

ECS2100 Series Gigabit Web-Smart Pro Switches

Product Highlight

- 2.65 cm high wall-mountable design (ECS2100-10PE)
- Fanless design (ECS2100-10T/P/PE/28T)
- 10G support (ECS2110-26T)
- Up to 740 W PoE (ECS2100-28PP)
- Dual firmware/configuration
- IPv4/IPv6
- IEEE 802.3az
- L3 static routing*
- Console port
- PoE timer
- Dashboard
- Auto firmware upgrade



*future release

Product Overview

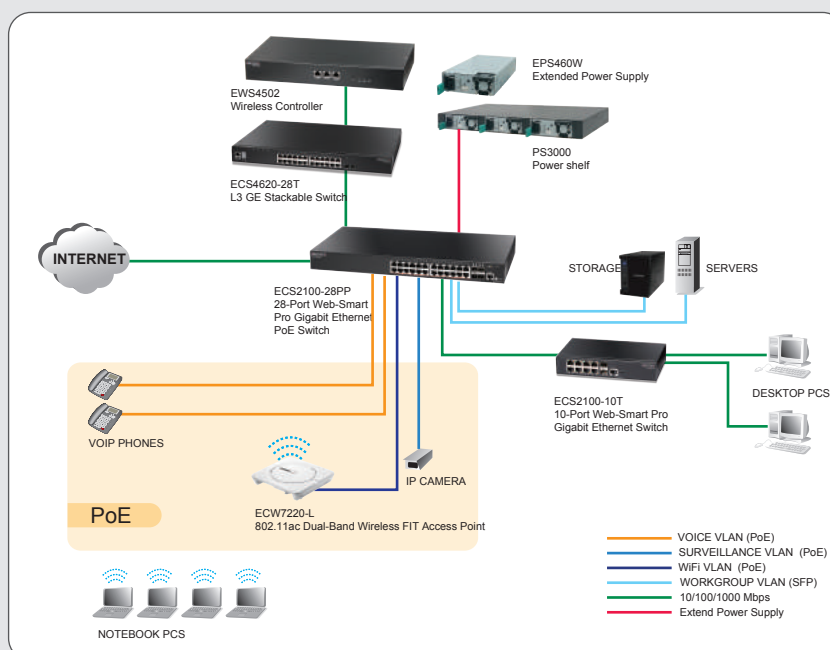
The ECS2100 Series is a range of web-smart switches designed for the SMB market. The switches can be deployed in different target network topologies, from small to large. Besides powerful software features, the switches provide a complete solution from 1G to 10G, including both non-PoE and PoE options.

The ECS2100 Series offers complete PoE solutions from 65 W to 740 W. The ECS2100-10PE is the most compact (height: 2.65 cm) managed PoE switch design, a cost-effective PoE switch with powerful software and security features. The switch can be mounted in many small spaces, on a wall or in a rack. The ECS2100-10P is a full-PoE fanless design switch, it supports up to 8 ports at 15.4 W, or 4 ports at 30 W to meet the increasing power demands of users. The ECS2100-28PP is an extendable PoE switch, it delivers a default 370 W of PoE power, but can be extended up to 740 W by purchasing a PS3000 (Power Shelf) and EPS460W (Extended Power Supply) to support future IP cameras, IP telephones, or access points.

The ECS2100 Series supports 8, 24, and 48 10/100/1000BASE-T ports, with each switch supporting 2 or 4 Gigabit SFP ports. The ECS2110-26P provides 2 10G uplink SFP ports to increase switch uplink bandwidth and meet the needs of future 802.11ac routers.

As well as IPv4 and IPv6 features, the ECS2100 supports L3 static routing. The ECS2100 includes the best green-saving technologies (IEEE 802.3az and Green-Ethernet). Using the Energy Efficient Ethernet standard, the switch automatically decreases power usage when network traffic is low.

