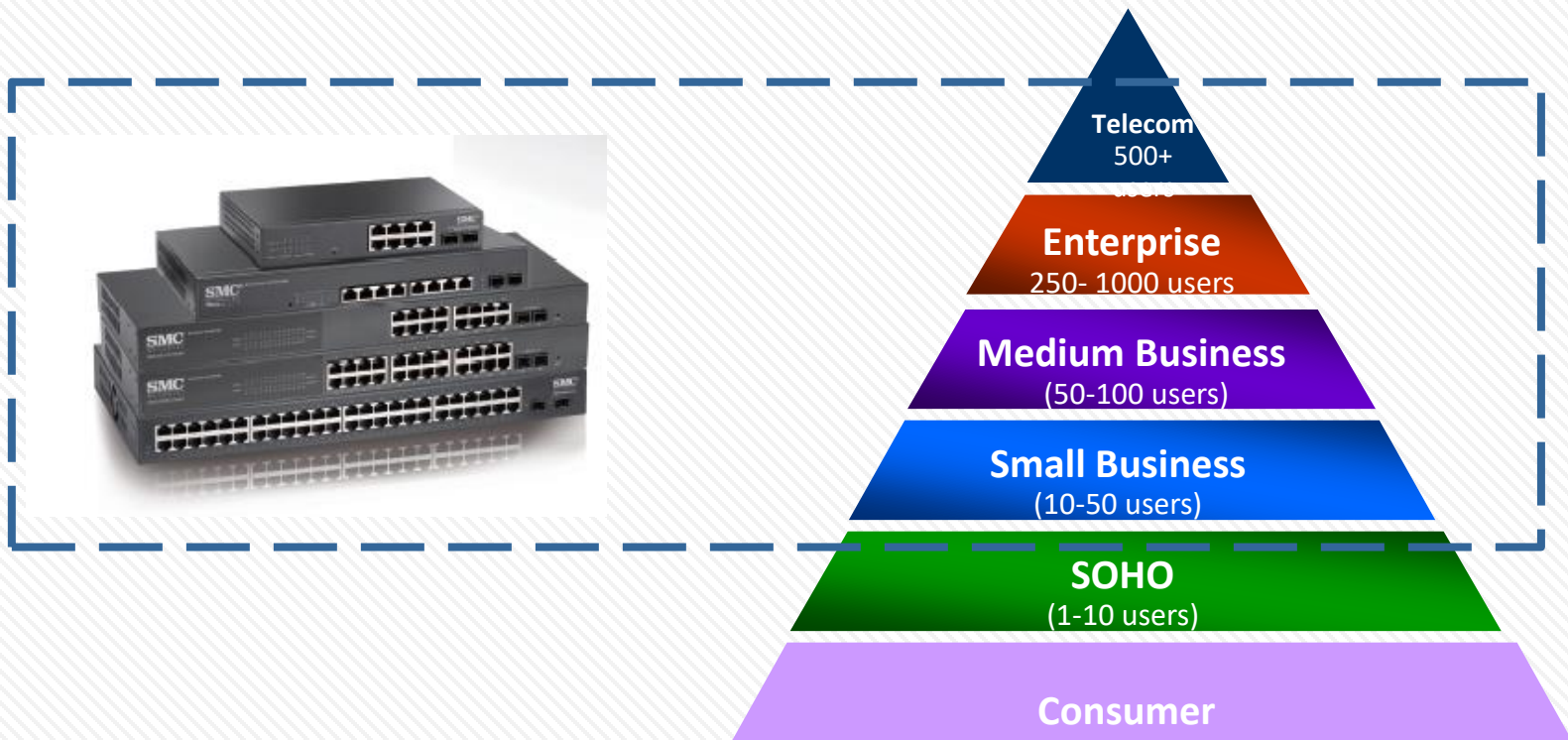


# ***Web Smart Pro Switch Series Introduction***

Albert Li

# SMB Definition

- Target Customers: SMB users between 10 to 250 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/Cloud management and Green saving.



# ECS2100 Target Market

- ECS2100 Series is our **new series combination with web-smart and L2 managed switch**.
- ECS2100 takes web-smart cost-effective advantage and provides the plentiful of management methods like L2 Managed switches with **console port**.
- With powerful software & hardware features, ECS2100 is designed for SMB & Enterprise market and provides complete solution from **1G to 10G**, including **both non-PoE and PoE** options.



