



# LAN Switches & Power over Ethernet

Scalability, Flexibility, Reliable Power Solution



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## LAN Switch Naming Rule

### xGS-42XX-MyNz

Switch Function

OSI Level

Main port number

#### Switch Category

- GS – Standalone
- XGS – 10G
- MGS – Metro
- IGS – Industrial
- SGS – Stackable
- WGS – Wall-mount

#### Switch Function

- 2 – L2 Web Smart
- 3 – L2
- 4 – L2/L4
- 5 – L2+ with static routing
- 6 – L3 with dynamic routing

#### OSI Level

- 2 – L2
- 3 – L3

#### Main Port Number/N Number

- M/N: Port numbers of this port type
- 2/4/8 – 2/4/8-port
- 24/48 – 24-port/48-port

#### y: Main Port Type

- T – 10/100/1000BASE-T
- P – PoE
- PL – PoE/large PoE and large power
- S – 100/1000BASE-x SFP slot

#### z: Port Type

- S – 100/1000BASE-X SFP slot
- C – TP/SFP Combo interface
- X – 10G SFP+
- Q – 40G QSFP+
- QC – 100G QSFP28

# Layer 3 IPv6/IPv4 Routing Switches

Chassis Switch	
Model	XGS3-42000R

Product Image



Chassis Slots	Total Number of Slots	4 ( 2 Management Modules + 2 Standard Modules or 1 Management Module + 3 Standard Modules )
	Max. Management Module	2
	Max. Standard Module	3
	Management Module Redundancy	●
	Number of Power Supply Bays	2
Total Port Capacity	Max. 40G QSFP+ Slot	6
	Max. 10/100/1000BASE-T	160
	Max. 1000BASE-SX/LX SFP Slot	156
	Switch Processing Scheme	Store-and-Forward
Hardware Specifications	Switching Capacity	432Gbps
	MAC Table	64K
	VLAN Table	4K
	ACL Table	16K max.
	Routing Table	IPv4 Protocol: 128K max. IPv6 Protocol: 64K max.
	Layer 3 Interface	500 max.
	Port Queues	8
	Jumbo Frame	9kbytes
	Dimensions (W x D x H)	440 x 421 x 266 mm
	Power Input	AC: Input 100~240V, 50~60 Hz
IPv4 Layer 3 Functions	IP Routing Protocol	Static Route, RIPv1/v2, OSPFv2, BGP4, Policy-based Routing (PBR), LPM Routing (MD5 authentication)
	Multicast Routing Protocol	IGMP v1/v2/v3, DVMRP, PIM-DM/SM, PIM-SSM
	Layer 3 Protocol	VRRP, ARP, ARP Proxy
	Routing Interface	Per VLAN
IPv6 Layer 3 Functions	IP Routing Protocol	RIPng, OSPFv3, BGP4+
	Layer 3 Protocol	Configured Tunnels, ISATAP, CIDR
Layer 2 Functions	Multicast	MLDv1/v2, MLD v1/v2 Snooping
	Access Control List	Supports Standard and Expanded ACL, IP-based ACL/MAC-based ACL, Time-based ACL, ACL Pool can be used for QoS classification, up to 1K entries
	Security	IPv4/IPv6 + MAC + Port Binding, IPv4/IPv6 + Port Binding, ARP Spoofng Prevention, ARP Scanning Prevention, IP Source Guard
	Authentication	IEEE 802.1x Port-based Network Access Control, AAA Authentication: IPv4/IPv6 over RADIUS
	System Configuration	Console, Telnet, SSH, Web Browser, SSL SNMPv1, v2c and v3
Management Function	Management	Supports IPv4/IPv6 HTTP and SSL, the user IP Security inspection for IPv4/IPv6 SNMP, IPv4/IPv6 NTP, IPv4/IPv6 SSH, SNMP v1/v2c/v3, TACACS+, and security IP safety net management function
	Compliance	FCC Part 15 Class A, CE

Gigabit/10G		
Model	XGS3-24042	XGS3-24242

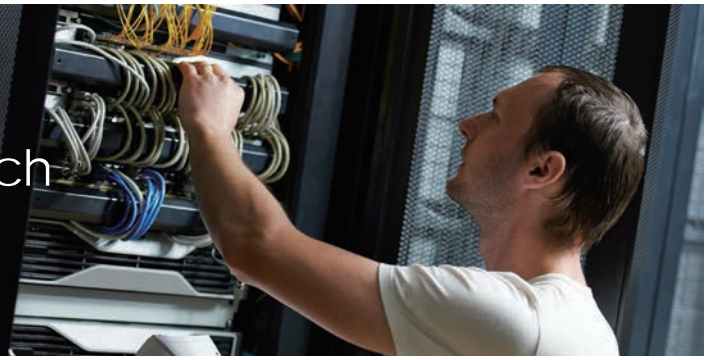
Product Image



Hardware	10/100BASE-TX	-	-
	10/100/1000BASE-T	24	16 combo
	100/1000BASE-X SFP	4	24
	QSFP+ Stacking slots	-	2
	1/10G SFP+	4	4
	Switch Fabric	128Gbps	208Gbps
	MAC Table	16K	32K
	Jumbo Frame	9K	16K
	Memory Buffer	12Mbits	32Mbits
	IP Routing	Routing Interface	Per VLAN
Static Routing		●	●
RIP v1/v2		●	●
OSPFv2		●	●
VRRP		●	●
Multicast Routing	IGMP/DVMRP	●	●
	PIM-DM/SM	●	●
Interface	Port Configuration	●	●
	Port Mirror	TX & RX	TX & RX
Link Aggregation	Port Trunk	●	●
	LACP	●	●
VLAN	Port-based	●	●
	802.1Q VLAN	● / 4K	● / 4K
	Protocol-based/GVRP	●	●
Spanning Tree	802.1D/802.1w/802.1s	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3
	802.1p Priority	● / 8 queues	● / 8 queues
	IP TOS/DSCP	●	●
	QoS Mode	Port-CoS, DSCP-CoS	Port-CoS, DSCP-CoS
Quality of Service	DiffServ Policy QoS	●	●
	Egress	●	●
Data Control	IP-based ACL	●	●
	MAC-based ACL	●	●
Security	802.1x Port-based Authentication	●	●
	MAC Binding/Filtering	●	●
	Port Security	●	●
Management	Console	● / RJ45	● / RJ45
	Telnet	●	●
	Web Management	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3
Physical	RMON	1,2,3,9	1,2,3,9
	SSH/SSL	●	●
	Firmware Upgrade	●	●
Physical	Configuration Backup/Recovery	●	●
	Single IP Management	●	●
	Syslog	●	●
	Dimensions (W x D x H)	440 x 350 x 44.5 mm	440 x 350 x 44.5 mm
	Power Supply	100~240V AC, -48 DC RPS	
EMI/Safety	FCC Class A,CE	FCC Class A,CE	



# Layer 3 IPv6/IPv4 Routing Switch Modules & Accessories



## Chassis Switch Modules & Accessories

### Available Management Module

Model	XGS3-M16C8S
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Product Image



10/100/1000T	16 (Shared)
100/1000BASE-X SFP	24
Console	1 (RJ45)

### Available Power Module

Model	XGS3-PWR-AC
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Product Image



Input Voltage	100-240V AC, 50/60Hz
Power Output	500 watts

### Available Standard Modules

Model	XGS3-S16C8S4X	XGS3-S48G	XGS3-S20X2Q	XGS3-S44S4X
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Product Image



10/100/1000T	16 (Shared)	48	-	-
100/1000BASE-X	24	-	-	44
1/10G SFP+	4	-	20	4
40G QSFP+	-	-	2	-

## Rackmount Switch Modules & Accessories

### 10G SFP+ Directly Attached Copper Cable

Model	CB-DASFP-0.5M	CB-DASFP-2M
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Product Image



Speed (Gbps)	10G	10G
Connector Interface	Directly Attached Copper Cable	
Fiber Mode	-	-
Distance	Up to 0.5m	Up to 2m
Wavelength (nm)	-	-
Operating Temp.	0 ~ 60 °C	0 ~ 60 °C

### QSFP+ Directly Attached Cable

Model	CB-DAQSFP-0.5M	CB-DAQSFP-2M
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Product Image



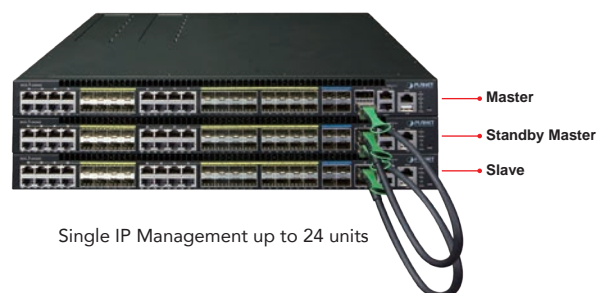
Speed (Gbps)	10G	10G
Connector Interface	Directly Attached Copper Cable	
Fiber Mode	-	-
Distance	Up to 0.5m	Up to 2m
Wavelength (nm)	-	-
Operating Temp.	0 ~ 60 °C	0 ~ 60 °C

### ▶ Two optional power modules







XGS3-24042/24242

### ▶ QSFP+ Hardware/Stacking








Single IP Management up to 24 units

# Layer 3 100G/10G Core Managed Switches

		100G		10G	
Model		XGS-6350-24X4C	XGS-6350-12X8TR	SGS-6340-16XR	XGS-5250-12X8CR
Product Image					
					