Network Application



Feature Benefits

Hardware Features	Benefits
IEEE 802.3af/802.3at Standard PoE	The ECS2100 Series PoE switches all support IEEE 802.3af & 802.3at for your VoIP, surveillance, and Wi-Fi APs.
Integrated 2 or 4 Gigabit SFP or 2 10G SFP+ Uplinks	The ECS2100-28/52 switches support 4 integrated Gigabit SFP ports. Besides providing more uplink bandwidth, the SFP ports can be used for redundant links. The ECS2110-26T supports 2 10G SFP+ ports for 10G switch or server connectivity.
740 W PoE Power	The ECS2100-28PP can extend PoE power by purchasing accessories. The Power Shelf (PS3000) and External Power Supply (EPS460W) support 24-ports at 30 W to meet 740 W high PoE power demands.
Console Port	The ECS2100 Series includes a console port. All switches support multiple management access through CLI/SNMP/Web/Telnet.
Diag LED	The ECS2100 Series includes a Diag LED to help check the switch status. When the switch boots, it runs a self-check. When the LED is on green, it means the switch operating status is normal.
Compact Wall-Mountable Design	The ECS2100-10PE is compact, wall-mountable external power PoE switch design. The PoE powerbudget is 65W. The Switch can be easily deployed in small office with its height as 2.65 cm only as well as thin space requirement.
Software Features	Benefits
Dual Firmware/Configuration	The ECS2100 Series can save dual firmware/configuration files to provide redundancy and more security for users.
Static Routing	The ECS2100 supports L3 static routing to group different network segments and increase user flexibility.
Dynamic VLAN Assignment	Dynamic VLAN Assignment automatically assigns the same port to different VLANs to increase user convenience.
PoE Timer	The PoE Timer can define a PoE power schedule for different customer applications. This saves money and reduces unnecessary waste.
IGMP and MLD Snooping	IGMP/MLD snooping manages multicast streams to ensure high-quality, smooth video.
802.3az and Green-Ethernet	The ECS2100 Series supports the new IEEE 802.3az and Green Ethernet. Using the Energy Efficient Ethernet standard, the switch automatically decreases power usage when network traffic is low.
Multi Network Management	The ECS2100 Series supports CLI, Web, SNMP v1/v2c/v3, and Telnet management to provide multiple network management access. The switch supports a private MIB for detailed information.
Enhanced Security	The ECS2100 Series supports multiple security features, such as ACLs, storm control, 802.1X, port security, MAC filters, IP source guard, and AAA.
Comprehensive QoS	The ECS2100 Series supports 8 hardware queues, port-based QoS (IPv4/IPv6 DSCP), and DiffServ features to provide optimal real-time services.
DDOS Protection	The ECS2100 Series provides DDOS protection to avoid hacker attacks on your network.
Cable Diagnostics	Cable diagnostics check real-time cable status to find network problems immediately.
Auto Voice/Surveillance VLANs	The ECS2100 Series supports automatic voice and surveillance VLANs, providing VoIP and IP cameras the optimum network traffic usage.
Dashboard	The ECS2100 Series provides a fantastic feature called "Dashboard". It provides the several useful current switch status, like CPU, Memory utilization and Event & traffic status and so on. With those useful information, users could quickly overview and maintain the switch status .

Key Features

Performance and Scalability

The ECS2100 Series is a range of web-smart switches designed for the SMB market. The switches can be deployed in different target network topologies, from small to large. Besides powerful software features, the switches provide a complete solution from 1G to 10G, including both non-PoE and PoE options.

The ECS2100 Series offers complete PoE solutions from 65 W to 740 W. The ECS2100-10PE is the most compact (height: 2.65 cm) managed PoE switch design, a cost-effective PoE switch with powerful software and security features. The switch can be mounted many small spaces, on a wall or in a rack. The ECS2100-10P is a full-PoE fanless design switch, it supports up to 8 ports at 15.4 W, or 4 ports at 30 W to meet the increasing power demands of users. The ECS2100-28PP is an extendable PoE switch, it delivers a default 370 W of PoE power, but can be extended up to 740 W by purchasing a PS3000 (Power Shelf) and EPS460W (Extended Power Supply) to support future IP cameras, IP telephones, or access points.

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.

