

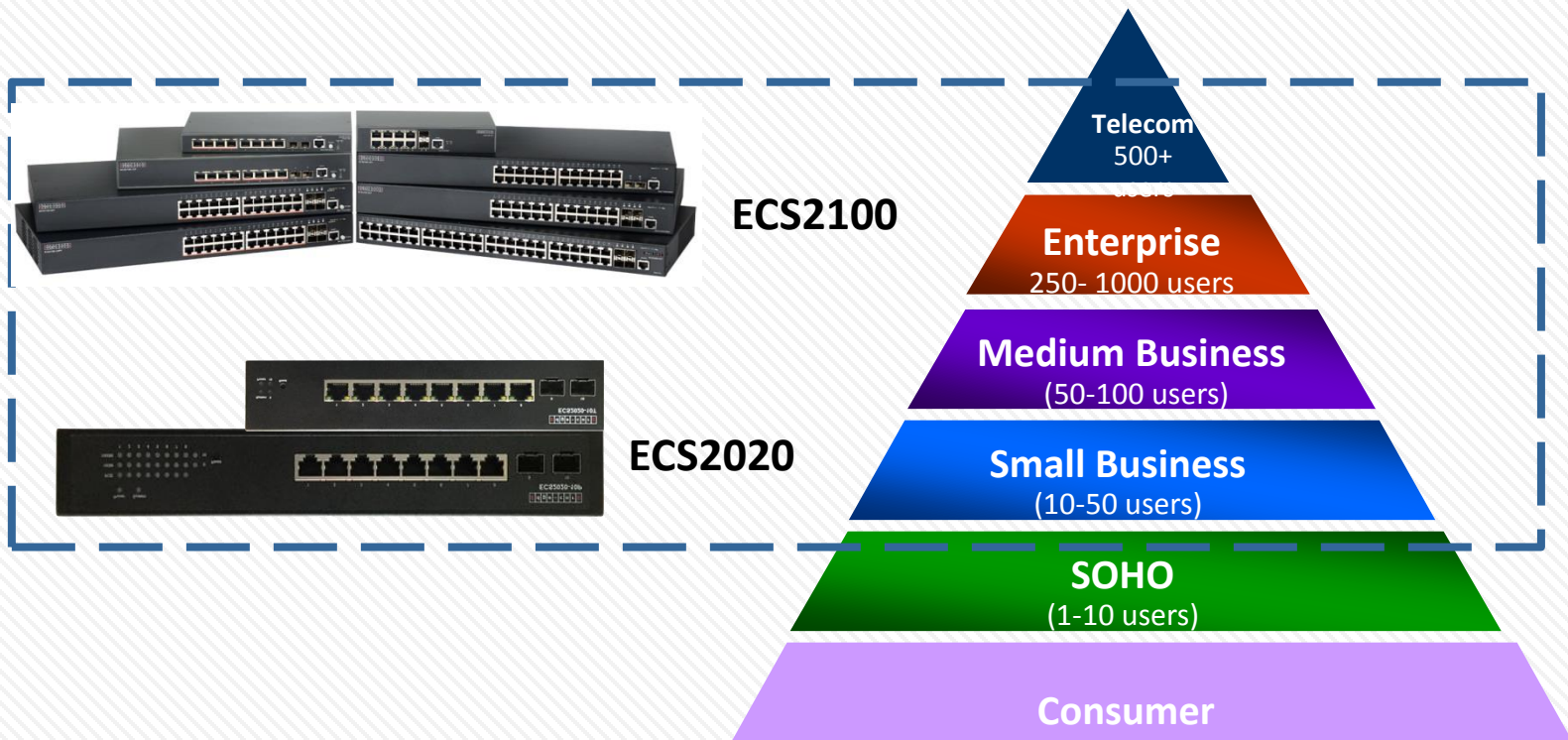


***ECS2020 Web Smart Switch Series
Introduction***

Albert Li

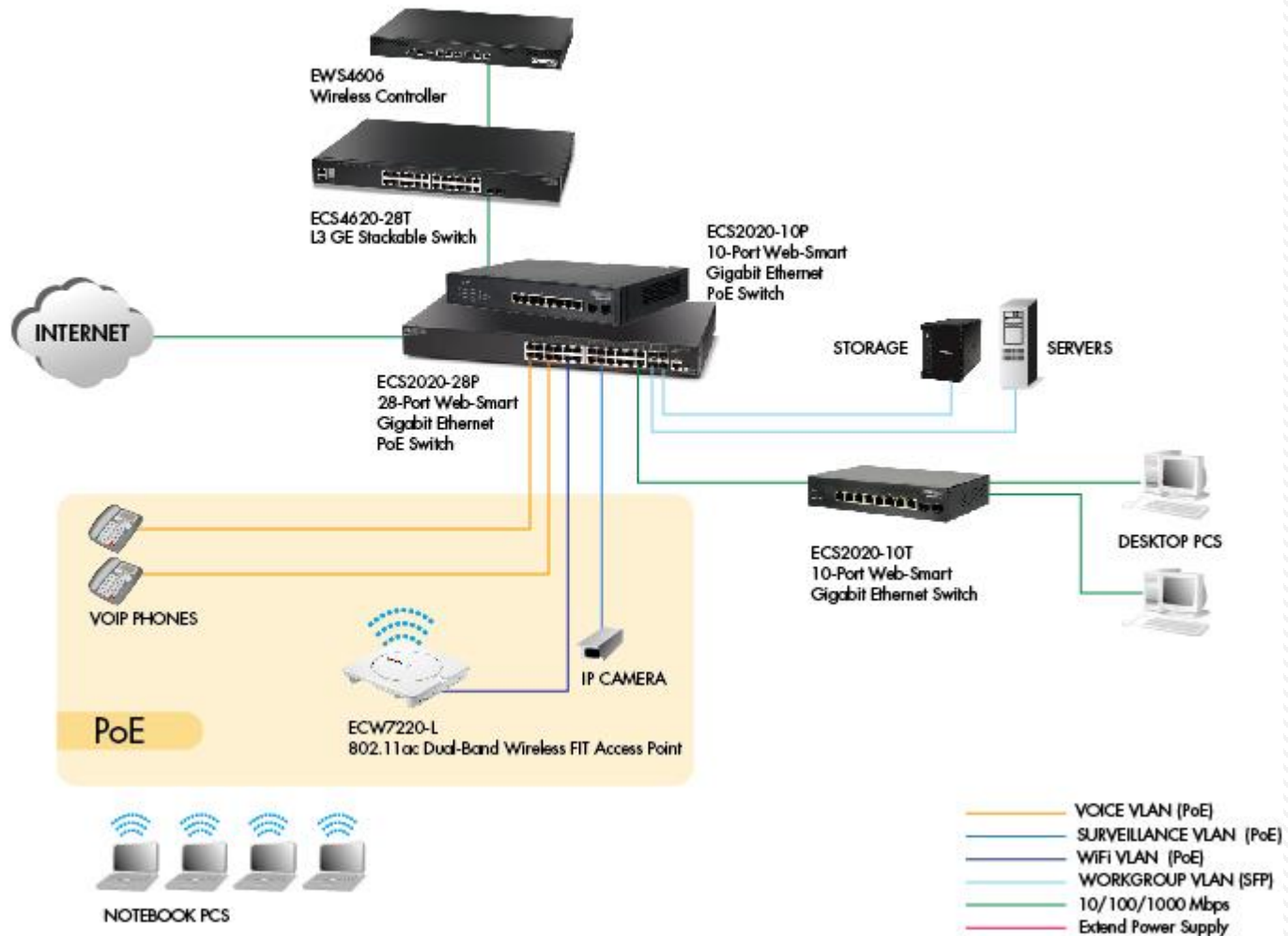
SMB & Enterprise Market

- Target Customers: SMB & Enterprise Market (10 to 500 users)
- Bring Gigabit / 10G to your office to enhance the office performance with option of PoE and non-PoE, offering advanced features, such as IPv6, SNMP/CLI management and IEEE802.3az



Network Application

Network Application



ECS2020 Target Market

- ECS2020 Series is EC **new generation cost-effective web-smart series managed switch**.
- ECS2020 provides the plentiful of L2 management features and could be managed by web and CLI via telnet.
- With powerful software & hardware features, ECS2020 is designed for SMB & Enterprise market and provides complete solution from **1G**, including **both non-PoE and PoE** options.