Hardware	10/100/1000BASE-T	-	8	-	8
	1000BASE-X SFP	-	-	-	8 combo
	10G SFP+ Slot	24 (1000X Compatible)	12 (1000X Compatible)	16 (1000X Compatible)	12 (1000X Compatible)
	40G QSFP+ Slot	-	-	-	-
	100G QSFP28 Slot	4 (Compatible with 40G QSFP+)	-	-	-
	PoE 802.3at Port	-	-	-	-
	PoE Budget	-	-	-	-
	Switch Fabric	1.28Tbps	256Gbps	320Gbps	256Gbps
	MAC Table	32K	32K	16K	32K
	Jumbo Frame	9K	9K	9K	9K
	Memory Buffer	4MB	3MB	2Mbytes	3MB
Layer 3 Features	IP Interfaces	128	128	64	128
	Routing Tables	16K	128	64	32
	Routing Protocols	Static routing, RIP and OSPF	Static routing, RIP and OSPF	Static routing, RIP and OSPF	Static routing, RIP and OSPF
	Accelerated Hardware	●	●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	● / 4K	● / 4K	● / 256	● / 4K
	Q-in-Q VLAN	●	●	●	●
	Private VLAN	●	●	●	●
Spanning Tree	802.1D	●	●	●	●
	802.1w	●	●	●	●
	802.1s	●	●	●	●
Rapid Data Recovery	ERPS	-	-	-	-
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	-
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS
	DiffServ Policy Qos	●	●	●	●
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●
	MAC-based	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●
	MAC Filtering	●	●	●	●
	Port Security	●	●	●	●
Management	IPv6/IPv4	●	●	● / ●	●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / -	● / -	● / ●	● / ●
	Firmware Upgrade	●	●	FTP, TFTP	●
	Configuration Backup/Recovery	HTTP, TFTP	HTTP, TFTP	●	HTTP, TFTP
	Single IP Management	-	●	●	-
	Syslog	●	●	●	●
Physical	Dimensions (W x D x H)	442.5 x 364 x 44 mm	400 x 315 x 44 mm	440 x 240 x 44 mm	400 x 200 x 44 mm
	Power Supply	100~240V AC, 50/60Hz	Dual 100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz Dual 40~60V DC
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Layer 3 Enterprise Stackable Switches

Gigabit/10G							
Model	SGS-6340-16XR	SGS-6341-16S8C4XR	SGS-6341-48T4X	SGS-6341-24T4X	SGS-6341-24P4X		
Product Image							
					<span style="background-color: purple; color: white; padding: 2px;">PoE</span>		
Hardware	10/100BASE-TX	-	-	-	-	-	
	10/100/1000BASE-T	-	8 combo	48	24	24	
	Mini-GBIC/SFP	-	24 (100X Compatible)	-	-	-	
	10G SFP+ Slot	16 (1000X Compatible)	4 (1000X Compatible)	4 (1000X Compatible)	4 (1000X Compatible)	4 (1000X Compatible)	
	PoE 802.3at Port	-	-	-	-	-	
	PoE Budget	-	-	-	-	-	
	Switch Fabric	320Gbps	128Gbps	176Gbps	128Gbps	128Gbps	
	MAC Table	16K	16K	16K	16K	16K	
	Jumbo Frame	9K	9K	9K	9K	9K	
	Memory Buffer	2Mbytes	1.5Mbytes	1.5Mbytes	1.5Mbytes	1.5Mbytes	
Layer 3 Features	IP Interfaces	64	128	128	128	128	
	Routing Tables	64	128	1K	1K	1K	
	Routing Protocols	Static routing, RIP and OSPF	Static routing, RIP and OSPF	Static routing, RIP and OSPF	Static routing, RIP and OSPF	Static routing, RIP and OSPF	
	Accelerated Hardware	●	●	●	●	●	
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	
Link Aggregation	Port Trunk	●	●	-	-	-	
	LACP	●	●	●	●	●	
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256	● / 256	
	Q-in-Q VLAN	●	●	●	●	●	
	Private VLAN	●	●	●	●	●	
Spanning Tree	802.1D	●	●	●	●	●	
	802.1w	●	●	●	●	●	
	802.1s	●	●	●	●	●	
Rapid Data Recovery	ERPS	-	-	-	-	-	
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	
	MVR	●	●	●	●	●	
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	
	IP TOS/DSCP	●	●	●	●	●	
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS			Port-CoS, DSCP-CoS, L4 Port-CoS		
	DiffServ Policy QoS	●	●	●	●	●	
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●	● / ●	
Access Control List	IP-based	●	●	●	●	●	
	MAC-based	●	●	●	●	●	
Security	802.1x Port-based Authentication	●	●	●	●	●	
	MAC Filtering	●	●	●	●	●	
	Port Security	●	●	●	●	●	
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●	● / ●	
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45	
	Telnet	●	●	●	●	●	
	Web Management	●	●	●	●	●	
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	
	SSH/SSL	● / ●	● / ●	● / ●	● / ●	● / ●	
	Firmware Upgrade	FTP, TFTP	FTP, TFTP	FTP, TFTP	FTP, TFTP	FTP, TFTP	
	Configuration Backup/Recovery	●	●	●	●	●	
	Single IP Management	●	●	●	●	●	
Syslog	●	●	●	●	●		
Physical	Dimensions (W x D x H)	440 x 240 x 44 mm	442 x 220 x 44 mm	440 x 240 x 44 mm	440 x 330 x 44 mm	440 x 330 x 44 mm	
	Power Supply	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz 12V DC	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	

# Layer 2+ IPv6/IPv4 Metro Fiber Switches

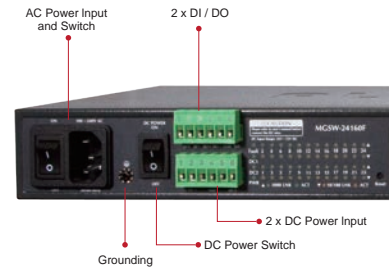
Metro Fiber Switches				
Model	MGSD-10080F	MGSW-24160F	MGSW-28240F	

Product Image



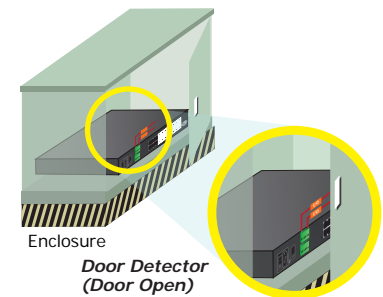
Hardware	10/100BASE-TX	-	-	-
	10/100/1000BASE-T	2	8	4 combo
	Mini-GBIC/SFP	8 (100FX Compatible)	16 (100FX Compatible)	24 (100FX Compatible)
	10G SFP+ Slot	-	-	4 (1000X Compatible)
	PoE 802.3at Port	-	-	-
	PoE Budget	-	-	-
	Switch Fabric	20Gbps	48Gbps	128Gbps
	MAC Table	8K	8K	32K
	Jumbo Frame	9K	9K	10K
	Memory Buffer	4Mbit	4Mbit	32Mbit
Layer 3 Features	IP Interfaces	8 VLAN	8 VLAN	128 VLAN
	Routing Tables	32	32	32
	Routing Protocols	IPv4/IPv6 Static Routing		IPv4/IPv6 Static Routing, OSPFv2
	Accelerated Hardware	-	-	•
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	•	•	•
	LACP	•	•	•
VLAN	802.1Q VLAN	• / 256	• / 256	• / 256
	Q-in-Q VLAN	•	•	•
	Private VLAN	•	•	•
Spanning Tree	802.1D	•	•	•
	802.1w	•	•	•
Rapid Data Recovery	802.1s	•	•	•
	ERPS	•	-	•
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	•	•	•
Quality of Service	802.1p Priority	• / 4 queues	• / 4 queues	• / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	•	•	•
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		
Data Control	DiffServ Policy QoS	•	•	•
Access Control List	Ingress/Egress	• / •	• / •	• / •
	IP-based	•	•	•
Security	MAC-based	•	•	•
	802.1x Port-based Authentication	•	•	•
	MAC Filtering	•	•	•
Management	Port Security	•	•	•
	IPv6/IPv4	• / •	• / •	• / •
	Console	• / RJ45	• / RJ45	• / RJ45
	Telnet	•	•	•
	Web Management	•	•	•
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	• / •	• / •	• / •
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	•	•	•
Single IP Management	-	-	-	
Physical	Syslog	•	•	•
	Dimensions (W x D x H)	330 x 155 x 43.5 mm	440 x 200 x 44 mm	440 x 200 x 44 mm
	Power Supply	100~240V AC, 50/60Hz -36V DC RPS	100~240V AC, 50/60Hz -36V DC RPS	100~240V AC, 50/60Hz -36V DC RPS
EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	

## Fully Front Panel Access Design



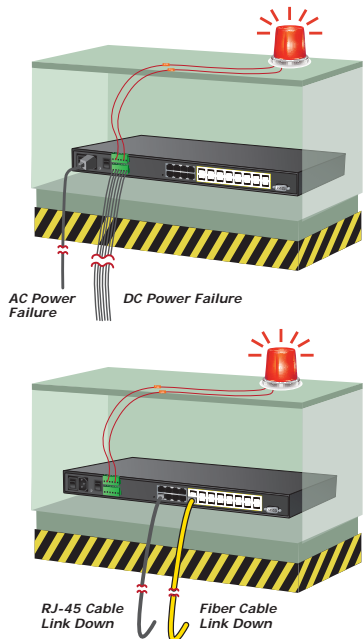
AC Power, DC Power, Digital I/O, and Network Access are all managed on the front panel.

## Digital Input



Designed for intrusion and environment detection to protect the assets.

