

ECS3510-26P

L2 Fast Ethernet Switch with PoE



Product Overview

The Edgecore ECS3510-26P is a high-performance Fast Ethernet Layer 2/4 switch featuring 26 ports; 24 10/100Mbps PoE ports and 2 combo Gigabit Ethernet RJ-45/SFP (Small Form Factor Pluggable) ports. It is ideal for desktop Fast Ethernet connectivity and wiring closet installations. This switch is packed with features and is a cost-effective solution that brings continuous availability, enhanced security and advanced QoS to the network edge, while maintaining simplicity of management.

Key Features and Benefits

Performance and Scalability

It's a great entry level managed with 8.8 Gbps switching capacity delivers wire-speed switching performance to take full advantage of existing high-performance on PCs and laptops by significantly improving the responsiveness of applications and file transfer times .

The device also has two Gigabit Ethernet combo ports for uplink flexibility, allowing copper or fiber uplinks port for high speed uplinks to servers or backbones. .

Continuous Availability

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

IEEE 802.1s Multiple Spanning Tree Protocol runs STP per VLAN base, providing Layer 2 load sharing on redundant links up to 8 instances.

Multicast VLAN Registration (MVR) is designed for applications such as Media-on-Demand is using multicast traffic across an Ethernet network.

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

The voice VLAN feature enables access ports to carry IP voice traffic from an IP phone.

The IEEE 802.1Q-in-Q VLAN Tag is purpose to expand the VLAN space by tagging the tagged packets.

Comprehensive QoS

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

Port Security ensures access to switch ports based on MAC address, limits the total number of devices from using a switch port and protects against MAC flooding attacks.

IEEE 802.1x port-based or MAC-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using any standard-based dynamic VLAN assignment with RADIUS server by guest VLAN.

Access Control Lists (ACLs) can be used to restrict access to sensitive network resources by denying packets based on source and destination MAC addresses, IP addresses, TCP/UDP ports. This is done by hardware, so switching performance is not compromised.

Security Shell (SSHv1.5/v2.0) and Secure Sockets Layer (SSL/HTTPS) encrypt network management information via Telnet and web, providing secure network management.

TACACS+3.0 Authentication for applications such as network access or IP mobility enables centralized control of the switch and restricts unauthorized users from altering the configuration of the switch.

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.

IP Source Guard is enabled on a trunk port with a large number of VLANs that have DHCP snooping enabled, you might run out of ACL.

DHCP snooping provides security by filtering un-trusted DHCP messages and by building and maintaining a DHCP snooping binding table.

Features

Ports

24 RJ-45 10/100Base-TX ports
2 Combo Gigabit (RJ-45/SFP) ports
1 RJ-45 console port

Performance

Switching Capability: 8.8 Gbps
Packet Buffer Size: 4 Mb
MAC Address Table: 8 K

L2 Features

Auto-negotiation for port speed and duplex mode

Flow Control:

IEEE 802.3x for full duplex mode
Back-Pressure for half duplex mode
Supports jumbo frames up to 10KB

Spanning Tree Protocol:

IEEE 802.1D Spanning Tree Protocol (STP)
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

Fast forwarding
BPDU Forwarding with STP disable

Auto edge port
BPDU filter/guard
Root Guard

Storm Control

VLANs:

Supports IEEE 802.1Q VLANs
Port-based VLANs
MAC-based VLANs
IEEE 802.1v Protocol-based VLANs
IP-based
Private VLAN
Voice VLAN
Guest VLAN
VLAN Aggregation
Auto VLAN assignment
GVRP
MVR
Supports Q-in-Q
VLAN Translation

Link Aggregation:

Static Trunk
IEEE 802.3ad Link Aggregation Control Protocol
Trunk groups: 5, Trunk links: 2~8

IGMP Snooping:

IGMP v1/v2/v3 snooping
IGMP v1/v2 Querier
IGMP Filtering/Throttling
IGMP Immediate Leave
IGMP Snooping Leave Proxy
IGMP v1/v2/v3 proxy

QoS

Priority Queues: 4 hardware queues per port
Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP,
TCP/UDP port number, IPv6, IP SA/DA, MAC SA/DA
Supports DWRR and Strict scheduling
IPv4/v6 Diffserv
Rate Limiting (Ingress and Egress, per port base)

Security

Port security (Static/Dynamic)
MAC Limitation
L2/L3/L4 Access Control List
RADIUS
TACAS+
SSH (v1.5/v2.0)
HTTPS/SSL
Support IEEE 802.1X
Port based
MAC based
VLAN Assignment, QoS Assignment, Web authentication, MAC authentication
Guest VLAN
Intrusion Lock (Link Detection)
IP source guard
DoS Protection
ARP Inspection

Management

Switch Management:
CLI via console port or Telnet
WEB management
SNMP v1, v2c, v3
Firmware & Configuration:
Firmware upgrade via TFTP/HTTP
Multiple configuration files
Configuration file upload/download via TFTP/HTTP
Supports RMON (groups 1, 2, 3 and 9), RMON II, MIB I/II
Supports BOOTP, DHCP client for IP address assignment
Supports DHCP Relay, DHCP Snooping
DNS Client, Proxy
Port Mirroring
Supports SNMP
Event/Error Log/Syslog, SMTP
Supports LLDP (802.1ab), LLDP-MED
Remote Ping
IP Clustering
MAC Flash
Dynamic ARP Inspection
IPv6 Management

PoE Features

Total Power Budget: 185 Watts
Compliant with IEEE 802.3af
Compliant with IEEE 802.3at draft
Simultaneously 24 ports can support a maximum of 7.5 W per port
Simultaneously 12 ports can support a maximum of 15.4 W per port
Simultaneously 6 ports (1~6) can support a maximum of 30 W per port

Mechanical

Dimensions: 44 cm x 28 cm x 4.4 cm (17.32 X 11.0 X 1.73 in)
Weight: 3.28 kg (7.23 lb)
LED Indicators: Port, Uplink, System, Diagnostic

Safety

UL (CSA 22.2. NO 60950-1 & UL60950-1)
CB (IEC60950-1)

Features

Electromagnetic Compatibility

CE Mark
FCC Class A
VCCI Class A

Environmental Specifications

Temperature:
IEC 68-2-14
0°C to 50°C (32°F to 122°F Standard Operating)
-40°C to 70°C (-40°F to 158°F 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

Power Supply

AC Power cord
100 to 240 V, 50-60 Hz, 3.0A
Power Supply
Internal, auto-ranging transformer: 100 to 240 VAC, 50 to 60 Hz

Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore Data Center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

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Ordering Information

Optional Accessories	Product Description
ET3201-FXP	100BASE-FX, Small Form Factor Pluggable (Distance: 2 km; Wavelength:1310 nm)
ET3201-FX20	100BASE-FX, Small Form Factor Pluggable (Distance: 20 km; Wavelength:1310 nm)
ET4201-SX	1Gbps, Small Form Factor Pluggable (Distance: 500 m; Wavelength: 850nm)
ET4201-LX	1Gbps, Small Form Factor Pluggable (Distance: 10 km; Wavelength: 1310 nm)
ET4201-LHX	1Gbps, Small Form Factor Pluggable (Distance: 40 km; Wavelength: 1310 nm)
ECView Pro	SNMP Network Management Software