ECS2000 Series
L2 Edge Gigabit Ethernet Switch

Product Overview

The Edge-Core ECS2000 series is a Layer 2 Edge switches featuring 10/18/26/50 ports w/wo PoE; with 8/16/24/48 10/100/1000Base-T ports, and 2 SFP 100/1000Base-X SFP slots. The ECS2000 series enable networks of all sizes to introduce Gigabit Ethernet to the desktop with management features targeted to meet the needs of SMB network. It is packed with features and is a cost-effective solution that brings continuous availability, QoS priority queuing with classification, and prioritization at Layer 2.

Key Features and Benefits

Performance and Scalability

The ECS2000-10P/18T/18P/26T/26P/50T/50P are entry-level managed switch with 20/36/36/52/52/100/100Gbps switching capacity. It delivers wire-speed switching performance on all ports connecting end stations to the corporate network.

There are two SFP ports for Gigabit Ethernet fiber uplink flexibility. Optional Gigabit Ethernet SFP transceivers can be installed for various fiber uplink distances.

Continuous Availability

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

IEEE 802.1Q VLAN-segmented broadcast domains reduce broadcast traffic and increase LAN security and performance.

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 connections.

Comprehensive QoS

Eight egress queues per port enables differentiated management of up to eight traffic types.

Traffic is prioritized according to 802.1p or 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 allows maximum control of network resources.

Enhanced Security

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

IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using a standards-based RADIUS server.

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. ACLs are hardware supported, so switching performance is not compromised.

Secure Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypts Telnet and web access to the switch, providing secure network management.

IP Source Guard can be enabled with DHCP snooping on trunk ports with a large number of VLANs to filter and control IP traffic access to the network.

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

Simple Management

An embedded user-friendly web interface helps users quickly and simply configure switches. SNMP v1/v2 are supported for management from a network management station. Telnet and SSH provide a safe and easy way for network administrators to manage the switch. This new Edge-Core switch also supports management functions through both IPv4 and IPv6.

PoE Features

The ECS2000-10P/18P/26P/50P can provide up to 30 Watts of power to attached devices, such as VoIP phones, wireless access points, surveillance cameras, etc, all over existing Cat. 5 cables. The switch can deliver up to 30 Watts on 2/4/6/12 ports, 15.4 Watts on 4/8/12/24 ports, or 7.5 Watts on 8/16/24/48 ports. This eliminates the need for individual power sources for devices in the network, saving on costs for power cables and avoiding power outlet availability issues. If the power demand exceeds the switch's maximum power budget, ports can be prioritized to receive power.

ECS2000 Series Product Specifications

Technical Specifications

Product Model		ECS2000-10P	ECS2000-18T	ECS2000-18P
Product Image				
Port	RJ-45 10/100/1000 Ports	8	16	16
	SFP Uplink Ports	2	2	2
	PoE Port	8	X	16
Performance	Switching Capacity	20Gbps	36Gbps	36Gbps
	Forwarding Rate	14.9Mpps	26.8Mpps	26.8Mpps
	Flash Memory	8M	16M	16M
	DRAM	64M	128M	128M
	MAC Address Table Size	8K	8K	8K
	Jumbo Frames	10K	10K	10K
	Auto-negotiation, Auto-MDI/MDIX	O	O	O
PoE	Support on all Gigabit ports based on IEEE 802.3af	O	X	O
	PoE+ based on IEEE 802.3at	O	X	O
	Auto disable after exceeding power budget	O	X	O
	Dynamic Power Allocation	O	X	O
	PoE Power Budget	75W	X	190W
Mechanical	Rack Space	19"	19"	19"
	Dimension (W x D x H) cm	33 x 20.4 x 4.3	44 x 28 x 4.4	44 x 35 x 4.45
	Weight	2.2kg	1.91kg	4.05kg
Power Supply	100-240 VAC, 50/60Hz	O	O	O
	Max Power Consumption (Watts)	100W	20W	250W
Environmental	Operating Temperature	0℃ to 50℃	0℃ to 50℃	0℃ to 50℃
	Storage Temperature	-40℃ to 70℃	-40℃ to 70℃	-40℃ to 70℃
	Operating Humidity (non-condensing)	10% to 90%	10% to 90%	10% to 90%
	Storage Humidity (non-condensing)	10% to 90%	10% to 90%	10% to 90%
	Environmental Regulation Compliance: WEEE	O	O	O
	Environmental Regulation Compliance: RoHS	O	O	O
Certification	FCC Class A	O	O	O
	CE	O	O	O
	Safety Compliance: CB	O	O	O
	Safety Compliance: UL	O	O	O