## Digital Output










Designed for AC, DC, link alteration

# Layer 3/Layer 2+ IPv6/IPv4 Managed 10G Switches





Standalone 10G							
Model	GS-5220-16T2XV GS-5220-16T2XVR	GS-5220-24T4XV GS-5220-24T4XVR	GS-5220-20T4C4X GS-5220-20T4C4XR	GS-5220-16T4S2X GS-5220-16T4S2XR	GS-5220-48T4X	GS-5220-46S2C4X	
Product Image							
	Touch LCD	Touch LCD					
Hardware	LCD	2.4" Color TFT Touch screen		-	-	-	-
	10/100BASE-TX	-	-	-	-	-	-
	10/100/1000BASE-T	16	24	24	16	48	2 combo
	100/1000BASE-X SFP	-	-	4 combo	4	4 combo	48
	10G SFP+ Slot	2, backward compatible with 1000X	4, backward compatible with 1000X	4 (1000X compatible)	2 (1000X compatible)	4 (1000X compatible)	4 (1000X compatible)
	PoE 802.3at Port	-	-	-	-	-	-
	PoE Budget	-	-	-	-	-	-
	Switch Fabric	72Gbps	128Gbps	128Gbps	80Gbps	176Gbps	176Gbps
	MAC Table	16K	16K	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	10K	10K	10K
Memory Buffer	32Mbit	32Mbit	32Mbit	32Mbit	64Mbit	64Mbit	
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN
	Routing Tables	128	128	128	128	32	32
	Routing Protocols	IPv4/IPv6 Static Routing, OSPFv2		IPv4/IPv6 Static Routing, OSPFv2		IPv4/IPv6 Static Routing	
	Accelerated Hardware	●	●	●	●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●	●
	LACP	●	●	●	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●	●	●
	Private VLAN	●	●	●	●	●	●
Spanning Tree	802.1D	●	●	●	●	●	●
	802.1w	●	●	●	●	●	●
	802.1s	●	●	●	●	●	●
Rapid Data Recovery	ERPS	●	●	●	●	-	-
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
	DiffServ Policy QoS	●	●	●	●	●	●
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●	●	●
	MAC-based	●	●	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●	●	●
	MAC Filtering	●	●	●	●	●	●
	Port Security	●	●	●	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●	●	●
	Web Management	●	●	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●	●	●
	Single IP Management	-	-	-	-	-	-
Syslog	●	●	●	●	●	●	
Physical	Dimensions (W x D x H)	400 x 200 x 55 mm	400 x 200 x 55 mm	440 x 200 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm
	Power Supply	100~240V AC, 36~60V DC (R model only)		100~240V AC, 36~60V DC (R model only)		100~240V AC, 50/60Hz	
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE







# Layer 2+ IPv6/IPv4 Managed Gigabit Switches

		Stackable 10G			Standalone			
Model		SGS-5220-24T2X	SGS-5220-24P2X	SGS-5220-24S2XR	WGSD-10020	WGSW-24040/R	GS-5220-16S8C/R	GS-5220-44S4C
Product Image								
		<b>PoE</b>						
Hardware	10/100BASE-TX	-	-	-	-	-	-	-
	10/100/1000BASE-T	24	24	8 combo	8	24	8 combo	4 combo
	100/1000BASE-X SFP	4 combo	4 combo	24	2	4 combo	24	48
	10G SFP+ Slot	4 (2 for stacking)	4 (2 for stacking)	4 (2 for stacking)	-	-	-	-
	PoE 802.3at Port	-	24	-	-	-	-	-
	PoE Budget	-	440W	-	-	-	-	-
	Switch Fabric	128Gbps	128Gbps	128Gbps	20Gbps	48Gbps	48Gbps	96Gbps
	MAC Table	16K	16K	16K	8K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	9K	9K	10K	10K
Memory Buffer	32Mbit	32Mbit	32Mbit	4Mbit	4Mbit	16Mbit	16Mbit	
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	8 VLAN	8 VLAN	128 VLAN	128 VLAN
	Routing Tables	32	32	32	32	32	32	32
	Routing Protocols	IPv4/IPv6 Static Routing			IPv4/IPv6 Static Routing		IPv4/IPv6 Static Routing	
	Accelerated Hardware	●	●	●	-	-	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●	●	●
	LACP	●	●	●	●	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●	●	●	●
	Private VLAN	●	●	●	●	●	●	●
Spanning Tree	802.1D	●	●	●	●	●	●	●
	802.1w	●	●	●	●	●	●	●
	802.1s	●	●	●	●	●	●	●
Rapid Data Recovery	ERPS	-	-	-	-	-	-	-
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 4 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS			Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
	DiffServ Policy QoS	●	●	●	●	●	●	●
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●	●	●	●
	MAC-based	●	●	●	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●	●	●	●
	MAC Filtering	●	●	●	●	●	●	●
	Port Security	●	●	●	●	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	●	●	● / RJ45	● / RJ45
	Telnet	●	●	●	●	●	●	●
	Web Management	●	●	●	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●	●	●	●
	Single IP Management	●	●	●	-	-	-	-
	Syslog	●	●	●	●	●	●	●
Physical	Dimensions (W x D x H)	440 x 200 x 44 mm	440 x 300 x 44 mm	440 x 200 x 44 mm	330 x 155 x 43.5 mm	440 x 200 x 44 mm	440 x 200 x 44 mm	440 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60 Hz, 36~60V DC	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz, 36~60V DC (R model only)		100~240V AC, 50/60Hz
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE








# Layer 3 IPv6/IPv4 Industrial Managed Gigabit Switches

IPv6/IPv4 Managed Gigabit Switches					
Model	IGS-6325-20T4C4X	IGS-6325-20S4C4X	IGS-6325-24P4X	IGS-6325-24P4S	
Product Image					
Hardware	10/100BASE-TX	-	-	-	-
	10/100/1000BASE-T	24	4	24	24
	100/1000BASE-X SFP	4	24	-	4
	10G SFP+ Slot	4	4	4	-
	PoE 802.3at Port	-	-	24	24
	PoE Budget	-	-	440W	440W
	Switch Fabric	128Gbps	128Gbps	128Gbps	48Gbps
	MAC Table	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	10K
	Memory Buffer	32Mbits	32Mbits	32Mbits	32Mbits
Layer 3 Features	IP Interfaces	128VLAN	128VLAN	128VLAN	128VLAN
	Routing Tables	128	128	128	128
	Routing Protocols	IPv4/IPv6 static routing OSPFv2 dynamic routing	IPv4/IPv6 static routing OSPFv2 dynamic routing	IPv4/IPv6 static routing OSPFv2 dynamic routing	IPv4/IPv6 static routing OSPFv2 dynamic routing
	Accelerated Hardware	●	●	●	●
Interface	Port Mirror	Many to many	Many to many	Many to many	Many to many
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	●	●	●	●
	Q-in-Q VLAN	●	●	●	●
	Private VLAN	●	●	●	●
Spanning Tree	802.1D	●	●	●	●
	802.1w	●	●	●	●
	802.1s	●	●	●	●
Rapid Data Recovery	ERPS	●	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v4	v1, v2, v5
	MVR	●	●	●	●
Quality of Service	802.1p Priority	● / 8 priority	● / 8 priority	● / 8 priority	● / 8 priority
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
	DiffServ Policy QoS	●	●	●	●
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●
	MAC-based	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●
	MAC Filtering	●	●	●	●
	Port Security	●	●	●	●
Management	IPv6/IPv4	●	●	●	●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1,2,3,9	1,2,3,9	1,2,3,9	1,2,3,9
	SSH/SSL	●	●	●	●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●
	Single IP Management	-	-	-	-
Syslog	●	●	●	●	
Physical	Dimensions (W x D x H)	440 x 200 x 44 mm	440 x 200 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz Dual 36~60V DC	100~240V AC, 50/60Hz Dual 36~60V DC	Dual 48~56V DC	Dual 48~56V DC
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE





# IPv6/IPv4 Industrial Managed Gigabit Switches

Industrial					
Model	IGSW-24040T	IGS-5225-16T4S	IGS-5225-20T4C2X	IGS-5225-24P4S	
Product Image					
			10G	30W PoE	
Hardware	10/100BASE-TX	-	-	-	-
	10/100/1000BASE-T	24	16	24	24
	100/1000BASE-X SFP	4 combo	4	4 combo	4 combo
	10G SFP+ Slot	-	-	2 (1000X Compatible)	-
	PoE 802.3at Port	-	-	-	24
	PoE Budget	-	-	-	440W max.
	Switch Fabric	48Gbps	40Gbps	88Gbps	48Gbps
	MAC Table	8K	8K	8K	8K
	Jumbo Frame	9K	9K	9K	9K
	Memory Buffer	1392KB	1392KB	32M bits	4Mbit
Layer 3 Features	IP Interfaces	8	8	128	8 VLAN
	Routing Tables	32	32	32	32
	Routing Protocols	IPv4/IPv6 Static Routing	IPv4/IPv6 Static Routing	IPv4/IPv6 Static Routing	IPv4/IPv6 Static Routing
	Accelerated Hardware	-	-	●	-
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●
	Private VLAN	●	●	●	●
Spanning Tree	802.1D	●	●	●	●
	802.1w	●	●	●	●
	802.1s	●	●	●	●
Rapid Data Recovery	ERPS	●	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
	DiffServ Policy QoS	●	●	●	●
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●
	MAC-based	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●
	MAC Filtering	●	●	●	●
	Port Security	●	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●
	Single IP Management	-	-	-	-
Syslog	●	●	●	●	
Physical	Dimensions (W x D x H)	440 x 200 x 44.5 mm	400 x 200 x 44mm	440 x 200 x 44.5 mm	440 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz Dual 36~60V DC	100~240V AC, 50/60Hz Dual 36~60V DC	100~240V AC, 50/60Hz Dual 36~60V DC	Dual 48~56V DC
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE



# Layer 2/4 IPv6/IPv4 Managed Gigabit Switches


		Standalone						
Model	GS-2240-48T4X	GS-4210-48T4S	WGSW-28040	GS-4210-24T2S	GS-4210-16T2S	GSD-1020S	GSD-1002M	
Product Image								
							<b>PoE PD</b>	
Hardware	10/100BASE-TX	-	-	-	-	-	-	-
	10/100/1000BASE-T	48	48	28	24	16	8	8
	100/1000BASE-X SFP	-	4	4 Combo	2	2	2	2
	10G SFP+	4 (1000X Compatible)	-	-	-	-	-	-
	PoE 802.3at Port	-	-	-	-	-	-	-
	PoE Budget	-	-	-	-	-	-	-
	Switch Fabric	176Gbps	104Gbps	56Gbps	52Gbps	36Gbps	20Gbps	20Gbps
	MAC Table	16K	16K	8K	8K	8K	8K	8K
	Jumbo Frame	13K	9K	9K	9K	9K	9K	9K
	Memory Buffer	1.5Mbytes	4Mbit	4Mbit	4Mbit	4Mbit	4Mbit	4Mbit
Interface	Port Configuration	●	●	●	●	●	●	●
	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●	●	●
	LACP	●	●	●	●	●	●	●
VLAN	Port-based	-	-	-	-	-	-	-
	802.1Q VLAN	● / 4K	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	-	●	●	●	●	●	●
Spanning Tree	Private VLAN	●	●	●	●	●	●	●
	802.1D	●	●	●	●	●	●	●
	802.1w	●	●	●	●	●	●	●
Multicast	802.1s	●	●	●	●	●	●	●
	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	-	-	-	●	●	●	●
Quality of Service	802.1p Priority	-	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	-	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	-	●	●	●	●	●	●
	QoS Mode	-	Port-CoS, DSCP-CoS, L4 Port-CoS			Port-CoS, DSCP-CoS, L4 Port-CoS		
	DiffServ Policy QoS	-	-	-	-	-	-	-
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	-	●	●	●	●	●	●
	MAC-based	-	●	●	●	●	●	●
Security	802.1x Port-based Authentication	-	●	●	●	●	●	●
	MAC Binding	●	●	●	●	●	●	●
	MAC Filtering	●	●	●	●	●	●	●
	Port Security	-	●	●	●	●	●	●
Management	IPv6/IPv4	- / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45	-	-
	Telnet	●	●	●	●	●	●	●
	Web Management	●	●	●	●	●	●	●
	SNMP	v1, v2c	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2, v3	v1, v2, v3
	RMON	-	1,2,3,9	1,2,3,9	1, 2, 3, 9	1,2,3,9	1,2,3,9	1,2,3,9
	SSH/SSL	- / -	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●	●	●	●
	Single IP Management	-	-	-	-	-	-	-
Syslog	●	●	●	●	●	●	●	
Physical	Dimensions (W x D x H)	440 x 270 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm	440 x 207 x 44 mm	440 x 207 x 44 mm	217 x 135 x 43.5 mm	191 x 85.7 x 26.3 mm
	Power Supply	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	12V DC, 1A
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