**HOTEL**



**Office**



**Shopping Mall**



**Hospital**





**Campus**

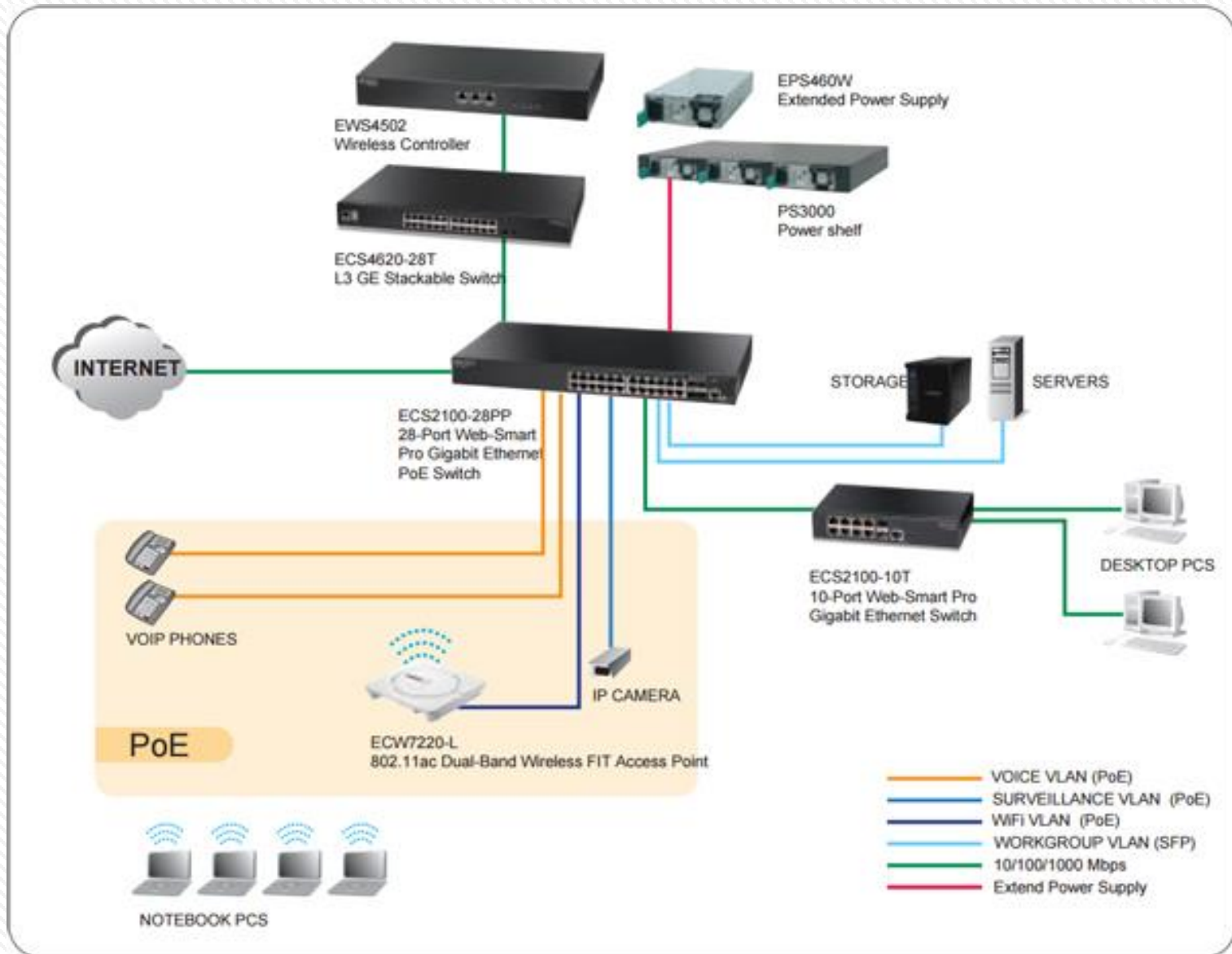
# Family member and Description

## 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

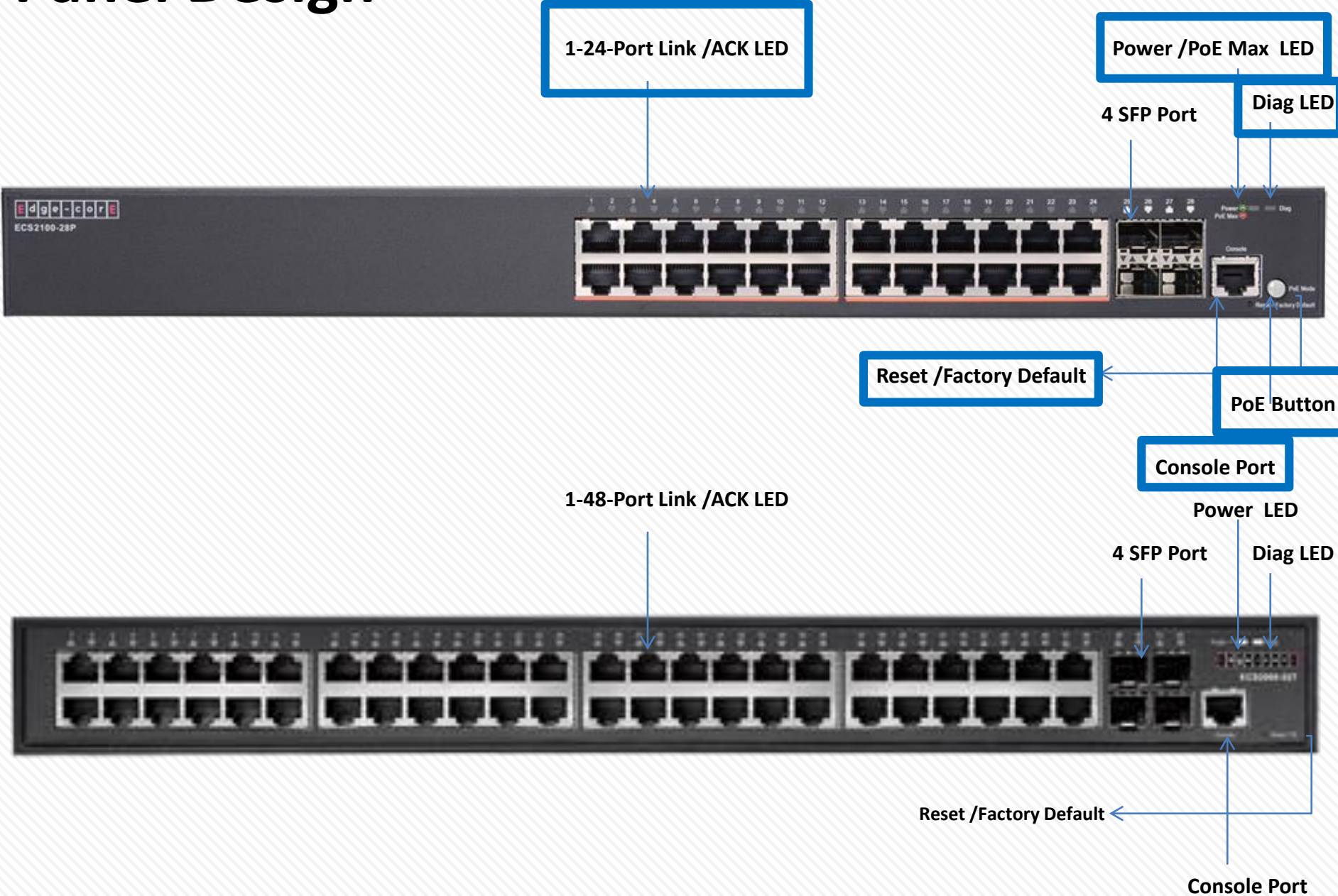
# Network Application



# Top 7 Key Features & Benefit

HW/SW Features	Benefits
Console Port	The ECS2100 series includes a serial console port. All switches support <b>multiple management</b> access through CLI/SNMP/Web/Telnet.
