

ECS2100-10P RAI Gigabit PoE Switch

Product Highlight

- Fanless design
- Dual firmware/configuration
- IPv4/IPv6
- IEEE 802.3az
- Console port
- PoE timer
- Dashboard
- Auto firmware upgrade

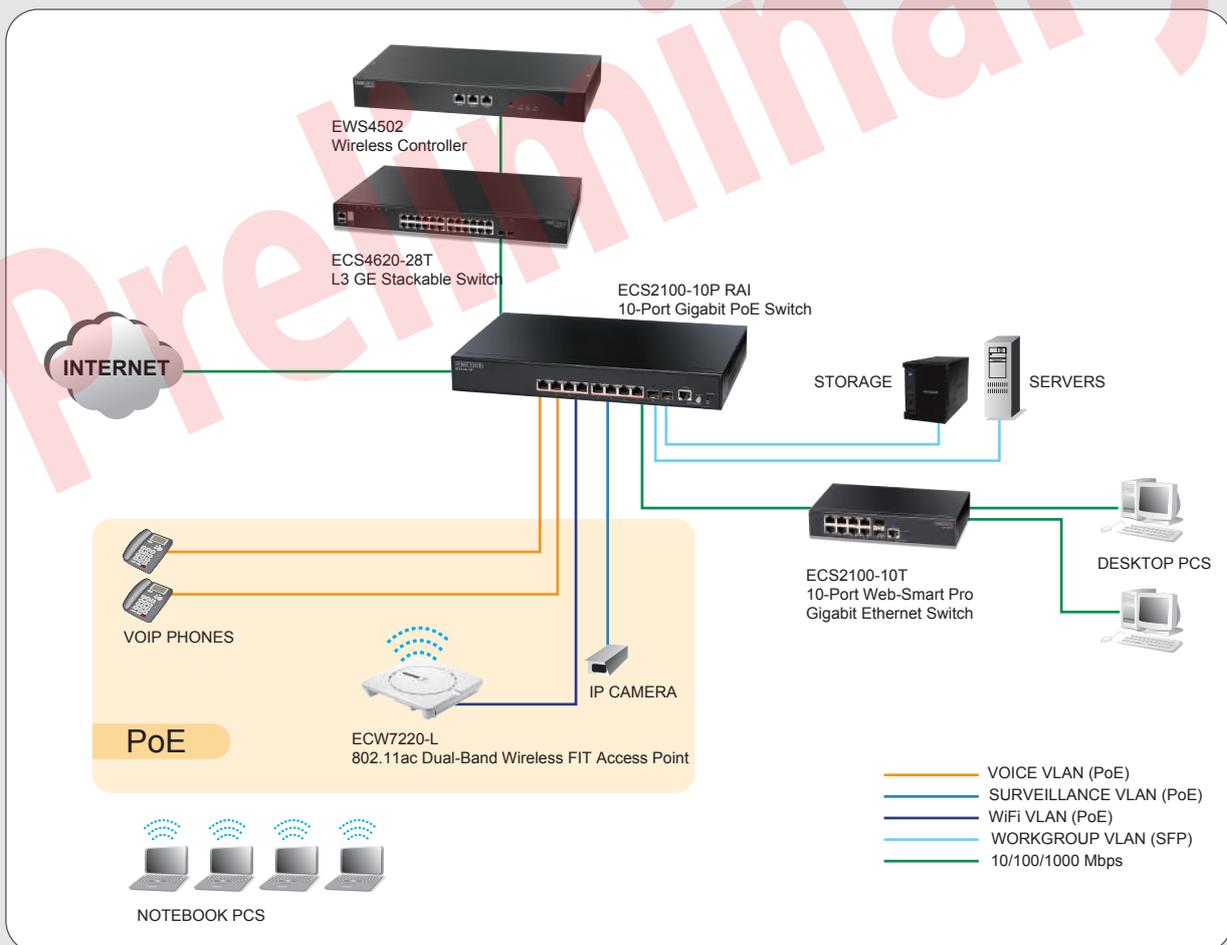


Product Overview

The ECS2100-10P is a PoE switch designed for the SMB market. The switch can be deployed in different target network topologies, from small to large. Besides powerful software features, the switch provides a complete solution from 1G and PoE options.