Multi Management

The ECS2100 Series supports CLI, Web, SNMP v1/v2c/v3, and Telnet management to provide multiple network management access. The switch supports a private MIB for detailed information.

This new Edgecore switch also supports management functions through both IPv4 and IPv6.

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.

Dynamic VLAN assignment for user authentication and location-independent access to the network.

Smart Network Deployment

Automatic Voice VLAN for quick deployment of VoIP, and automatic Video VLAN to help deploy your IP-based surveillance system. Static routing helps you set simple routes for control of your network resources. IGMP and MLD snooping provide better multicast services.

PoE Support

The ECS2100-10PE/10P/28P/28PP provide up to 30 Watts of power to attached devices, such as VoIP phones, wireless access points, and surveillance cameras, all over existing Ethernet cables. The switch can deliver up to 30 Watts on 2/4/6/12 ports, or 15.4 Watts on 4/8/12/24 ports.

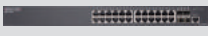
The ECS2100-28PP can extend its power budget up to 740 Watts by connecting an external power bank (PS3000 and EPS460W) to deliver 30 Watts on 24 ports.

The ECS2100-10PE is compact, wall-mountable external power PoE switch design. The PoE power budget is 65 W. The switch can be easily deployed in small office with its height as 2.65 cm only as well as thin space requirement.

ECS2100 Series Product Specifications

www.edge-core.com

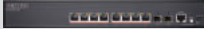
Features

Product Model		ECS2100-10T	ECS2100-28T	ECS2100-52T	ECS2110-26T
Product Image				Coming Soon	Coming Soon
Port	RJ-45 10/100/1000 Ports	8	24	48	24
	SFP or SFP+ Uplink Ports	2 (1G)	4 (1G)	4 (1G)	2 (10G)
	PoE Ports	X	X	X	X
	Console Port	1	1	1	1
Performance	Switching Capacity	20 Gbps	56 Gbps	104 Gbps	88 Gbps
	Forwarding Rate	14.9 Mpps	41.7 Mpps	77.4 Mpps	65.5 Mpps
	Flash Memory	32 MB	32 MB	32 MB	32 MB
	DRAM	256 MB	256 MB	256 MB	256 MB
	Packet Buffer	4.1 Mbits	4.1 Mbits	12 Mbits	12 Mbits
	MAC Address Table	8 K	8 K	16 K	16 K
	Jumbo Frames	10 K	10 K	10 K	10 K
	MTBF	1284,936 hrs	563,826 hrs	TBD	TBD
	Heat Dissipation	27.297 (Btu/H)	68.242 (Btu/H)	TBD	TBD
	Acoustic Noise	0 dB (A)	0 dB (A)	TBD	TBD
Power Supply	100-240 VAC, 50-60 Hz	O	O	O	O
	Max System Power Consumption (Watts)	8 W	20 W	X	X
PoE	IEEE 802.3af/802.3at	X	X	X	X
	PoE Power Budget	X	X	X	X
	PoE Timer	X	X	X	X
Mechanical	Rack Space	9"	19"	19"	19"
	Form Factor	Rackmount	Rackmount	Rackmount	Rackmount
	Dimension (W x D x H)	19.6 x 11.7 x 3.6 cm (7.7 x 4.6 x 1.4 in)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)
	Weight	816 g (1.81 lb)	2.2 kg (4.86 lb)	TBD	TBD
Environmental	Operating Temperature	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
	Storage Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
	Altitude	3000 m	3000 m	3000 m	3000 m
	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%
	WEEE	O	O	O	O
	RoHS	O	O	O	O