Diag LED	The ECS2100 Series includes a <b>Diag LED</b> 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 Total Solution	ECS2100-10PE 2.65cm high only ECS2100-10P 125W (Fan-less) ECS2100-28P 200W (the biggest power budget in 24-port PoE) ECS2100-28PP 740W (extended ability)
Dual firmware / configuration	The ECS2100 series have <b>256MB RAM</b> which it could save dual firmware/ configuration files to provide redundant and more security for users.
Dashboard	ECS2100 provides a <b>fantastic feature called “Dashboard”</b> . 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
Plentiful features	The ECS2100 support <b>L3 static routing / QinQ / G.8032 / mDNS / IP Clustering</b> to increase user flexibility.
Comprehensive security	The ECS2100 Series supports multiple security features, such as <b>ACLs, storm control, 802.1X, port security, MAC filters, IP source guard, and AAA.</b>

# Panel Design





# Dash Board

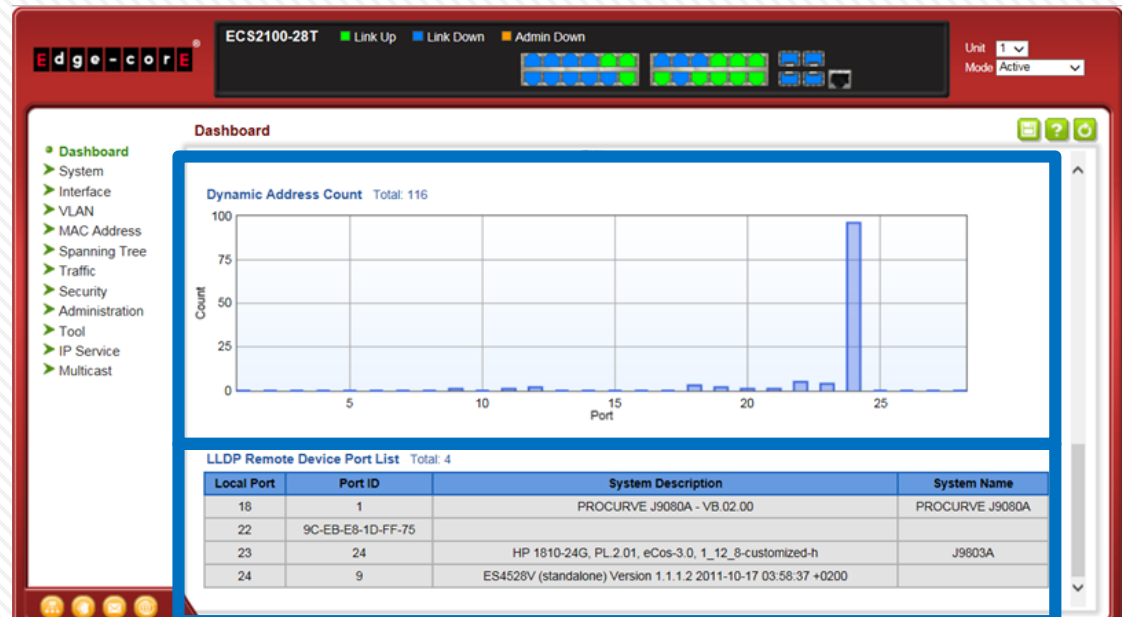
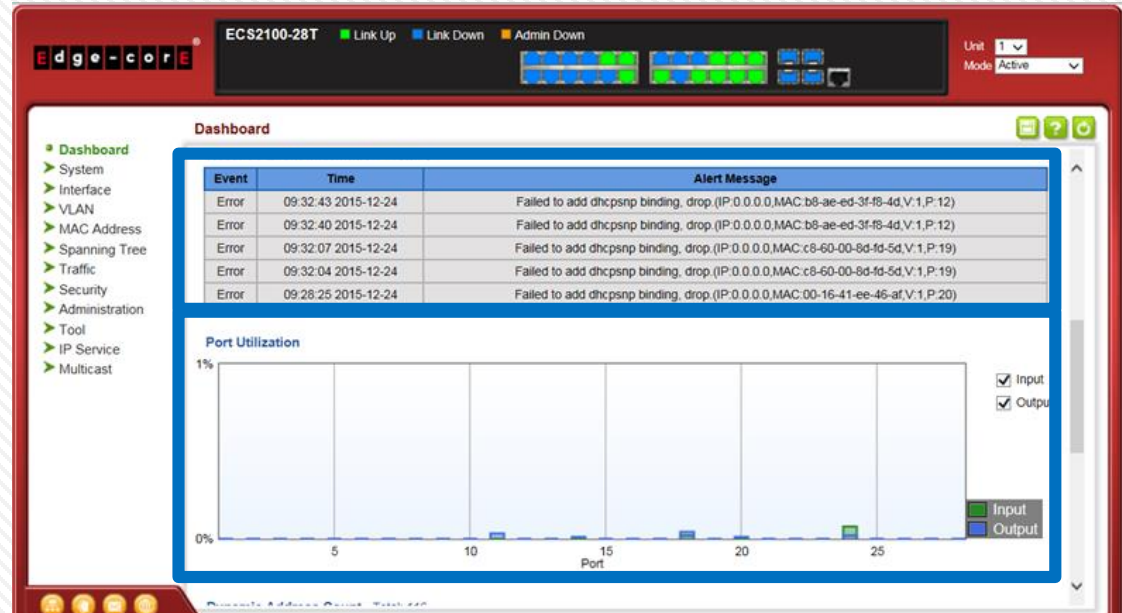
- Switch Basic information
  - Status: Link Up/Down/ Speed/ duplex mode
  - Uptime, Model, Serial No , Firmware Version(HW/SW)
- CPU/Memory Utilization
- Event Log overview