HOTEL



Office



Shopping Mail



Hospital



Campus

ECS2100 Series (On-Sale)

Family members:







Model Name	Dimension(I/E)	PoE Power Budget	Description
ECS2100-10T	19*11*3.6cm	N/A	8 x 1G RJ-45 + 2x 1G SFP ports
ECS2100-10PE	24X15.5X2.65cm	65W	8 x 1G RJ-45 + 2x 1G SFP ports
ECS2100-10P	33*20.5*4.4cm	125W	8 x 1G RJ-45 + 2x 1G SFP ports
ECS2100-28T	44*22*4.4cm	N/A	24 x 1G RJ-45 + 4 x 1G SFP ports
ECS2100-28P	44*22*4.4cm	200W	24 x 1G RJ-45 + 4 x 1G SFP ports
ECS2100-28PP	44*22*4.4cm	370W(740W)	24 x 1G RJ-45 + 4 x 1G SFP ports
ECS2100-52T	44*22*4.4cm	N/A	48 x 1G RJ-45 + 4 x 1G SFP ports
ECS2110-26T	44*22*4.4cm	N/A	24 x 1G RJ-45 + 2 x 10G SFP ports

ECS2020 Series (On-Sale)

Family members:



Model Name	Dimension(I/E)	PoE Power Budget	Description
ECS2020-10T 	21.6*13.3*4.2cm	N/A	8 x 1G RJ-45 + 2x 1G SFP ports
ECS2020-10P 	29.3*18.0*4.4cm	70W	8 x 1G RJ-45 + 2x 1G SFP ports
ECS2020-28T 	44.0*20.8*4.4cm	N/A	24 x 1G RJ-45 + 4x 1G SFP ports
ECS2020-28P 	44.0*20.8*4.4cm	190W	24 x 1G RJ-45 + 4 x 1G SFP ports

ECS2020 & ECS2100 Comparison

Model	ECS2100 Series	ECS2020 Series
Target Market	Enterprise	SMB
Management	CLI/Web/SNMP/Telnet	Web/SNMP/Telnet
Family Group	10T/28T/52T/2*10G 10P/10PE/28P/28PP	10T/28T 10P/28P
Software Level	L2 /L3 Lite (Static routing)	L2 Only
Language	English	English/TW/CN
Surge Protection	1.5KV (Ethernet)	4KV (Ethernet)
IGMP / MLD Snooping / Jumbo Frame / Rate limiting	YES	YES
Cable Diag/ MAC filter IPv4 /IPv6	YES	YES
Advanced Features	Static Routing, mDNS , QinQ IP Clustering (Software Stacking)	No

ECS2020 & ECS2100 Comparison

Model	ECS2100 Series	ECS2020 Series
RJ45 Console Port	YES	NO
Flash Memory	32MB	16MB
RAM	256MB	128MB
RJ45 Console Port	YES	NO
Diag LED	YES	System LED
Temperature Range	0°C to 40°C (10P/28PP) 0°C to 50°C(Others)	0°C to 50°C (All)
MAC Table	8K 16K (ECS2100-52T/ECS2110-26T)	8K (All)
Fan / Fan-less	Fan-less Fan(ECS2100-28P/28PP/52T)	Fan-less Fan(ECS2020-28P)
VLAN	4096	4096
Power	Internal Power	Internal Power
Dual Firmware / Configuration	YES	Dual Configuration
Cable Diagnostic	YES	YES
DDOS Protection	YES	YES
802.3az	YES	YES
Static routing	YES	NO
IP Clustering	YES	NO
QinQ	YES	NO

Top 7 Key Features & Benefit

HW/SW Features	Benefits
Multiple management	The ECS2020 series support multiple management access through SNMP/Web/Telnet /CLI CLI could operate via telnet (no console port)
System LED	The ECS2020 Series includes a System 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 operating status is normal .
PoE Solution	ECS2020-10P 70W (Fan-less) ECS2020-28P 190W (Fan)
Dual configuration	The ECS2020 series have 128MB RAM which it could save dual configuration files to provide redundant and more security for users.
Extensive L2 features	ECS2020 series provides a complete lineup of L2 features, IGMP Snooping, Port Mirroring, Spanning Tree, and Link Aggregation Control Protocol (LACP).Loopback Detection and Cable Diagnostics.
Multiple Language	The ECS2020 support Simplified /Traditional Chinese & English Language.
Comprehensive security	The ECS2020 Series supports multiple security features, such as ACLs, storm control, 802.1X, port security, MAC filters, IP source guard, and AAA.