## 19-inch Rack-mountable Switches

		Fast Ethernet		Gigabit	
Model		FNSW-1601	FNSW-2401	GSW-1601	GSW-2401
Product Image					
Hardware	10/100BASE-TX	16	24	-	-
	10/100/1000BASE-T	-	-	16	24
	Switch Fabric	3.2Gbps	4.8Gbps	32Gbps	48Gbps
	MAC Table	8K	8K	8K	8K
	Jumbo Frame	-	-	9K	9K
	Memory Buffer	1.25Mbits	1.25Mbits	built-in	built-in
Interface	Auto-negotiation	●	●	●	●
Physical	Dimensions (W x D x H)	440 x 180 x 44 mm	441 x 180 x 44 mm	440 x 180 x 45 mm	440 x 180 x 45 mm
	Power Supply	100~240V AC, Universal Power Supply		100~240V AC, Universal Power Supply	
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
	Material	Metal	Metal	Metal	Metal
	Rack-mountable	●	●	●	●

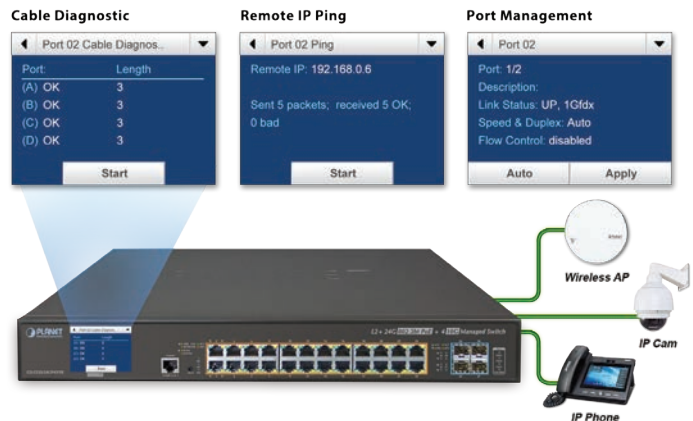
## SOHO/Home Switches

		Fast Ethernet	
Model		SW-504/FSD-503	SW-804/FSD-803
Product Image			
Hardware	10/100/BASE-TX	5	8
	10/100/1000BASE-T	-	-
	PoE 802.3af Port	-	-
	PoE Budget	-	-
	Switch Fabric	1 Gbps	1.6 Gbps
	MAC Table	1K/2K	1K/2K
	Jumbo Frame	-	-
	Memory Buffer	384Kb	768Kb/448Kb
Interface	Auto-negotiation	●	●
	802.3x Flow Control	●	●
Physical	Dimensions (W x D x H)	184 x 110 x 30 mm/160 x 80 x 28 mm	184 x 110 x 30 mm/160 x 80 x 28 mm
	Power Supply	9V DC, 700mA/12V DC, 500mA	9V DC, 700mA/12V DC, 500mA
	EMI/Safety	FCC Class A, CE	FCC Class A, CE
	Material	Plastic/Metal	Plastic/Metal
	Rack-mountable	-	-

		Gigabit					
Model		GSD-503/GSD-504	GSD-803/GSD-804	GSD-805	GSD-603F	GSD-1603	WGS-803
Product Image							
Hardware	10/100/1000BASE-T	5	8	8	5	16	8
	1000BASE-X SFP	-	-	-	-	-	-
	PoE 802.3af Port	-	-	-	-	-	-
	PoE Budget	-	-	-	-	-	-
	Switch Fabric	10Gbps	16Gbps	16Gbps	12Gbps	32Gbps	16Gbps
	MAC Table	8K	8K	8K	2K	8K	8K
	Jumbo Frame	9K	9K	9K	9K	9216Bytes	9K
	Memory Buffer	1Mb	1Mb	1Mb	1.5Mb	Integrated SRAM for packet buffer	1Mb
Interface	Auto-negotiation	●	●	●	●	●	●
	802.3x Flow Control	●/●	●/●	●	●	●	●
Physical	Dimensions (W x D x H)	155 x 86 x 26 mm/176 x 106 x 30 mm		168 x 93 x 32 mm	162 x 102 x 28 mm	155 x 118 x 46 mm	148 x 25 x 134 mm
	Power Supply	12V DC, 500mA/ 12V DC, 1000mA	12V DC, 1000mA	Internal Power	5V DC, 1A	12V DC, 1A	12V~48V DC
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Part 15, Class B, CE	FCC Class A, CE
	Material	Metal/Plastic	Metal/Plastic	Metal	Metal	Metal	Metal
	Rack-mountable	-	-	-	-	-	-

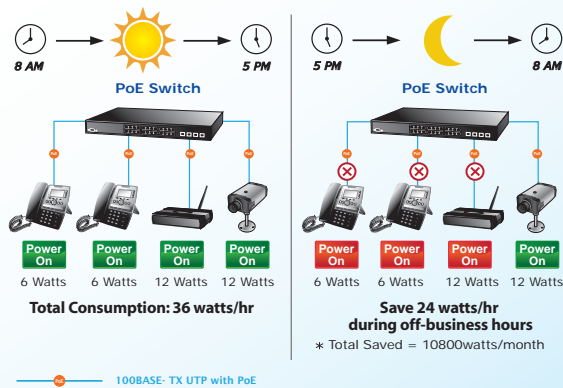


# Power over Ethernet

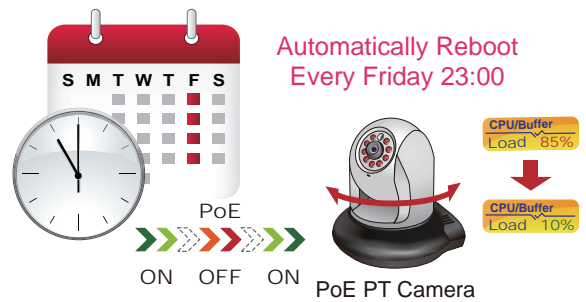


## Intelligent PoE Management

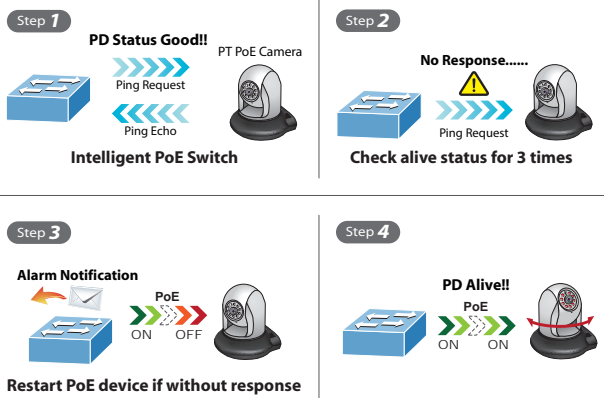
### PoE Schedule for Energy Saving



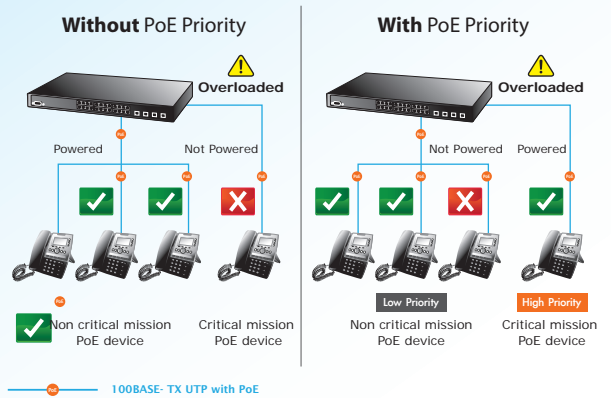
### Scheduled Power Recycling








### PoE PD Alive-checking






### PoE Priority for Critical Services



# Layer 3 IPv6/IPv4 Managed Gigabit Ultra PoE Switches

Ultra PoE/PoE++					
Model	GS-5220-8UP2T2X	GS-5220-16UP4S2X GS-5220-16UP4S2XR	GS-5220-24UP4X GS-5220-24UP4XR	GS-5220-24UPL4X GS-5220-24UPL4XR	
Product Image					
Layer 3 Features	10/100/1000BASE-T	10	16	24	24
	1000BASE-X SFP	-	4	4 combo	4 combo
	10G SFP+ Slot	2, backward compatible with 1000X	2	4	4
	PoE 802.3bt Port	8, up to 75W per port	16, up to 75W per port	24, up to 75W per port	24, up to 75W per port
	PoE Budget	240W	400W	400W	600W
	Switch Fabric	60Gbps	80Gbps	128Gbps	128Gbps
	MAC Table	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	10K
	Memory Buffer	32Mbit	32Mbit	32Mbit	32Mbit
	Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN
Routing Tables		128	128	128	128
Routing Protocols		IPv4/IPv6 Static Routing, OSPFv2		IPv4/IPv6 Static Routing, OSPFv2	
Accelerated Hardware		●	●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●
	Private VLAN	●	●	●	●
Spanning Tree	802.1D	●	●	●	●
	802.1w	●	●	●	●
	802.1s	●	●	●	●
Rapid Data Recovery	ERPS	●	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
Data Control	DiffServ Policy Qos	●	●	●	●
Access Control List	Ingress/Egress	● / ●	● / ●	● / ●	● / ●
	IP-based	●	●	●	●
Security	MAC-based	●	●	●	●
	802.1x Port-based Authentication	●	●	●	●
	MAC Filtering	●	●	●	●
Management	Port Security	●	●	●	●
	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●
Single IP Management	-	-	-	-	
Syslog	●	●	●	●	
Physical	Dimensions (W x D x H)	330 x 200 x 44 mm	400 x 300 x 44 mm	400 x 300 x 44 mm	400 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz 36~60V DC (R model only)	100~240V AC, 50/60Hz 36~60V DC (R model only)	
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Layer 3 IPv6/IPv4 Managed Gigabit Ultra PoE Switches

