

ECS4310-18T

Gigabit Ethernet Smart Switch



Product Overview

The Edge-Core Web smart Gigabit Ethernet Switch ECS4310-18T is a new 16 Gigabit ports smart switch with 2 SFP ports that bring the speed of Gigabit copper to the desktop with the added flexibility of fiber. ECS4310-18T enables networks of all sizes to introduce Gigabit Ethernet with management features targeted to meet the needs of the SMB network, and Gigabit to the desktop for power users. It provides a flexible Web based management interface to enable the configuration of switch features, port settings including security, QoS with 8 queues, link aggregation and VLANs. These features can increase throughput and flexibility. Security is more important in next generation networks so this switch has added security features to protect your network.

Key Features and Benefits

Performance and Scalability

It's a great entry level managed with 36Gbps 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.

IEEE802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and providing load balancing and fault tolerance for uplink connections.

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

Comprehensive QoS

8 egress queues per port enable differentiated management of up to 8 traffic types.

Traffic is prioritized according to 802.1p and DSCP 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.

EAPOL transparent* is an alternative way to leverage the more powerful L2/L3 switch for the access authentication.

Simple Management

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

It's also supports SNMP v1/v2C to be managed and control SNMP network station.

Cable diagnostics for diagnose any cable faults (Short, Open etc.) and feedback a distance to the fault.

LLDP (Link Layer Discovery Protocol) enables administrator to monitor what device is attached to the switch.



Features

Physical Ports

16 10Base-T/100Base-TX/1000Base-T with auto-negotiation
2 1000Base-X SFP transceiver slots

Performance

Switching Capability: 36Gbps
Forwarding Rate: 26.8Mpps
Packet Buffer Size: 448KB
MAC Address Table: 16K

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
Spanning Tree Protocol:
IEEE 802.1D Spanning Tree Protocol (STP)
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
VLANs:
Supports 256 IEEE 802.1Q VLANs
Port-based VLANs
Private VLAN (port isolation)
Link Aggregation:
Static Trunk
IEEE 802.3ad Link Aggregation Control Protocol
Trunk groups: 8, Trunk links: 2~8
IGMP Snooping:
IGMP v1/v2snooping
IGMP Immediate leave
Supports jumbo frames up to 9KB

IPv6 Features

IPv4/IPv6 Dual Protocol stack
IPv6 Address Types Stack: Unicast
IPv6 Neighbor Discovery
SNMP over IPv6
HTTP over IPv6
Remote IPv6 ping

QoS Features

Priority Queues: 8 hardware queues per port
Traffic classification based on IEEE 802.1p CoS & DSCP
Supports WRR and Strict scheduling
Rate Limiting (Ingress and Egress, per port base)
FE: Resolution 16Kbps ~ 100Mbps
GE: Resolution 16Kbps ~ 100Mbps

Security

Supports IEEE 802.1X Port-based and MAC-based* authentication
Supports EAPOL transparent*
Supports local authentication
MAC Filter
IP Filter

Management

Switch Management:
WEB management
SNMP v1, v2c
Firmware & Configuration:
Firmware upgrade via Web
Supports DHCP Client
Supports DHCP snooping*
Supports LLDP (802.1ab)
(Optional) ECView Pro, a powerful network management software that maximizes the managed capabilities of Edge-Core devices with:
Topology Management
Performance Management
Configuration Management
Event Management
SNMP Management

Mechanical

Dimensions (W x D x H): 172 mm x 440 mm x 43 mm
(6.77 x 17.32 x 1.69 inches)
Weight : 1.98kg (4.37lbs)
LED Indicators: Port, Uplink, System, Diagnostic

Safety

CSA (CSA 22.2 NO 60950-1 & UL 60950-1)
CB(IEC/EN60950-1)

Electromagnetic Compatibility

CE Mark
FCC Class A
EN 55022 (CISRP 22) Class A
EN 61000-3-2/3
VCCI*

Environmental Specifications

Temperature:
0°C to 50°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

Power Supply

AC Power code
■ 100 to 240 V, 50-60 Hz, 0.7A
Power Supply
■ Internal, auto-ranging transformer: 100 to 240 VAC, 50 to 60 Hz
Power Consumption
■ 30 Watts maximum
Maximum Current
■ 0.3A @ 100 VAC
■ 0.12A @ 240 VAC

Warranty

Three years warranty

Ordering Information

Optional Accessories

ET4201-SX
ET4201-LX
ET4201-LHX
ET4201-ZX
ECView Pro

Product Description

1Gbps, Small Form Factor Pluggable (Distance: 500m; Wavelength: 850nm)
1Gbps, Small Form Factor Pluggable (Distance: 10km; Wavelength: 1310nm)
1Gbps, Small Form Factor Pluggable (Distance: 40km; Wavelength: 1310nm)
1Gbps, Small Form Factor Pluggable (Distance: 80km; Wavelength: 1550nm)
SNMP Network Management Software

* Feature Release