ECS2000 Series Product Specifications

Technical Specifications

Product Model		ECS2000-26T	ECS2000-26P	ECS2000-50T	ECS2000-50P
Product Image					
Port	RJ-45 10/100/1000 Ports	24	24	48	48
	SFP Uplink Ports	2	2	2	2
	PoE Port	X	24	X	48
Performance	Switching Capacity	52Gbps	52Gbps	100Gbps	100Gbps
	Forwarding Rate	38.7Mpps	38.7Mpps	74.4Mpps	74.4Mpps
	Flash Memory	16M	16M	16M	16M
	DRAM	128M	128M	128M	128M
	MAC Address Table Size	8K	8K	32K	32K
	Jumbo Frames	10K	10K	10K	10K
	Auto-negotiation, Auto-MDI/MDIX	O	O	O	O
PoE	Support on all Gigabit ports based on IEEE 802.3af	X	O	X	O
	PoE+ based on IEEE 802.3at	X	O	X	O
	Auto disable after exceeding power budget	X	O	X	O
	Dynamic Power Allocation	X	O	X	O
	PoE Power Budget	X	190W	X	375W
Mechanical	Rack Space	19"	19"	19"	19"
	Dimension (W x D x H) cm	44 x17.3 x 4.45	44 x 35 x 4.45	43 x 25 x 4.45	44 x 35 x 4.45
	Weight	1.91kg	4.05kg	2.98kg	5.19kg
Power Supply	100-240 VAC, 50/60Hz	O	O	O	O
	Max Power Consumption (Watts)	20W	250W	50W	525W
Environmental	Operating Temperature	0℃ to 50℃	0℃ to 50℃	0℃ to 50℃	0℃ to 50℃
	Storage Temperature	-40℃ to 70℃	-40℃ to 70℃	-40℃ to 70℃	-40℃ to 70℃
	Operating Humidity (non-condensing)	10% to 90%	10% to 90%	10% to 90%	10% to 90%
	Storage Humidity (non-condensing)	10% to 90%	10% to 90%	10% to 90%	10% to 90%
	Environmental Regulation Compliance: WEEE	O	O	O	O
	Environmental Regulation Compliance: RoHS	O	O	O	O
Electromagnetic Compatibility	FCC Class A	O	O	O	O
	CE	O	O	O	O
	Safety Compliance: CB	O	O	O	O
	Safety Compliance: UL	O	O	O	O

Features

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 802.1s Multiple Spanning Tree Protocol (MSTP)
- BPDU Guard
- Root Guard

VLANs:
- Supports 4K IEEE 802.1Q VLANs
- Port-based VLANs
- IP based VLANs
- Private VLAN s
- Voice VLAN
- Q-in-Q
- Select Q-in-Q

Link Aggregation:
- Static Trunk
- IEEE 802.3ad Link Aggregation Control Protocol

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

MVR (Multicast VLAN Registration)

IPv6 Features

IPv4/IPv6 Dual Protocol stack
IPv6 Address Types Stack: Unicast
ICMPv6
ICMPv6 Redirect (Host)
Stateless Auto configuration
IPv6 Neighbor Discovery
SNMP over IPv6
HTTP over IPv6
DHCPv6 Client
Remote IPv6 Ping
NTPv6

QoS Features

Priority Queues: 8 hardware queues per port
Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP,
TCP/UDP port number
Supports WRR and Strict scheduling
Rate Limiting (Ingress and Egress, per port base)
Diffserv

Security Features

Static Port Security (MAC-based)
Dynamic Port Security (MAC-based)
MAC Limitation per port
Supports IEEE 802.1X port based (single host & multiple host)
VLAN Assignment
QoS Assignment
Dynamic VLAN Assignment, Auto QoS
MAC authentication & Web authentication
Guest VLAN
RADIUS Accounting
AMC Spoofing
IP MAC Binding
TACACS+
TACACS+ Accounting
IP Source Guard
ACL
Support DHCP snooping

Management

Switch Management:
- Telnet
- WEB management
- SNMP v1, v2, v3

Firmware and Configuration: Upgrade via TFTP/HTTP
Supports RMON (groups 1, 2, 3 and 9)
Supports DHCP Client
Supports DHCP Server
Supports DNS client, proxy
Supports HTTP Server
Supports HTTPs
Supports SSHv2
Supports System Syslog
Supports LLDP
Support sFlow

Warranty

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

For More Information
To find out more about Edge-Core Networks products and solutions, visit www.edge-core.com

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

To purchase Edge-Core Networks solutions, please contact your Edge-Core Networks representative at 886 3 563 8888 or authorized reseller.

* Future Release

Ordering Information

Optional Accessories

ET4201-SX
ET4201-LX
ET4201-LHX
ET4201-ZX
ET4202-SX
ET4202-LX

Product Description

Small Form Factor Pluggable (1000BASE-SX; Distance: 500m; Wavelength: 850nm)
Small Form Factor Pluggable (1000BASE-LX; Distance: 10km; Wavelength: 1310nm)
Small Form Factor Pluggable (1000BASE-LHX; Distance: 40km; Wavelength: 1310nm)
Small Form Factor Pluggable (1000BASE-ZX; Distance: 80km; Wavelength: 1550nm)
Small Form Factor Pluggable (1000BASE-SX; Distance: 500m; Wavelength: 850nm,DDM)
Small Form Factor Pluggable (1000BASE-LX; Distance: 10km; Wavelength: 1310nm.DDM)

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