention
- Provides Broadcast Storm Protection
- Supports IGMP snooping v1/v2
- Supports IGMP querier
- Link Aggregation
 - Complies to IEEE 802.3ad (LACP)
 - Cisco Ether-Channel compatible (Static Trunk)
 - Up to 6 trunks
 - 2 ~ 8 ports per trunk
 - Support Load Balance for both Unicast and Multicast traffic
- Supports IEEE 802.1D Spanning Tree Protocol
- Supports IEEE 802.1s Multiple Spanning Tree
- Supports IEEE 802.1w Rapid Spanning Tree
- Supports Accton proprietary per-port based Fast Forwarding mode
- IEEE 802.3ac frame extension for VLAN tagging
- IEEE 802.1Q tagging VLAN
- Up to 255 VLAN entries
- Supports Port-based VLAN
- Private VLAN
- GVRP protocol for dynamic VLAN management

Security

- User/Password protection
- Static port security (MAC-based)
- L2/L3/L4 access control list
- RADIUS
- TACACS+
- Secure Shell (SSH/Secure Telnet)
- HTTPS/SSL
- IEEE 802.1x

IEEE 802.1x

- Supports 802.1p based CoS
 - 8 priority queues per port
 - WRR for priority queue
 - Strict Scheduling priority queue
- Supports IP TOS/Precedence based CoS
- Supports DSCP based CoS
- Supports TCP/UDP port-based CoS
- Provides Ingress and Egress Rate Limiting
- Supports DiffServ

Management

- Provides 1 Male DB9 RS-232C console interface configured as DTE
- Supports Industrial-like Command Line Interface (CLI)
- Supports Telnet management (4 sessions)
- Supports Embedded Web-based Management
- Supports software upgrade/backup via XMODEM or TFTP
- Supports configuration backup/restore via TFTP
- Support Port Mirroring
- Supports BOOTP/DHCP client for IP address assignment
- Supports Remote Ping
- Supports dual copies of code
- Supports multiple copies of configuration
- Supports System log
- Supports SNTP (RFC 2030)
- Supports SNMPv1/v2c/v3*
- Supports RFC 2819 RMON group (1,2,3 & 9)
- Supports Private MIBs

Mechanical

- SDimension: 440mm x 354mm x 43mm

Performance

- MAC address: 8K
- Packet buffer: 1MB
- Switch Fabric: 24Gbps

Power Requirements

- Nominal Input Voltages: 110-240V
- Input Voltage Range: 12V
- Input Frequency: 47~63 Hz
- Power: 35W

Mechanical

- Temperature:
 - IEC 68-2-14
 - 0°C to 40 °C (Standard Operating)
 - -40°C to 70 °C (Non-operating)
- Humidity: 10% to 90% (Non-condensing)
- Vibration: IEC 68-2-36, IEC 68-2-6
- Shock: IEC 68-2-29
- Drop: IEC 68-2-32

Safety

- CSA/NRTL (UL1950, CSA 22.2.950)
- TUV/GS (EN60950)

Electromagnetic Compatibility

- CE Mark
- FCC Class A
- VCCI Class A
- CISPR Class A

IEEE Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX and 100BASE-FX
- IEEE 802.3z 1000BASE-SX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.ad Link Aggregation
- IEEE 802.3x Flow Control
- IEEE 802.1p Priority
- IEEE 802.3ac Frame extension for VLAN tagging
- IEEE 802.1D Bridging
- IEEE 802.1Q Virtual LAN
- IEEE 802.1s Per VLAN Spanning Tree
- IEEE 802.1w Rapid Spanning Tree

Ordering Information

IEEE Standards	Product Description
● ET4201-SX	Small Frm Factor Pluggable (Distance:500m ; Wavelength: 850nm)
● ET4201-LX	Small Frm Factor Pluggable (Distance:10km ; Wavelength: 1310nm)
● ET4201-LHX	Small Frm Factor Pluggable (Distance:40km ; Wavelength: 1310nm)
● ET4201-ZX	Small Frm Factor Pluggable (Distance:80km ; Wavelength: 1550nm)

* future s p e c i f i c a t i o n