Ultra PoE/PoE++				
Model	GS-5220-16UP2XV GS-5220-16UP2XVR	GS-5220-24UP4XV GS-5220-24UP4XVR	GS-5220-24UPL4XV GS-5220-24UPL4XVR	
Product Image	 <b>Touch LCD</b>	 <b>Touch LCD</b>	 <b>Touch LCD</b>	
10/100BASE-TX	LCD	2.4" Color TFT Touch screen	2.4" Color TFT Touch screen	2.4" Color TFT Touch screen
	10/100/1000BASE-T	16	24	24
	1000BASE-X SFP	-	-	-
	10G SFP+ Slot	2, backward compatible with 1000X	4, backward compatible with 1000X	4, backward compatible with 1000X
	PoE 802.3bt Port	16, up to 75W per port	24, up to 75W per port	24, up to 75W per port
	PoE Budget	400W	400W	600W
	Switch Fabric	72Gbps	128Gbps	128Gbps
	MAC Table	16K	16K	16K
	Jumbo Frame	10K	10K	10K
	Memory Buffer	32Mbit	32Mbit	32Mbit
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN
	Routing Tables	128	128	128
	Routing Protocols	IPv4/IPv6 Static Routing, OSPFv2	IPv4/IPv6 Static Routing, OSPFv2	IPv4/IPv6 Static Routing, OSPFv2
	Accelerated Hardware	●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●
	LACP	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●
	Private VLAN	●	●	●
Spanning Tree	802.1D	●	●	●
	802.1w	●	●	●
	802.1s	●	●	●
Rapid Data Recovery	ERPS	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS
	DiffServ Policy Qos	●	●	●
Data Control	Ingress/Engress	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●
	MAC-based	●	●	●
Security	802.1x Port-based Authentication	●	●	●
	MAC Filtering	●	●	●
	Port Security	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●
	Web Management	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/ Recovery	●	●	●
	Single IP Management	-	-	-
Syslog	●	●	●	
Physical	Dimensions (W x D x H)	400 x 300 x 55 mm	440 x 300 x 56 mm	400 x 300 x 55 mm
	Power Supply	100~240V AC, 50/60Hz 36~60V DC (R model only)	100~240V AC, 50/60Hz 36~60V DC (R model only)	100~240V AC, 50/60Hz 36~60V DC (R model only)
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Layer 2 Gigabit Ultra PoE Switches

	Managed Switches			Unmanaged
Model	GS-4210-16UP4C	GS-4210-24UP4C	IGS-5225-4UP1T2S	GSW-1222VUP



bt Ready

Modbus TCP

LCD

Hardware	10/100BASE-TX	-	-	-	-
	10/100/1000BASE-T	16	24	5	10
	1000BASE-SX/LX	4 SFP	4 SFP	2 SFP	2
	10GBASE-SR/LR	-	-	-	-
	Switch Fabric	40Gbps	56Gbps	14Gbps	24Gbps/non-blocking
	Throughput	29.79Mpps	41.66Mpps	10.41Mpps	17.8Mpps@64Bytes
PoE Spec.	PoE Standard	802.3bt Ultra PoE, (802.3at Compliant)	802.3bt Ultra PoE, (802.3at Compliant)	802.3bt Ultra PoE, (802.3at Compliant)	IEEE 802.3af/802.3at Ultra PoE PSE
	PSE Type	Mid-span + End-span	Mid-span + End-span	Mid-span + End-span	End-span + Mid-span
	Power Pin Assignment	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)	Ultra PoE: 1/2 (+), 3/6 (-), 4/5 (+), 7/8 (-) End-span: 1/2 (+), 3/6 (-) Mid-span: 4/5 (+), 7/8 (-)
PoE Ability	PoE Port	16	24	4	8
	PoE Power Output	52V DC, 60 watts max.	52V DC, 60 watts max.	48~56V DC, 60 watts max.	54V DC, 60 watts max.
	PoE Budget	400 watts max.	600 watts max.	240 watts max.	380 watts (max.)
	Number of Class 2 PDs @ 6.5 watts	16	24	4	8 (15W PD)
	Number of Class 3 PDs @ 12.9 watts	16	24	4	8 (30W PD)
	Number of Class 4 PDs @ 25 watts	16	24	4	6 (60W PD)
Intelligent PoE Control	Over Temperature Protection	●	●	●	●
	PD Alive Check	●	●	●	-
	PoE Schedule	●	●	●	-
	Power Limit	●	●	●	-
	Scheduled Power Recycling	●	●	●	-
	PoE Classification	●	●	●	-
	PoE Event/Threshold Trap	-	-	●	-
Protocols	VLAN	802.1Q, Q-in-Q, Voice VLAN, Private VLAN	802.1Q, Q-in-Q, Voice VLAN, Private VLAN	802.1Q, Q-in-Q, Voice VLAN, Private VLAN	-
	Spanning Tree	802.1D/802.1w/802.1s	802.1D/802.1w/802.1s	802.1D/802.1w/802.1s	-
	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	-
Management	Interface	Console, Telnet, HTTP	Console, Telnet, HTTP	Console, Telnet, HTTP	-
	SNMP	v1, v2c, v3, trap	v1, v2c, v3, trap	v1, v2c, v3, trap	-
	SSH/SSL	●/●	●/●	●/●	-
Physical	Dimensions (W x D x H)	440 x 300 x 44 mm	440 x 300 x 44 mm	75.7 x 107.2 x 152 mm	440 x 233 x 44 mm, 1U height
	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	Dual 48V~56V DC	100~240V AC, 50/60Hz, 6A max.
	Operating Temperature	0~50 degrees C	0~50 degrees C	-40~75 degrees C	0 ~ 50 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Part 15 Class A, CE

# Layer 3 IPv6/IPv4 Managed Gigabit PoE+ Switches

Standalone PoE+			
Model	GS-5220-16P2XV GS-5220-16P2XVR	GS-5220-24P4X GS-5220-24P4XR	GS-5220-24PL4X GS-5220-24PL4XR



Touch LCD

Hardware	LCD	2.4" Color TFT Touch screen	-	-
	10/100/1000BASE-T	16	24	24
	1000BASE-X SFP	-	4 combo, backward compatible with 100FX	4 combo, backward compatible with 100FX
	10G SFP+ Slot	2, backward compatible with 1000X	4, backward compatible with 1000X	4, backward compatible with 1000X
	PoE 802.3at Port	16, up to 36W per port	24, up to 36W per port	24, up to 36W per port
	PoE Budget	220W	400W	600W
	Switch Fabric	72Gbps	128Gbps	128Gbps
	MAC Table	16K	16K	16K
	Jumbo Frame	10K	10K	10K
	Memory Buffer	32Mbit	32Mbit	32Mbit
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN
	Routing Tables	128	128	128
	Routing Protocols	IPv4/IPv6 Static Routing, OSPFv2	IPv4/IPv6 Static Routing, OSPFv2	IPv4/IPv6 Static Routing, OSPFv2
	Accelerated Hardware	●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●
	LACP	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●
	Private VLAN	●	●	●
Spanning Tree	802.1D	●	●	●
	802.1w	●	●	●
	802.1s	●	●	●
Rapid Data Recovery	ERPS	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS	Port-CoS, DSCP-CoS, L4 Port-CoS
Data Control	DiffServ Policy Qos	●	●	●
	Ingress/Engress	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●
	MAC-based	●	●	●
Security	802.1x Port-based Authentication	●	●	●
	MAC Filtering	●	●	●
	Port Security	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●
	Web Management	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●
	Single IP Management	-	-	-
Syslog	●	●	●	
Physical	Dimensions (W x D x H)	400 x 300 x 55 mm	400 x 300 x 44 mm	400 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz 36~60V DC (R model only)		
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE



# Layer 3 IPv6/IPv4 Managed Gigabit PoE+ Switches

## Standalone PoE+

Model	GS-5220-24P4XV GS-5220-24P4XVR	GS-5220-24PL4XV GS-5220-24PL4XVR	GS-5220-48P4X GS-5220-48P4XR	GS-5220-48PL4X GS-5220-48PL4XR
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Touch LCD

Touch LCD

Hardware	LCD	2.4" Color TFT Touch screen		-	-
	10/100/1000BASE-T	24	24	48	48
	1000BASE-X SFP	-	-	-	-
	10G SFP+ Slot	4, backward compatible with 1000X		4, backward compatible with 1000X	
	PoE 802.3at Port	24, up to 36W per port	24, up to 36W per port	48, up to 36W per port	48, up to 36W per port
	PoE Budget	400W	600W	400W	600W
	Switch Fabric	128Gbps	128Gbps	176Gbps	176Gbps
	MAC Table	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	10K
Memory Buffer	32Mbit	32Mbit	32Mbit	32Mbit	
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN
	Routing Tables	128	128	128	128
	Routing Protocols	IPv4/IPv6 Static Routing, OSPFv2		IPv4/IPv6 Static Routing, OSPFv2	
	Accelerated Hardware	●	●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●
	Private VLAN	●	●	●	●
Spanning Tree	802.1D	●	●	●	●
	802.1w	●	●	●	●
	802.1s	●	●	●	●
Rapid Data Recovery	ERPS	●	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
Data Control	DiffServ Policy QoS	●	●	●	●
	Ingress/Engress	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●
	MAC-based	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●
	MAC Filtering	●	●	●	●
	Port Security	●	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●
Single IP Management	-	-	-	-	
Physical	Syslog	●	●	●	●
	Dimensions (W x D x H)	400 x 300 x 55 mm	400 x 300 x 55 mm	400 x 300 x 44 mm	400 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz 36~60V DC (R model only)		100~240V AC, 50/60Hz 36~60V DC (R model only)	
EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	