ECS2020 Web GUI

Browser address bar: <http://192.168.2.10/switch.htm> ECS2020-10P

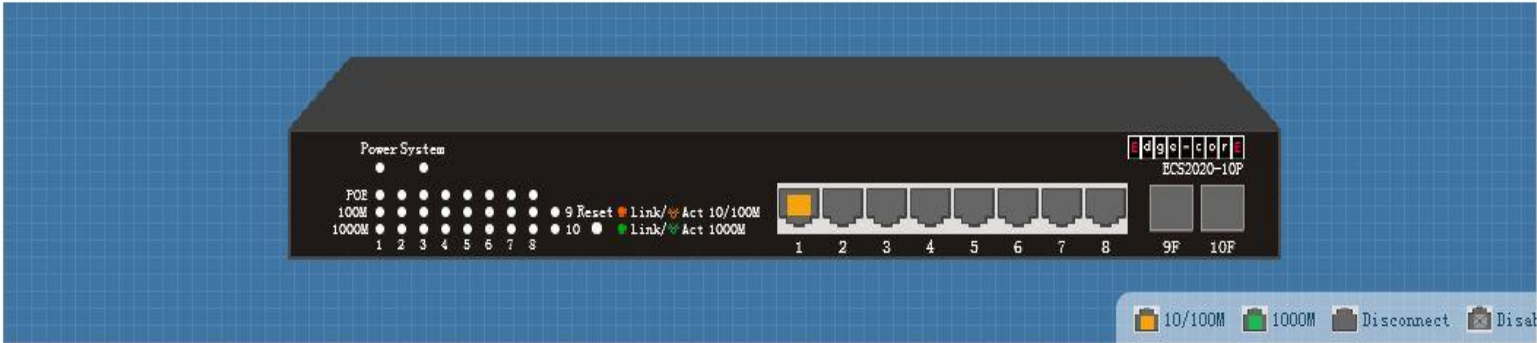
Edge-core Current User: admin Log Out

System Home

Quick Configuration

- + Port Management
- + VLAN Management
- + Fault / Safety
- + System Management
- + PSE System
- + QoS
- + EEE

Model name: ECS2020-10P CPU: 33% Available Memory: 66MB Available Flash: 3MB Hardware Version: B1 Serial number: Date/Time: 2000-1-1 00:05:51 Software Version: v1.0.0.0 Mac address: 00E0.4C00.0000



Port Information | Flow Trend | Device Configuration | Port Statistics

Keyword: Search Refresh

Port	Description	Input Flow(Bps)	Output Flow (Bps)	Status	Connection Status	VLAN	Trunk Port	Edit
Gi 0/1		OK	OK	Enabled	💡 Connected	1	No	Check the Flow Trend
Gi 0/2		OK	OK	Enabled	🚫 Not Connected	1	No	Check the Flow Trend
Gi 0/3		OK	OK	Enabled	🚫 Not Connected	1	No	Check the Flow Trend
Gi 0/4		OK	OK	Enabled	🚫 Not Connected	1	No	Check the Flow Trend
Gi 0/5		OK	OK	Enabled	🚫 Not Connected	1	No	Check the Flow Trend

Model name: ECS2020-10P Hardware Version: B1 Soft Version: v1.0.0.0

Case Study- 3,000 units of Edge-Core Networks' ECS2100-10P will deploy at 400 Railway stations in India for RailTel Project

RailTel Corporation a "Mini Ratna (Category-I)" PSU is **one of the largest neutral telecom infrastructure providers** in the country owning a Pan-India optic fiber network on exclusive Right of Way (ROW) along Railway track



RailTel has taken a lead in providing fast Wi-Fi for the use of passengers at **(400) Railway stations**. **Railwire Wi-Fi** will be available to any user who has a working mobile connection on a smartphone.

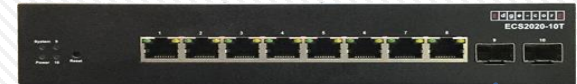
BRINGING
INTERNET TO
MILLIONS OF
PASSENGERS IN
RAILWAY STATIONS



8-port GE Web Smart Switch

Model No.	Product Description
ECS2020-10T	8 port 10/100/1000BaseT + 2 1000BaseX SFP Internal Power Supply

- Fan-less, reliable, silent
- Multi management (FTP, Web, SNMP (Public/ Private MIB))
- Voice / Surveillance VLAN
- Port Security / AAA (RADIUS/TACACS+) /Port Isolation
- IGMP Snooping v1/v2/v3 & MLD Snooping
- IEEE802.3az Green Saving
- IPv4 / IPv6 Support