# Dash Board

- Recent 4 events
- Port Utilization
- User numbers
- Neighbors



# 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 Pro Switch


Model No.	Product Description
ECS2100-10T 	8 port 10/100/1000BaseT + 2 1000BaseX SFP 1 RJ45 Console Port Internal Power Supply

- Fan-less, reliable, silent
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Dual firmware /configuration
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security (DDOS Protection , CPU Guard, IP Source Guard)
- IPv4 / IPv6 Support
- Static routing (Support v1.2.2.0+)
- ERPS (G.8032) / QinQ (Support v1.2.2.0+)
- IP Clustering / mDNS (Support v1.2.2.0+)

# Competitor Analysis-ECS2100-10T

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-10T	GS108Tv2	DGS-1210-10	GS1900-8	JG920A
1 Gigabit port	8	8	8	8	8
1 Gigabit SFP Port	2	0	2	0	2
RJ45 Console Port	YES	NO	NO	NO	YES(Limited CLI)
Diag LED	YES	NO	NO	NO	NO
Power	Internal Power	External Power	Internal Power	External power	Internal Power
Temperature Range	0°C to 50°C	0°C to 40°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	Fanless	Fanless	Fanless	Fanless	Fanless
VLAN	4096	64	4K	4K	N/A
Dual Firmware / Configuration	YES	NO	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	NO	YES	NO	YES
DDOS Protection	YES	NO	NO	YES	N/A
Static routing	YES (V1.2.2.0+)	NO	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	NO	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO

# 8-port GE PoE Web Smart Pro Switch

Model No.	Product Description
<p data-bbox="102 239 351 274">ECS2100-10PE</p> 	<p data-bbox="884 239 1734 274">8 port 10/100/1000BaseT PoE +2 1000BaseX SFP</p> <p data-bbox="884 288 1232 322">1 RJ45 Console Port</p> <p data-bbox="884 337 1149 371">External Power</p>


- **Thinnest 2.65cm ( Wall mountable)**
- Fan-less, reliable, silent
- IEEE 802.3az Energy Efficient Ethernet (EEE) –Power Saving
- PoE power budget 65W
  - 30W for 2 ports
  - 15.4W for 4 ports
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security (DDOS Protection , CPU Guard, IP Source Guard)
- IPv4 / IPv6 Support
- **Static routing (Support v1.2.2.0+)**
- **ERPS (G.8032) / QinQ (Support v1.2.2.0+)**
- **IP Clustering / mDNS (Support v1.2.2.0+)**