# Layer 3/Layer 2+ IPv6/IPv4 Managed Gigabit PoE+ Switches

Standalone PoE+							
Model	GS-5220-8P2T2X	MGS-5220-8P2X	GS-5220-8P2T2S	WGSD-10020HP	WGSW-20160HP	WGSW-24040HP WGSW-24040HP4	



Hardware	LCD	-	-	-	-	-	-
	10/100/1000BASE-T	10	8 x 2500/1000/100/10BASE-T	10	8	20	24
	100/1000BASE-X SFP	-	-	2	2	4 combo	4 combo
	10G SFP+ Slot	2, backward compatible with 1000X		-	-	-	-
	PoE 802.3at Port	8, up to 36W per port		8	8	16	24
	PoE Budget	240W	240W	240W	150W	220W	HP : 220W HP4 : 440W
	Switch Fabric	60Gbps	56Gbps	24Gbps	20Gbps	40Gbps	48Gbps
	MAC Table	16K	16K	8K	8K	8K	8K
	Jumbo Frame	10K	10K	9K	9K	9K	9K
	Memory Buffer	32Mbit	32Mbit	1392KB	4Mbit	4Mbit	4Mbit
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	8 VLAN	8 VLAN	8 VLAN	8 VLAN
	Routing Tables	128	128	32	32	32	32
	Routing Protocols	IPv4/IPv6 Static Routing, OSPFv2		IPv4/IPv6 Static Routing		IPv4/IPv6 Static Routing	
	Accelerated Hardware	●	●	-	-	-	-
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●	●
	LACP	●	●	●	●	●	●
VLAN	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●	●	●
	Private VLAN	●	●	●	●	●	●
Spanning Tree	802.1D	●	●	●	●	●	●
	802.1w	●	●	●	●	●	●
	802.1s	●	●	●	●	●	●
Rapid Data Recovery	ERPS	●	-	-	-	-	-
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
	MVR	●	●	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 4 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS		Port-CoS, DSCP-CoS, L4 Port-CoS	
	DiffServ Policy QoS	●	●	●	●	●	●
Data Control	Ingress/Egress	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
Access Control List	IP-based	●	●	●	●	●	●
	MAC-based	●	●	●	●	●	●
Security	802.1x Port-based Authentication	●	●	●	●	●	●
	MAC Filtering	●	●	●	●	●	●
	Port Security	●	●	●	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	●	●	●
	Telnet	●	●	●	●	●	●
	Web Management	●	●	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9	1, 2, 3, 9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●	●	●
	Single IP Management	-	-	-	-	-	-
Syslog	●	●	●	●	●	●	
Physical	Dimensions (W x D x H)	330 x 200 x 44 mm	330 x 200 x 44 mm	330 x 200 x 44 mm	330 x 155 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm
	Power Supply	100-240V AC, 50/60Hz		100-240V AC, 50/60Hz		100-240V AC, 50/60Hz	
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Layer 2/4 Managed Gigabit PoE+ Switches

		PoE+						
Model	GS-4210-48P4S	GS-4210-24P4C GS-4210-24PL4C	GS-4210-24P2S	GS-4210-16P4C	GS-4210-16P2S	GS-4210-8P2T2S	GS-4210-8P2S	
Product Image								
Hardware	10/100BASE-TX	-	-	-	-	-	-	-
	10/100/1000BASE-T	48	28	24	20	16	10	8
	Mini-GBIC/SFP	4	4 Combo	2	4 Combo	2	2	2
	PoE 802.3at Port	48	24	24	16	16	8	8
	PoE Budget	440W	P : 220W PL : 440W	300W	220W	220W	240W	120W
	Switch Fabric	104Gbps	56Gbps	52Gbps	40Gbps	36Gbps	24Gbps	20Gbps
	MAC Table	16K	8K	8K	8K	8K	8K	8K
	Jumbo Frame	9K	9K	9K	9K	9K	9K	9K
Interface	Memory Buffer	4Mbit	4Mbit	4Mbit	4Mbit	4Mbit	4Mbit	4Mbit
	Port Configuration	●	●	●	●	●	●	●
Link Aggregation	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
	Port Trunk	●	●	●	●	●	●	●
VLAN	LACP	●	●	●	●	●	●	●
	Port-based	-	-	-	-	-	-	-
	802.1Q VLAN	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●	●	●	●
Spanning Tree	Private VLAN	●	●	●	●	●	●	●
	802.1D	●	●	●	●	●	●	●
	802.1w	●	●	●	●	●	●	●
Multicast	802.1s	●	●	●	●	●	●	●
	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
Quality of Service	MVR	-	-	●	●	●	●	●
	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 queues
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	IP TOS/DSCP	●	●	●	●	●	●	●
	QoS Mode	Port-CoS, DSCP-CoS, L4 Port-CoS				Port-CoS, DSCP-CoS, L4 Port-CoS		
Data Control	DiffServ Policy QoS	-	-	-	-	-	-	-
Access Control List	Ingress/Egress	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	IP-based	●	●	●	●	●	●	●
Security	MAC-based	●	●	●	●	●	●	●
	802.1x Port-based Authentication	●	●	●	●	●	●	●
	MAC Binding	●	●	●	●	●	●	●
	MAC Filtering	●	●	●	●	●	●	●
	Port Security	●	●	●	●	●	●	●
Management	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45	● / RJ45
	Telnet	●	●	●	●	●	●	●
	Web Management	●	●	●	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	RMON	1,2,3,9	1,2,3,9	1,2,3,9	1,2,3,9	1,2,3,9	1,2,3,9	1,2,3,9
	SSH/SSL	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●	●	●	●
	Single IP Management	-	-	-	-	-	-	-
Physical	Syslog	●	●	● / ●	● / ●	● / ●	●	●
Physical	Dimensions (W x D x H)	440 x 300 x 44 mm	440 x 300 x 44 mm	440 x 207 x 44 mm	440 x 300 x 44 mm	440 x 207 x 44 mm	330 x 200 x 44 mm	330 x 155 x 44 mm
	Power Supply	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Layer 2 Web Smart Fast Ethernet PoE+ Switches


PoE+				
Model	FGSD-1008HPS	FGSW-1816HPS	FGSW-2624HPS	FGSW-2624HPS4

Product Image








Hardware	10/100BASE-TX	8	16	24	24
	10/100/1000BASE-T	2	2	2	2
	Mini-GBIC/SFP	2 combo	2 combo	2 combo	2 combo
	PoE 802.3af Port	-	16	-	-
	PoE 802.3at Port	8	16	24	24
	PoE Budget	120W	220W	220W	440W
	Switch Fabric	5.6Gbps	7.2Gbps	8.8Gbps	8.8Gbps
	MAC Table	4K	4K	4K	4K
	Jumbo Frame	-	-	-	-
	Memory Buffer	2.75Mb	2.75Mb	2.75Mb	2.75Mb
Interface	Auto-negotiation	●	●	●	●
	802.3x Flow Control	●	●	●	●
	Port Configuration	●	●	●	●
	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Static Port Trunk	●	●	●	●
	802.3ad LACP	●	●	●	●
VLAN	Port-based VLAN	●	●	●	●
	802.1Q VLAN	● / 32	● / 32	●	32
Spanning Tree Protocol	802.1D STP	●	●	●	●
	802.1w RSTP	●	●	●	●
Multicast	IGMP Snooping	v1, v2	v1, v2	v1, v2	v1, v2
Quality of Service	802.1p Priority	● / 2 queues	● / 2 queues	●	2 queues
	DSCP	●	●	●	●
	Priority Mode	Strict/WRR	Strict/WRR	Strict/WRR	Strict/WRR
	QoS Mode	Port-CoS, IP ToS	Port-CoS, IP ToS	Port-CoS, IP ToS	Port-CoS, IP ToS
Data Control	Ingress	●	●	●	●
	Egress	●	●	●	●
Access Control List	IP-based	-	-	-	-
Security	802.1x Port-based Authentication	-	-	-	-
	Static MAC	●	●	●	●
	MAC Filter	●	●	●	●
	IP Filter	-	-	-	-
Management	Console	-	-	-	-
	Web Management	●	●	●	●
	SNMP	Trap	Trap	Trap	Trap
	Management Utility	●	●	●	●
	Firmware Upgrade	HTTP	HTTP	HTTP	HTTP
	Cable Diagnostic	-	-	-	-
Physical	Dimensions (W x D x H)	330 x 155 x 44 mm	440 x 200 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm
	Power Supply	100~240V AC, 50/60Hz		100~240V AC, 50/60Hz	
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

## Unmanaged LCD PoE+ Switches






		Fast Ethernet/PoE+			Gigabit/PoE+		
Model		FGSD-1022VHP	FGSW-1822VHP	FGSW-2622VHP	GSD-1222VHP	GSW-1820VHP	GSW-2620VHP
Product Image							
Hardware	LCD	2" mono	2" color	2" color	2" mono	2" color	2" color
	10/100BASE-TX	8	16	24	-	-	-
	10/100/1000BASE-T	2	2	2	10	16	24
	Mini-GBIC/SFP	2	2	2	2	2	2
	PoE 802.3af/at Port	8	16	24	8	16	24
	PoE Budget	120W	220W	300W	120W	300W	300W
	Switch Fabric	5.6Gbps	7.2Gbps	8.8Gbps	24Gbps	36Gbps	52Gbps
	MAC Table	4K	4K	4K	8K	8K	8K
	Jumbo Frame	-	-	-	9K	9K	9K
Memory Buffer	2.75Mbits	2.75Mbits	2.75Mbits	4.1Mb	4.1Mb	4.1Mb	
Interface	Auto-negotiation	●	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●	●
Physical	Dimensions (W x D x H)	280 x 180 x 44 mm	440 x 230 x 44 mm	440 x 230 x 44 mm	280 x 180 x 44 mm	440 x 233 x 44 mm	440 x 233 x 44 mm
	Power Supply	100~240V AC, 50/60Hz			100~240V AC		
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
	Material	Metal	Metal	Metal	Metal	Metal	Metal
	Rack mountable	●	●	●	●	●	●