Competitive Analysis-ECS2020-10T

Brand	Edgecore	Netgear	DLINK	Zyxel	TP-Link
Model	ECS2020-10T	GS108Tv2	DGS-1210-10	GS1900-8	TL-SG2008
1 Gigabit port	8	8	8	8	8
1 Gigabit SFP Port	2	2	2	0	0
RJ45 Console Port	NO	NO	NO	NO	NO
System LED	YES	NO	NO	NO	NO
Power	Internal Power	External Power	Internal Power	External Power	External Power
PoE Power Budget	N/A	N/A	N/A	N/A	N/A
Temperature Range	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 40°C
MAC Table	8K	4K	16K	8K	8K
Fan / Fanless	Fan-less	Fan-less	Fan-less	Fan-less	Fan-less
VLAN	4096	64	4K	4K	4K
Dual Configuration	YES	NO	N/A	YES	NO
Cable Diagnostic	YES	NO	YES	NO	NO
DDOS Protection	YES	NO	YES	YES	YES
QoS	8 queues	NO	8 queues	YES (N/A)	4 queues
IPv6	YES	NO	YES	YES	NO

8-port GE Web Smart PoE Switch

Model No.	Product Description
ECS2020-10P	8 port 10/100/1000BaseT PoE +2 1000BaseX SFP Internal Power Supply

- **Fan-less**, reliable, silent
- PoE power budget 70W
 - 30W for 2 ports
 - 15.4W for 4 ports
 - 6.5 W for 8 ports
- Multi management (FTP, HTTP, SNMP) (Standard / Private MIB)
- Voice / Surveillance VLAN
- Port Security / AAA (RADIUS/TACACS+) /Port Isolation
- IGMP Snooping v1/v2/v3 & MLD Snooping
- IEEE802.3az Green Saving
- IPv4 / IPv6 Support



Competitive Analysis-ECS2020-10P

Brand	Edgecore	Netgear	DLINK	Zyxel	TP-Link
Model	ECS2020-10P	GS110TP	DGS-1210-10P	GS1200-8HP	TL-SG2210P
1 Gigabit port	8	8	8	8	8
1 Gigabit SFP Port	2	2	2	0	2
RJ45 Console Port	NO	NO	NO	NO	NO
System LED	YES	NO	NO	NO	NO
Power	Internal Power	External Power	Internal Power	External Power	External Power
PoE Power Budget	70W (802.3af & at)	46W (802.3af & at)	78W (802.3af & at)	60W (802.3af & at)	53W (802.3af only)
Temperature Range	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 40°C	0°C to 40°C
MAC Table	8K	4K	16K	8K	8K
Fan / Fanless	Fan-less	Fan-less	Fan-less	Fan-less	Fan-less
VLAN	4096	64	4K	4K	4K
Dual Configuration	YES	NO	N/A	YES	NO
Cable Diagnostic	YES	NO	YES	NO	NO
DDOS Protection	YES	YES	YES	NO	NO
QoS	8 queues	YES (N/A)	8 queues	NO (N/A)	4 queues
IPv6	YES	NO	YES	NO	NO
PoE Timer	YES	NO	YES	NO	NO

28-port GE Web Smart Switch

Model No.	Product Description
ECS2020-28T	24 port 10/100/1000BaseT + 4 1000BaseX SFP Internal Power Supply

- Fan-less, reliable, silent
- Multi management (FTP, Web, SNMP (Public/ Private MIB))
- Voice / Surveillance VLAN
- Port Security / AAA (RADIUS/TACACS+) /Port Isolation
- IGMP Snooping v1/v2/v3 & MLD Snooping
- IEEE802.3az Green Saving
- IPv4 / IPv6 Support



Competitive Analysis-ECS2020-28T

Brand	Edgecore	Netgear	DLINK	Zyxel	TP-Link
Model	ECS2020-28T	GS724Tv4	DGS-1200-28	GS1920-24	TL-SG2424
1 Gigabit port	24	24	24	24	24
1 Gigabit SFP Port	4	2	4	0	4
System LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal Power	Internal Power
PoE Power Budget	N/A	N/A	N/A	N/A	N/A
Temperature Range	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 40°C
MAC Table	8K	4K	16K	8K	8K
Fan / Fanless	Fan-less	Fan-less	Fan-less	Fan-less	Fan-less
VLAN	4096	256	4K	4K	4K
Dual Configuration	YES	YES	N/A	YES	YES
Cable Diagnostic	YES	NO	YES	NO	NO
DDOS Protection	YES	NO	YES	NO	NO
DHCP Server/ Relay/ Option82	YES	NO	DHCP Server Only	DHCP Relay Only	NO
QoS	8 queues	YES	8 queues	YES (N/A)	8 queues
IPv6	YES	YES	YES	YES	YES
Static Routing	NO	YES	YES	NO	YES