# Competitor Analysis-ECS2100-10PE

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-10PE	GS110TP	DGS-1210-10P	GS1900-8P	JG921A
1 Gigabit port	8	8	8	8	8
1 Gigabit SFP Port	2	2	2	0	2
RJ45 Console Port	YES	NO	NO	NO	YES(Limited CLI)
Diag LED	YES	NO	NO	NO	NO
Power	External Power	External Power	Internal Power	External Power	Internal Power
PoE Power Budget	65W	59.3W	78W	70W	65W
Temperature Range	0°C to 50°C	0°C to 40°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	Fanless	Fanless	Fanless	Fanless	Fanless
VLAN	4096	64	4K	4K	N/A
Dual Firmware / Configuration	YES	NO	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	NO	YES	NO	YES
DDOS Protection	YES	NO	NO	YES	N/A
Static routing	YES (V1.2.2.0+)	NO	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	NO	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO



# 8-port GE PoE Web Smart Pro Switch


Model No.	Product Description
<p>ECS2100-10P</p> 	<p>8 port 10/100/1000BaseT PoE +2 1000BaseX SFP 1 RJ45 Console Port Internal Power Supply</p>

- **Fan-less**- reliable, silent
- IEEE 802.3az Energy Efficient Ethernet (EEE) –Power Saving
- **PoE power budget 125W**
  - 30W for 4 ports
  - 15.4W for 8 ports
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security (DDOS Protection , CPU Guard, IP Source Guard)
- IPv4 / IPv6 Support
- **Static routing (Support v1.2.2.0+)**
- **ERPS (G.8032) / QinQ (Support v1.2.2.0+)**
- **IP Clustering / mDNS (Support v1.2.2.0+)**

# Competitor Analysis-ECS2100-10P

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-10P	GS510TP	DGS-1110-10MP	GS1900-10HP	JG922A
1 Gigabit port	8	8	8	8	8
1 Gigabit SFP Port	2	2	2	2	2
RJ45 Console Port	YES	NO	NO	NO	YES(Limited CLI)
Diag LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal Power	Internal Power
PoE Power Budget	125W	130W	130W	78W	180W
Temperature Range	0°C to 40°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	Fanless	Fan	Fan	Fanless	Fan
VLAN	4096	64	4K	4K	N/A
Dual Firmware / Configuration	YES	NO	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	NO	YES	NO	YES
DDOS Protection	YES	YES	YES	YES	N/A
Static routing	YES (V1.2.2.0+)	NO	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	YES	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO

# 28-port GE Web Smart Pro Switch


Model No.	Product Description
<p>ECS2100-28T</p> 	<p>24 port 10/100/1000BaseT + 4 1000BaseX SFP 1 RJ-45 Console Port Internal Power Supply</p>

- Fan-less, reliable, silent
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Dual firmware /configuration
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security (DDOS Protection , CPU Guard, IP Source Guard)
- IPv4 / IPv6 Support
- Static routing (Support v1.2.2.0+)
- ERPS (G.8032) / QinQ (Support v1.2.2.0+)
- IP Clustering / mDNS (Support v1.2.2.0+)

# Competitor Analysis-ECS2100-28T

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-28T	GS724Tv4	DGS-1210-28	GS1920-24	JG924A
1 Gigabit port	24	24	24	24	24
1 Gigabit SFP Port	4	2	4	4	4
RJ45 Console Port	YES	NO	NO	NO	YES(Limited CLI)
Diag LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal power	Internal Power
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	16K	16K	16K	8K
Fan / Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
VLAN	4096	256	4K	4K	N/A
Dual Firmware / Configuration	YES	YES	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	N/A	YES	NO	YES
DDOS Protection	YES	YES	NO	N/A	N/A
Static routing	YES (V1.2.2.0+)	YES	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	NO	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO

# 28-port GE PoE Web Smart Pro Switch

Model No.	Product Description
<p data-bbox="100 239 330 275">ECS2100-28P</p> 	<p data-bbox="884 239 1765 379">24 port 10/100/1000BaseT PoE + 4 1000BaseX SFP 1 RJ45 Console Port Internal Power Supply</p>


- PoE power budget 200W
  - 30W for 6 ports
  - 15.4W for 12 ports
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Dual firmware /configuration
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security
- IPv4 / IPv6 Support
- Static routing (Support v1.2.2.0+)
- ERPS (G.8032) / QinQ (Support v1.2.2.0+)
- IP Clustering / mDNS (Support v1.2.2.0+)