ECS2100 Series Product Specifications

www.edge-core.com

Features

Product Model		ECS2100-10PE	ECS2100-10P	ECS2100-28P	ECS2100-28PP
Product Image					
Port	RJ-45 10/100/1000 Ports	8	8	24	24
	SFP Uplink Ports	2 (1G)	2 (1G)	4 (1G)	4 (1G)
	PoE Ports	8	8	24	24
	Console Port	1	1	1	1
Performance	Switching Capacity	20 Gbps	20 Gbps	56 Gbps	56 Gbps
	Forwarding Rate	14.9 Mpps	14.9 Mpps	41.7 Mpps	41.7 Mpps
	Flash Memory	32 MB	32 MB	32 MB	32 MB
	DRAM	256 MB	256 MB	256 MB	256 MB
	Packet Buffer	4.1 Mbits	4.1 Mbits	4.1 Mbits	4.1 Mbits
	MAC Address Table	8 K	8 K	8K	8K
	Jumbo Frames	10 K	10 K	10 K	10 K
	MTBF	1,393,424 hrs	2,196,413 hrs	681,017 hrs	370,636 hrs
	Heat Dissipation	272.966 (Btu/H)	545.933 (Btu/H)	887.141 (Btu/H)	1678.743 (Btu/H)
	Acoustic Noise	0 dB (A)	0 dB (A)	N/A	N/A
Power Supply	100-240 VAC, 50-60 Hz	External Power 54V, 1.67A	O	O	O
	Max System Power Consumption (Watts)	80 W	160 W	260 W	490 W (950 W)
PoE	IEEE 802.3af/802.3at	O	O	O	O
	PoE Power Budget	65 W	125 W	200 W	370 W (740 W)
	PoE Timer	O	O	O	O
Mechanical	Rack Space	10"	13"	19"	19"
	Form Factor	Wallmount	Rackmount	Rackmount	Rackmount
	Dimension (W x D x H)	24 x 15.5 x 2.65 cm (9.4 x 6.1 x 1.04 in)	33 x 20.4 x 4.26 cm (12.9 x 8 x 1.67 in)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)
	Weight	973 g (2.15 lb)	2.4 kg (5.34 lb)	2.8 kg (6.18 lb)	3.1 kg (6.85 lb)
Environmental	Operating Temperature	0°C to 50°C	0°C to 40°C	0°C to 50°C	0°C to 50°C
	Storage Temperature	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C	-40°C to 70°C
	Altitude	3000 m	3000 m	3000 m	3000 m
	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%
	WEEE	O	O	O	O
	RoHS	O	O	O	O

Features

L2 Features

Spanning Tree Protocol:
 IEEE 802.1D Spanning Tree Protocol (STP)
 IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
 IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP)
 Loopback Detection
 BDPU Filter/Guard
 BDPU Forward
 Root Guard
 VLANs:
 Supports 4K IEEE 802.1Q VLANs
 Port-Based/MAC-Based/Protocol-Based VLANs
 Guest VLAN
 Auto Voice VLAN
 Auto Surveillance VLAN*
 Link Aggregation:
 Static Trunk
 IEEE 802.3ad Link Aggregation Control Protocol (LACP)
 IGMP Snooping:
 IGMP v1/v2/v3 snooping
 IGMP Filtering/Throttling
 IGMP Queries
 IGMP Immediate leave
 MLD Snooping
 LLDP/LLDP-MED
 Green-Saving
 IEEE 802.3az
 Cable Length
 No Link Power-Saving
 Jumbo Frame packet
 Cable Diagnostic

L3 Features

Static Routing*

QoS Features

Rate Limiting
 Priority Queues Schedule (WRR/Strict Priority/Hybrid QoS)
 Port-Based QoS
 IPv4/IPv6 DSCP
 DiffServ
 Auto VOIP
 Auto Video
 8 HW Queues per port
 Dynamic QoS

IPv6

IPv4/IPv6 Dual Protocol Stack
 IPv6 Management
 IPv6 Ping/Trace
 IPv6 Telnet
 IPv6 Syslog
 IPv6 TFTP
 HTTP over IPv6
 SNMP over IPv6

*future release

PoE

Support IEEE 802.3af (15.4 W)/IEEE802.3at (30W) on each port
 (Total PoE Power Budget as follows):
 ECS2100-10PE (65 W)
 ECS2100-10P (125 W)
 ECS2100-28P (200 W)
 ECS2100-28PP (370 W)
 (Up to 740W using PS3000+EPS460W)
 Dynamic Power Allocation
 Auto disable after exceeding power budget
 PoE Timer