28-port GE Web Smart PoE Switch

Model No.	Product Description
ECS2020-28P	24 port 10/100/1000BaseT PoE + 4 1000BaseX SFP Internal Power Supply

- **Fan** reliable, silent
- PoE power budget 190W
 - 30W for 6 ports
 - 15.4W for 12 ports
 - 6.5 W for 24 ports
- Multi management (FTP, HTTP, SNMP) (Standard / Private MIB)
- Voice / Surveillance VLAN
- Port Security / AAA (RADIUS/TACACS+) /Port Isolation
- IGMP Snooping v1/v2/v3 & MLD Snooping
- IEEE802.3az Green Saving
- IPv4 / IPv6 Support



Competitive Analysis-ECS2020-28P

Brand	Edgecore	Netgear	DLINK	Zyxel	TP-Link
Model	ECS2020-28P	GS728TP	DGS-1210-28P	GS1900-24HP	TL-SG2424P
1 Gigabit port	24	24	24	24	24
1 Gigabit SFP Port	4	4	4	0	4
System LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal Power	Internal Power
PoE Power Budget	190W	192W	193W	170W	192W
Temperature Range	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 40°C
MAC Table	8K	4K	16K	8K	8K
Fan / Fanless	Fan	Fan	Fan	Fan	Fan
VLAN	4096	256	4K	4K	4K
Dual Configuration	YES	YES	N/A	YES	Dual Image
Cable Diagnostic	YES	YES	YES	NO	NO
DDOS Protection	YES	YES	YES	NO	YES
DHCP Server/ Relay/ Option82	YES	NO	DHCP Server Only	DHCP Relay Only	DHCP Relay
QoS	8 queues	YES	8 queues	YES (N/A)	8 queues
IPv6	YES	YES	YES	YES	YES
Static Routing	NO	YES	YES	NO	YES

ECS2020 Software Features(I)

- Switching Feature
 - Flow control
 - Storm Control
(Broadcast/ Multicast/ Unknown Unicast)
 - Auto MDI/MDIX
 - Spanning Tree Protocol
 - IEEE 802.1D /.1w/.1s
 - STP fast forwarding
 - BPDU Guard/BPDU filtering
 - Root Guard
 - BPDU transparent
 - Loopback detection
- VLAN
 - 4K VLAN (256 concurrent)
 - Port-based VLAN
 - 802.1Q VLAN
 - MAC-based VLAN
 - Voice / Surveillance VLAN
 - Auto VLAN Assignment
- Port Trunk
 - Static trunk
 - IEEE 802.3ad LACP
- QoS
 - 8 Hardware queues
 - 802.1p CoS
 - CoS based on IP precedence, DSCP, TCP/UDP Port, ACL
 - WRR/Strict or Hybrid
 - DiffServ
 - Ingress traffic policing
 - Rate limiting
- Multicast control
 - IGMP snooping v1/v2/v3
 - IGMP Querier
 - IGMP snooping filtering/throttling
 - IGMP snooping proxy
 - Immediate leave
 - MLD snooping v1/v2

ECS2020 Software Features(II)

- Security
 - Denial of Service Protection
 - CPU Guard
 - Port Isolation
 - MAC filtering
 - Port Mirror
 - Storm Control
(Broadcast/Multicast/Unknown_Unicast)
 - 802.1x
 - Access Control List
 - Port Security
 - MAC Filter
 - Dynamic ARP Inspection
 - DHCP snooping/snooping 82
 - AAA (Authentication, Authorization, Accounting)
 - SSH v1/v2
 - SSL/HTTPS (IPv4/IPv6)
 - Management Access(Telnet/WEB/SNMP v1/v2/v3)
- Management
 - System password protection
 - Cisco like CLI (Telnet)
 - Time zone for SNTP
 - Telnet/WEB/SNMP v1/v2/v3
 - RMON(1,2,3,9)
 - SNMP (Standard / Private MIB)
 - TFTP/HTTP download
 - DHCP dynamic provision (option 66&67)
 - DHCP client/option 82 relay
 - DHCP Snooping
 - Event/error log, system log
 - LLDP (802.1ab)
 - Cable diagnostic
 - PoE Timer
 - 802.3az EEE
- IPv6
 - IPv4/IPv6 Dual Stack
 - IPv6 over Ethernet
 - ICMP v6
 - IPv6 Neighbor Discovery
 - IPv6 (Ping / Tracer)
 - IPv6 Telnet
 - IPv6 Syslog
 - SNMP over IPv6