# Competitor Analysis-ECS2100-28P

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-28P	GS728TP	DGS-1210-28P	GS1920-24HP	JG925A
1 Gigabit port	24	24	24	24	24
1 Gigabit SFP Port	4	4	4	4	4
RJ45 Console Port	YES	NO	NO	NO	YES
Diag LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal Power	Internal Power
PoE Power Budget	200W	192W	193W	375W	180W
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	8K	16K	16K	8K
Fan / Fanless	Fan	Fan	Fan	Fan	Fan
VLAN	4096	256	4K	4K	N/A
Dual Firmware / Configuration	YES	NO	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	NO	YES	NO	YES
DDOS Protection	YES	NO	N/A	N/A	N/A
Static routing	YES (V1.2.2.0+)	NO	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	NO	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO



# 28-port GE PoE Web Smart Pro Switch

Model No.	Product Description
<p data-bbox="100 239 351 274">ECS2100-28PP</p> 	<p data-bbox="884 239 1767 378">24 port 10/100/1000BaseT PoE + 4 1000BaseX SFP 1 RJ45 Console Port Internal Power Supply</p>

- PoE power budget 370W, can be extended to 740W with EPS460W
  - 30W for 12 ports → 30W for 24 ports with EPS460W
  - 15.4W for 24 ports
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Dual firmware /configuration
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security
- IPv4 / IPv6 Support
- Static routing (Support v1.2.2.0+)
- ERPS (G.8032) / QinQ (Support v1.2.2.0+)
- IP Clustering / mDNS (Support v1.2.2.0+)



EPS460W




PS3000 +3 x EPS460W

# Competitor Analysis-ECS2100-28PP

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-28PP	GS728TPP	DGS-1210-28P	GS1920-24HP	JG926A
1 Gigabit port	24	24	24	24	24
1 Gigabit SFP Port	4	4	4	4	4
RJ45 Console Port	YES	NO	NO	NO	YES
Diag LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal Power	Internal Power
PoE Power Budget	370W(740W)	384W(720W)	193W	375W	370W
Temperature Range	0°C to 45°C(370W) 0°C to 40°C(740W)	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 40°C
MAC Table	8K	8K	16K	16K	8K
Fan / Fanless	Fan	Fan	Fan	Fan	Fan
VLAN	4096	256	4K	4K	N/A
Dual Firmware / Configuration	YES	NO	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	NO	YES	NO	YES
DDOS Protection	YES	NO	N/A	N/A	N/A
Static routing	YES (V1.2.2.0+)	NO	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	NO	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO

# 48-port GE Web Smart Pro Switch


Model No.	Product Description
ECS2100-52T 	48 port 10/100/1000BaseT PoE + 4 1000BaseX SFP 1 RJ45 Console Port Internal Power Supply

- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Dual firmware /configuration
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security
- IPv4 / IPv6 Support
- **Static routing**
- **ERPS (G.8032) / QinQ**
- **IP Clustering / mDNS**

# Competitor Analysis-ECS2100-52T

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2100-52T	GS48Tv5	DGS-1210-52	GS1920-48	JG927A
1 Gigabit port	48	48	48	48	48
1 Gigabit SFP Port	4	4	4	4 (Combo)	4
RJ45 Console Port	YES	NO	NO	NO	YES
Diag LED	YES	NO	NO	NO	NO
Power	Internal Power	Internal Power	Internal Power	Internal power	Internal Power
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	16K	16K	16K	16K	8K
Fan / Fanless	Fan	Fan	Fan	Fan	Fan
VLAN	4096	256	4K	4K	N/A
Dual Firmware / Configuration	YES	YES	N/A	YES	Dual Firmware Only
Cable Diagnostic	YES	N/A	YES	NO	YES
DDOS Protection	YES	YES	N/A	N/A	N/A
Static routing	YES (V1.2.2.0+)	YES	NO	NO	YES
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	NO	NO	NO
QinQ	YES (V1.2.2.0+)	NO	NO	NO	NO

# 28-port GE PoE Web Smart Pro Switch

Model No.	Product Description
ECS2110-26T 	24 port 10/100/1000BaseT + 2 10G BaseX SFP 1 RJ45 Console Port Internal Power Supply