## Unmanaged PoE/PoE+ Switches



		Fast Ethernet PoE/PoE+				
Model		FSD-504HP	FSD-604HP	FSD-1008HP	FGSD-1011HP	FNSW-1600P
Product Image						
Hardware	10/100BASE-TX	5	6	10	8	16
	10/100/1000BASE-T	-	-	-	1	-
	Mini-GBIC/SFP	-	-	-	1	-
	PoE 802.3af/at Port	4 (802.3at)	4 (802.3at)	8 (802.3at)	8 (802.3at)	16 (802.3at)
	PoE Budget	60W	60W	120W	120W	125W
	Switch Fabric	1Gbps	1.2Gbps	2Gbps	5.6Gbps	3.2Gbps
	MAC Table	1K	2K	8K	4K	8K
	Jumbo Frame	-	1536 bytes	1522 bytes	9K bytes	-
	Memory Buffer	384K Bytes	2Mb	2Mb	2Mb	2Mb
DIP Switch	Standard/Extend (250m)	Standard/Extend(250m)	Standard/VLAN/Extend (250m)	Standard/VLAN/Extend (250m)	-	
Interface	Auto-negotiation	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●
Physical	Dimensions (W x D x H)	100 x 100 x 26 mm	168 x 93 x 32 mm	220 x 150 x 43 mm	220 x 150 x 43 mm	440 x 207 x 45 mm
	Power Supply	51V DC, 1.25A	100~240V AC	100~240V AC	100~240V AC	100~240V AC
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
	Material	Metal	Metal	Metal	Metal	Metal
	Rack mountable	-	●	●	●	●






# Unmanaged PoE/PoE+ Switches

Gigabit PoE+						
Model	GSD-804P	GSD-604HP	GSD-908HP	GSD-1008HP	GSW-1600HP GSW-2620HP	
Product Image						
Hardware	10/100BASE-TX	-	-	-	-	-
	10/100/1000BASE-T	8	6	9	10	16/24
	Mini-GBIC/SFP	-	-	-	-	-/2
	PoE 802.3at Port	4	4	8	8	16/24
	PoE Budget	55W	60W	120W	120W	220W/220W
	Switch Fabric	16Gbps	12Gbps	18Gbps	20Gbps	32Gbps/52Gbps
	MAC Table	8K	8K	4K	8K	8K/8K
	Jumbo Frame	9K	9K	9K	9K bytes	9K
	Memory Buffer	1Mb	1Mb	192K bytes	2Mb	4.1Mb
	DIP Switch	Standard/Extend (200m)	-	-	Standard/VLAN/Extend (250m)	-
Interface	Auto-negotiation	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●
Physical	Dimensions (W x D x H)	217 x 135 x 43 mm	160 x 92.5 x 28 mm	235 x 103 x 27 mm	220 x 150 x 43 mm	445 x 207 x 44 mm
	Power Supply	100~240V AC	55V DC	51V DC	100~240V AC	100~240V AC
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
	Material	Metal	Metal	Metal	Metal	Metal
	Rack mountable	Optional kit	-	-	●	● / ●

# PoE Network Adapters






PoE Network Adapters		
Model	ENW-9720P	ENW-9740P
Product Image		
	<b>PoE NIC</b>	<b>PoE NIC</b>
Attached Interface	x4 PCI Express v2.0	x4 PCI Express v2.1
Network Interface	Dual Port 10/100/1000 Mbps	Quad Port 10/100/1000 Mbps
PoE	802.3at/af	802.3at/af
OS Support	Windows 10	●
	Windows 8	●
	Windows 7	●
	Windows XP	●
	Windows 2008	●
	Linux	●

## 60-watt Ultra Power PoE Injector Hubs

Managed Injector Hubs				
Model	UPOE-2400G	UPOE-1600G	UPOE-800G	
Product Image				
Hardware	RJ45 Data Input Ports	24	16	8
	RJ45 Data + Power Output Ports	24	16	8
	Pass-through Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3bt, Ultra PoE (802.3at Compliant)	802.3bt, Ultra PoE (802.3at Compliant)	802.3bt, Ultra PoE (802.3at Compliant)
	PSE Type	End-span+Mid-span/ End-span/Mid-span	Mid-span + End-span	Mid-span + End-span
	Power Pin Assignment	Pair 1: 1/2(-), 3/6(+) Pair 2: 4/5(+), 7/8(-)	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)
PoE Ability	PoE Port	24	16	8
	PoE Power Output	54V DC, 60W max.	52V DC, 60W max.	52V DC, 60W max.
	PoE Budget	800 watts max.	600 watts max.	440 watts max.
	Number of Class 2 PDs @ 6.5 watts	24	16	8
	Number of Class 3 PDs @ 12.9 watts	24	16	8
	Number of Class 4 PDs @ 25 watts	24	16	8
Intelligent PoE Control	Over Temperature Protection	●	●	●
	PD Alive Check	●	-	-
	PoE Schedule	●	●	●
	Power Limit	●	●	●
	PoE Priority	●	●	●
	PoE Classification	●	●	●
	PoE Event/Threshold Trap	●	●	●
Management	Interface	HTTP	HTTP	HTTP
	SNMP	v1,v2, trap	v1, v2, trap	v1, v2, trap
Physical	Dimensions (W x D x H)	440 x 300 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm
	Rackmountable	●	●	●
	Power Supply	Internal	Internal	Internal
Regulatory	Power Requirements	100-240V AC, 50/60Hz	100-240V AC, 50/60Hz	100-240V AC, 50/60Hz
	Operating Temperature	0-50 degrees C	0-50 degrees C	0-50 degrees C
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

## 60-watt/95-watt Ultra Power PoE Injectors, Splitters & Extenders

Injectors								
Model	POE-171	POE-171A-60 POE-171A-95	POE-172	POE-173	POE-175-95	IPOE-171-60W	IPOE-171-95W	
Product Image								
Hardware	RJ45 Data Input Port	1	1	1	1	1	1	1
	RJ45 Data + Power Output Port	1	1	1	1	1	1	1
	Data Rate	10/100/1000Mbps		10/100/1000Mbps		10/100/1000Mbps		
PoE Spec.	PoE Standard	Ultra PoE (802.3at Compliant)	802.3bt (802.3at Compliant)	Ultra PoE (802.3at Compliant)		802.3bt (802.3at Compliant)		
	PSE Type	Mid-span + End-span		Mid-span + End-span		Mid-span + End-span		
	Power Pin Assignment	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)		Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)		Pair 1: 1/2 (-), 3/6 (+) Pair 2: 4/5 (+), 7/8 (-)		
PoE Ability	PoE Port	1	1	1	1	1	1	1
	PoE Power Output	56V DC	54V DC	56V DC	50V DC	54V DC	48~54V DC	54V DC
	PoE Ability	60 watts	60 watts 95 watts	60 watts	60 watts	95 watts	60 watts	95 watts
Physical	Dimensions (W x D x H)	90 x 70 x 26 mm	90 x 70 x 26 mm	115 x 62.5 x 31 mm	115 x 62.5 x 31 mm	170 x 100 x 40 mm	135 x 87.8 x 32 mm	135 x 87.8 x 32 mm
	Power Supply	External	External	Internal	Internal	Internal	External	External
	Power Requirements	100~240V AC, 50/60Hz		100~240V AC, 50/60Hz		48~56V DC		12~48V DC
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C	-40~75 degrees C	-40~75 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

Splitters				Extenders			
Model	POE-171S	POE-172S	IPOE-171S	POE-E304	IPOE-E174	IPOE-E172	
Product Image							
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Data Power Output Port	1 x RJ45	1 x RJ45	1 x RJ45	4 x RJ45 Data + Power		2 x RJ45 Data + Power
	DC Output Voltage	12V/19V/24V DC, Max. 2A		12V/24V DC, Max. 2A	PoE 44~57V DC	PoE 44~57V DC	PoE 44~57V DC
	DIP Switch	Adjustable 12V/19V/24V		Adjustable 12V//24V	-	-	-
	Data Rate	10/100/1000Mbps			10/100/1000Mbps		
PoE Spec.	PoE Standard	Ultra PoE (802.3at Compliant)			Ultra PoE (802.3at Compliant)		
	PD Type	Both Mid-span and End-span			Both Mid-span and End-span		
	PoE Power Input	52~56V DC	52~56V DC	52~56V DC	52~56V DC	52~56V DC	52~56V DC
Physical	Dimensions (W x D x H)	95 x 70 x 26 mm	95 x 70 x 26 mm	32 x 87 x 135 mm	160 x 92.5 x 28 mm	56 x 87.8 x 135 mm	200 x 81 x 40 mm
	Operating Temperature	0~50 degrees C	0~50 degrees C	-40~75 degrees C	0~50 degrees C	-40~75 degrees C	-40~75 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# PoE Injector Hubs





802.3at PoE+						
Model	HPOE-2400G	POE-2400G	HPOE-1200G	POE-1200G	HPOE-460	




Product Image



Hardware	RJ45 Data Input Ports	24	24	12	12	4
	RJ45 Data + Power Output Ports	24	24	12	12	4
	Pass-through Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	PSE Type	Mid-span	Mid-span	Mid-span	Mid-span	Mid-span
	Power Pin Assignment	4/5(-), 7/8(+)	4/5(-), 7/8(+)	4/5(-), 7/8(+)	4/5(-), 7/8(+)	4/5(+), 7/8(-)
PoE Ability	PoE Port	24	24	12	12	4
	PoE Power Output	52V DC, 30.8 watts max.	52V DC, 30.8 watts max.	52V DC, 30.8 watts max.	52V DC, 30.8 watts max.	52V DC, 30.8 watts max.
	PoE Budget	720 watts max.	440 watts max.	360 watts max.	220 watts max.	120 watts max.
	Number of Class 2 PD @ 6.5 watts	24	24	12	12	4
	Number of Class 3 PD @ 12.9 watts	24	14	12	7	4
	Number of Class 4 PD @ 25 watts	24	14	12	7	4
Intelligent PoE Control	Over Temperature Protection	●	●	●	●	●
	PD Alive Check	-	-	-	-	-
	PoE Schedule	●	●	●	●	●
	Power Limit	●	●	●	●	●
	PoE Priority	●	●	●	●	●
	PoE Classification	●	●	●	●	●
	PoE Event/Threshold Trap	●	●	●	●	●
Management	Interface	HTTP	HTTP	HTTP	HTTP	HTTP
	SNMP	v1, v2, trap	v1, v2, trap	v1, v2, trap	v1, v2, trap	v1, v2, trap
Physical	Dimensions (W x D x H)	440 x 300 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm	440 x 300 x 44 mm	26 x 70 x 97 mm
	Rackmountable	●	●	●	●	Wall mount
	Power Supply	Internal	Internal	Internal	Internal	External
	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	52V~56V DC
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