The ECS2100-10P offers complete PoE solutions to 100 W. The ECS2100-10P RAI is a full-PoE fanless design switch, it supports total power budget up to 100W to meet the increasing power demands of users.

Network Application



Gigabit PoE Switch

Key Features and Benefits

Hardware Features	Benefits
IEEE 802.3af/802.3at Standard PoE	The ECS2100-10P RAI PoE switch supports IEEE 802.3af and 802.3at for your VoIP, surveillance, and Wi-Fi APs.
Integrated 2 Gigabit SFP	The ECS2100-10P RAI PoE switch supports 2 integrated Gigabit SFP ports. Besides providing more uplink bandwidth, the SFP ports can be used for redundant links.
Console Port	The ECS2100-10P RAI includes a console port. All switches support multiple management access through CLI/SNMP/Web/Telnet.
Diag LED	The ECS2100-10P 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.
Software Features	Benefits
Dual Firmware/Configuration	The ECS2100-10P RAI can save dual firmware/configuration files to provide redundancy and more security for users.
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 ECS2100-10P RAI 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 ECS2100-10P RAI 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 ECS2100-10P RAI supports multiple security features, such as ACLs, storm control, 802.1X, port security, MAC filters, IP source guard, and AAA.
Comprehensive QoS	The ECS2100-10P RAI supports 8 hardware queues, port-based QoS (IPv4/IPv6 DSCP), and DiffServ features to provide optimal real-time services.
DDOS Protection	The ECS2100-10P RAI 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 VLANs	The ECS2100-10P RAI supports automatic voice VLANs, providing VoIP and IP cameras the optimum network traffic usage.
Dashboard	The ECS2100-10P RAI 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 .

Features

Performance and Scalability

The ECS2100-10P is a range of PoE switch designed for the SMB market. The switch can be deployed in different target network topologies, from small to large. Besides powerful software features, the switch provides a complete solution from 1G and PoE options.

The ECS2100-10P offers complete PoE solutions to 100 W. The ECS2100-10P RAI is a full-PoE fanless design switch, it supports total power budget up to 100W to meet the increasing power demands of users.

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 ECS2100-10P 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 ECS2100-10P RAI 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 100 W PoE power budget.

Features

Product Model		ECS2100-10P RAI
Product Image		
Port	RJ-45 10/100/1000 Ports	8
	SFP+ Uplink Ports	2 (1G)
	PoE Ports	8
	Console Port	1
Performance	Switching Capacity	20 Gbps
	Forwarding Rate	14.9 Mpps
	Flash Memory	32 MB
	DRAM	256 MB
	Packet Buffer	4.1 Mbits
	MAC Address Table	8 K
	Jumbo Frames	10 K
	MTBF	2,196,413 hrs
	Heat Dissipation	545.933 (Btu/H)
	Acoustic Noise	0 dB (A)
	Surge Protection	Ethernet : ± 2KV Power: ± 2KV (line-earth), Ethernet : +/- 1KV (line-line)
Power Supply	100-240 VAC, 50-60 Hz	O
	Max System Power Consumption (Watts)	160 W
PoE	IEEE 802.3af/802.3at	O
	PoE Power Budget	0°C~40°C/125 W, 0°C~45°C/100 W,
	PoE Timer	O
Mechanical	Rack Space	13"
	Form Factor	Rackmount
	Dimension (W x D x H)	33 x 20.4 x 4.26 cm (12.9 x 8 x 1.67 in)
	Weight	2.4 kg (5.34 lb)
Environmental	Operating Temperature	0°C to 45°C
	Storage Temperature	-40°C to 70°C
	Altitude	3000 m
	Operating Humidity (non-condensing)	10% to 90%
	Storage Temperature (non-condensing)	10% to 90%
	WEEE	O
	RoHS	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
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

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

PoE

Support IEEE 802.3af (15.4 W)/IEEE802.3at (30W) on each port
Total PoE Power Budget: ECS2100-10P RAI (100 W)
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

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
Port Mirroring (One to One) TX/RX (both)
DNS Client without DNS proxy

*future release

Features

Safety

UL 60950-1

Electromagnetic Compatibility

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

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
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: 550 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