- 2-Port 10G SFP + support
- Fan-less, reliable, silent
- Multi management (Console ,FTP, Web, SNMP)
- Dashboard
- Dual firmware /configuration
- Plentiful L2 managed switch features (LLDP , IGMP Snooping , ACL ,.....)
- Comprehensive Security
- IPv4 / IPv6 Support
- Static routing
- EPRS (G.8032) / QinQ
- IP Clustering / mDNS

PS3000 +3 x EPS460W

# Competitor Analysis-ECS2110-26T

Brand	Edgecore	Netgear	DLINK	Zyxel	HP
Model	ECS2110-26T	S3300-28X	DGS-1510-28	X	X
1 Gigabit port	24	24	24	X	X
10 Gigabit SFP+ Port	2	4	2 Gigabit SFP 2 10G SFP+	X	X
RJ45 Console Port	YES	NO	YES	X	X
Diag LED	YES	NO	NO	X	X
Power	Internal Power	Internal Power	Internal Power	X	X
Temperature Range	0°C to 50°C	0°C to 50°C	0°C to 50°C	X	X
Fan / Fanless	Fan-less	Fan	Fan	X	X
MAC Table	16K	16K	16K	X	X
VLAN	4096	256	4K	X	X
Dual Firmware / Configuration	YES	YES	YES	X	X
Cable Diagnostic	YES	NO	YES	X	X
Physical Stacking	NO	NO	YES	X	X
Static routing	YES (V1.2.2.0+)	YES	YES	X	X
G.8032 (ERPS)	YES (V1.2.2.0+)	NO	YES	X	X
QinQ	YES (V1.2.2.0+)	NO	N/A	X	X



# ECS2100 Software Features(I)

- Switching Feature
  - Flow control
  - Broadcast/ Multicast/ Unknown unicast control
  - Auto MDI/MDIX
- Spanning Tree Protocol
  - IEEE 802.1D /.1w/.1s
  - STP fast forwarding/Auto Edge
  - BPDU Guard/BPDU filtering
  - Root Guard
  - BPDU transparent
  - Loopback detection
- VLAN
  - 4K VLAN
  - Port-based VLAN
  - 802.1Q VLAN
  - 802.1v Protocol based VLAN
  - MAC-based VLAN
  - Traffic Segmentation
  - Voice 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
  - Marking/remarking
  - Auto QoS profile assignment
  - Rate limiting
- Multicast control
  - IGMP snooping v1/v2/v3
  - IGMP Querier
  - IGMP snooping filtering/throttling
  - IGMP snooping proxy
  - Immediate leave
  - MLD snooping v1/v2

# ECS2100 Software Features(II)

- Security
  - MAC filtering
  - Port security (dynamic & static)
  - Port security intrusion action
  - 802.1x Port-based authentication
  - 802.1x MAC-based authentication
  - Guest VLAN
  - MAC filtering
  - MAC authentication
  - DHCP snooping/snooping 82
  - IP Source Guard
  - Dynamic ARP Inspection
  - Access Control List
  - Denial of Service Protection
  - AAA (Authentication, Authorization, Accounting)
  - SSH v1/v2
  - SSL/HTTPS
  - Management access filter (WEB/SNMP/Telnet)
  - **Static Routing \***
  - **mDNS \***
  - **QinQ \***
  - **G.8032 \***
  - **IP Clustering \***
- Management
  - **Cisco like CLI**
  - Telnet/WEB/SNMP v1/v2/v3
  - RMON(1,2,3,9)
  - FTP/TFTP/HTTP download
  - DHCP dynamic provision (option 66&67)
  - DHCP client/option 82 relay
  - Time zone for Sntp
  - DNS client/proxy
  - Delay reload
  - Event/error log, system log
  - **Auto upgrade**
  - Port monitor
  - LLDP (802.1ab)
  - **Cable diagnostic**
- IPv6
  - IPv4/IPv6 Dual Protocol Stack
  - IPv6 Address types: Unicast
  - IPv6 Neighbor Discovery
  - SNMP over IPv6
  - HTTP over IPv6
  - Remote IPv6 ping
  - IPv6 Management
  - IPv6 ACL
  - IPv6 QoS

**\* (v1.2.2.0 + support )**