Security

DDOS Protection
 CPU Guard (CPU Protection)
 Port Isolation
 Port Mirror (One to One, One to Many)
 Remote Mirror
 Storm Control
 Broadcast/Multicast/Unknown Storm Control
 IEEE 802.1X
 ACL
 Ingress Only
 L2/L3/L4
 ACL entry: 512
 IPv4/IPv6
 TCP/UDP-Based, MAC-Based ACL
 Port Security
 MAC Filter
 MAC Authentication
 Port max count per port
 Dynamic VLAN Assignment
 Dynamic ARP Inspection
 AAA (RADIUS/TACACS+)
 IP Source Guard
 SSH v1.5/v2.0
 SSL v1/v2/v3
 SSL IPv4/IPv6
 SFlow*
 (10T/P/PE/28T/28P/28PP Trace on port (Ingress only)
 (52T/26T trace multi port)

Management

System password protection
 NTP/SNTP
 Dual Image/Configuration
 Configuration upload/download (HTTP/TFTP/FTP)
 Firmware upload/download (HTTP/TFTP/FTP)
 Auto Firmware Upgrade
 RMON (groups 1,2,3 and 9)
 SNMP
 SNMP Trap
 SNMP v1/v2/v3
 SNMP Standard/Private MIB
 Management Access (Console/SNMP/Web /Telnet)
 Memory Flash Log
 Event/Error Log/Syslog
 DHCP v4/v6 Client/DHCP Snooping
 DHCP Snooping Option82
 Dynamic Provision (via Option 66,67)
 DHCP Relay v4 (v6*)
 Port Mirroring (One to One) TX/RX (both)
 DNS Client without DNS proxy

Features

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

For More Information

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

About Edgecore Networks Corporation

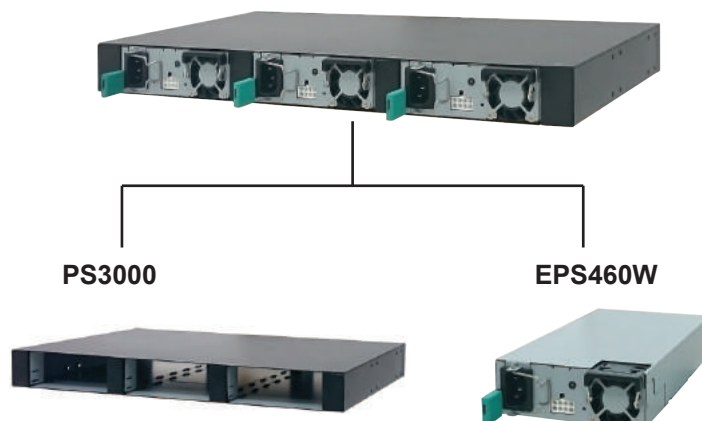
Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves 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 authorized resellers.

© Copyright 2016 Edgecore Networks Corporation. The information contained herein is subject to change without notice. This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered by Edgecore Networks Corporation. Edgecore Networks Corporation shall not be liable for technical or editorial errors or omissions contained herein.

Accessories



Installation



Ordering Information

Optional Accessories	Product Description
PS3000	Power Shelf (For ECS2100-28PP)
EPS460W	Entended Power Supply 460 W (For ECS2100-28PP)
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)
ET4201-ZX	1Gbps, Small Form Factor Pluggable (Distance: 80 km; Wavelength: 1550 nm)
ET4202-SX	1Gbps, Small Form Factor Pluggable (Distance: 500 m; Wavelength: 850 nm, DDM)
ET4202-LX	1Gbps, Small Form Factor Pluggable (Distance: 10 km; Wavelength: 1310nm, DDM)
ET5402-SR	10Gbps, Small Form Factor Pluggable (Distance: 300 m; Wavelength: 850 nm)
ET5402-LR	10Gbps, Small Form Factor Pluggable (Distance: 10 km; Wavelength: 1310 nm)
ET5402-ER	10Gbps, Small Form Factor Pluggable (Distance: 40 km; Wavelength: 1550 nm)
ECView Pro	SNMP Network Management Software
120500000027A	Console Cable