## PoE Injectors & Media Converters

802.3at PoE+					
Model	POE-161	POE-163	POE-164	GTP-805A	
Product Image					
Hardware	RJ45 Data Input Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x 1000X/LC/Vary on Module
	RJ45 Data + Power Output Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at
	PSE Type	Mid-span	Mid-span	Mid-span	Mid-span
	Power Pin Assignment	4/5(+), 7/8(-)	4/5(+), 7/8(-)	4/5(+), 7/8(-)	4/5(+), 7/8(-)
	PoE Port	1	1	1	1
	PoE Power Output	56V DC	53V DC	53V DC	52V DC
	PoE Ability	30 watts	30 watts	30 watts	30 watts
Physical	Dimensions ( W x D x H)	97 x 70 x 25 mm	115 x 62.5 x 31 mm	115 x 62.5 x 31 mm	97 x 70 x 26 mm
	Power Supply	External	Internal	Internal	External
	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

802.3af PoE				
Model	POE-151/POE-152	FTP-802	FTP-802S15	
Product Image				
Hardware	RJ45 Data Input Port	1 x RJ45	1 x 100FX/SC/MM/2km	1 x 100FX/SC/MM/15km
	RJ45 Data + Power Output Port	1 x RJ45	1 x RJ45	1 x RJ45
	Data Rate	10/100/1000Mbps	10/100Mbps	10/100Mbps
PoE Spec.	PoE Standard	802.3af	802.3af	802.3af
	PSE Type	End-span	End-span	End-span
	Power Pin Assignment	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)
	PoE Port	1	1	1
	PoE Power Output	48V DC	48V DC	48V DC
	PoE Ability	15.4 watts	15.4 watts	15.4 watts
Physical	Dimensions ( W x D x H)	73 x 55 x 24 mm	97 x 70 x 26 mm	97 x 70 x 26 mm
	Power Supply	External	External	External
	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE



# PoE Extenders & Splitters

## PoE Extenders

Model	POE-E101	POE-E201	POE-E202	POE-E304	IPOE-E202
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Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Data + Power Output Port	1 x RJ45	1 x RJ45	2 x RJ45	4 x RJ45	2 x RJ45
DC Output Voltage	PoE 48V DC, max. 270mA	PoE 48~56V DC, max. 510mA	PoE 48~56V DC, max. 510mA	PoE 44~55V DC, max. 510mA	PoE 44~55V DC, max. 510mA	
DIP Switch	-	-	-	-	-	
Data Rate	10/100Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	
PoE Spec.	PoE Standard	802.3af	802.3af/802.3at	802.3af/802.3at	PD: Ultra PoE PSE: 802.3af/802.3at	802.3at
	PSE Type	End-span	End-span	End-span	End-span	End-span
	PoE Power Input	48V DC	52~56V DC	52~56V DC	52~56V DC	52~56V DC
Physical	Dimensions (W x D x H)	97 x 70 x 26 mm	97 x 70 x 26 mm	97 x 70 x 26 mm	160 x 92.5 x 28 mm	200 x 81 x 40 mm
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C	-40~75 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

## PoE Splitters

Model	POE-161S	POE-162S	PoE Tester	POE-TESTER
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Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45
	Data Output Port	1 x RJ45	1 x RJ45	-
DC Output Voltage	5V/12V	12V/24V DC, max. 2A	-	
DIP Switch	Adjustable 5V/12V DC	Adjustable 12V/24V DC	-	
Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	
PoE Spec.	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at/Ultra PoE
	PD Type	Both Mid-span and End-span	Both Mid-span and End-span	Mid-span and End-span
	PoE Power Input	52~56V DC	52~56V DC	36~57V DC
Physical	Dimensions (W x D x H)	97 x 70 x 25 mm	97 x 70 x 25 mm	70 x 23 x 22 mm
	Operating Temperature	0~50 degrees C	0~50 degrees C	-10~60 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	CE compliance

# Long Reach PoE Series




	Coaxial Switches			Industrial Coaxial Switch
Model	LRP-822CS	LRP-1622CS	LRP-422CST	




Product Image



Ethernet Interfaces	10/100BASE-TX	-	-	-
	10/100/1000BASE-T	2 x RJ45	2 x RJ45	2 x RJ45
	1000BASE-SX/LX	2 x SFP slot	2 x SFP slot	2 x SFP slot
	Cabling	Copper: Cat5e or above Fiber: multi-mode 50/125um; Single mode 9/125um		
	Maximum Distance	Copper: 100m Fiber: vary on SFP module; up to 120km		
Long Reach PoE Interfaces	Connectivity	8 x BNC female	16 x BNC female	4 x BNC female
	Cabling	Coaxial cable: 75ohm	Coaxial cable: 75ohm	Coaxial cable: 75ohm
	Maximum Distance	1000m	1000m	1000m
	Data Rate	200m: 75Mbps/81Mbps (Download/Upload) 1000m: 31Mbps/38Mbps (Download/Upload)		
	Power Output	54V DC over coaxial, 36 watts max.	52V DC over coaxial, 36 watts max.	48~56V DC over coaxial, 36 watts max.
	Total Power Budget	240 watts max.	440 watts max.	144 watts max.
	Encryption	AES 128-bit	AES 128-bit	AES 128-bit
PoE Ability	PoE Standard	Power over coaxial	Power over coaxial	Power over coaxial
	PoE Port	8	16	4
	PoE Power Output	54V DC	52V DC	44~56V DC
Intelligent Power Control	Over Temperature Protection	●	●	●
	PD Alive Check	●	●	●
	PoE Schedule	●	●	●
	Power Limit	●	●	●
	Scheduled Power Recycling	●	●	●
Protocols	VLAN	802.1Q, Q-in-Q, Voice VLAN, Private VLAN	802.1Q, Q-in-Q, Voice VLAN, Private VLAN	802.1Q, Q-in-Q, Voice VLAN, Private VLAN
	Spanning Tree	802.1D/802.1w/802.1s	802.1D/802.1w/802.1s	802.1D/802.1w/802.1s
	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3
Management	Interface	Console, Telnet, HTTP	Console, Telnet, HTTP	Console, Telnet, HTTP
	SNMP	v1, v2c, v3, trap	v1, v2c, v3, trap	v1, v2c, v3, trap
	SSH/SSL	● / ●	● / ●	● / ●
Physical	Dimensions (W x D x H)	440 x 300 x 44 mm	440 x 300 x 44 mm	107 x 72 x 152 mm
	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	Dual 48~56V DC
	Operating Temperature	0~50 degrees C	0~50 degrees C	-40~75 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Long Reach PoE Series

Long Reach PoE Injectors				
Model	LRP-101CH	LRP-101UH	LRP-201HT	
Product Image				
Ethernet Interfaces	10/100BASE-TX	1 x RJ45 PoE PD	1 x RJ45 PoE PD	1 x RJ45 w/ PoE PD
	10/100/1000BASE-T	-	-	-
	PoE Power	-	-	-
	Cabling	Cat5e or above	Cat5e or above	Cat. 5e or above
	Maximum Distance	100m	100m	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PSE)	1 x RJ45 Copper (PSE)	1 x BNC female (PSE) 1 x RJ45 copper (PSE)
	Cabling	Coaxial cable: 75ohm	Copper: 4-pair or 1-pair UTP	Coaxial cable: 75 ohm Copper: Cat. 5e/6 UTP or 2-pair twisted-pair cable
	Maximum Distance	1000m	500m	600m
	Data Rate (Down/upstream)	200m: 58Mbps/58Mbps 1000m: 48Mbps/46Mbps	200m: 58Mbps/58Mbps 500m: 56Mbps/56Mbps	Coaxial 200m: 480/530 Mbps Coaxial 600m: 100/121 Mbps UTP 200m: 279/295 Mbps UTP 400m: 56/85 Mbps
	Power Output	56V DC, 36 watts max.	56V DC, 36 watts max.	44~54V DC, 72 watts max.
	Total Power Budget	36 watts max.	36 watts max.	72 watts max.
PoE Ability	PoE Standard	Power over coaxial	Power over UTP	Power over coaxial/UTP/telephone wire
	PoE Port	1 x BNC female (PSE)	1 x UTP	1 x BNC female (PSE) 1 x RJ45 copper (PSE)
	PoE Power Output	44~56V DC	44~56V DC	44~54V DC
Physical	Dimensions (W x Dx H)	90 x 70 x 26 mm	90 x 70 x 26 mm	135 x 87.8 x 32mm
	Power Requirements	DC: 48~56V DC PoE: 802.3af input	DC: 48~56V DC PoE: 802.3af input	DC: 48~54V, PoE: 802.3af/bt input
	Operating Temperature	-20 ~ 70°C	-20 ~ 70°C	-20~70 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

Long Reach PoE Extenders					
Model	LRP-101CE	LRP-101UE	LRP-104CET	LRP-201ET	
Product Image					
Ethernet Interfaces	10/100BASE-TX	1 x RJ45 PoE PSE	1 x RJ45 PoE PSE	4 x RJ45 PoE PSE	
	10/100/1000BASE-T	-	-	-	
	PoE Power	44~54V DC, 600mA max.	44~54V DC, 600mA max.	56V DC, 600mA max.	53V DC, 1200mA max.
	Cabling	Cat5e or above	Cat5e or above	Cat5e or above	Cat. 5e or above
	Maximum Distance	100m	100m	100m	100m
Long Reach PoE Interfaces	Connectivity	1 x BNC female (PD)	1 x RJ45 Copper (PD)	1 x BNC female (PD)	1 x BNC female (PD) 1 x RJ45 copper (PD)
	Cabling	Coaxial cable: 75ohm	Copper: 4-pair or 1-pair UTP	Coaxial cable: 75ohm or Copper: 4-pair UTP	Coaxial cable: 75 ohm Copper: Cat. 5e/6 UTP or 2-pair twisted-pair cable
	Maximum Distance	1000m	500m	600m	600m
	Data Rate (Down/upstream)	200m: 58Mbps/58Mbps 1000m: 48Mbps/46Mbps	200m: 58Mbps/58Mbps 500m: 56Mbps/56Mbps	200m: 93Mbps/93Mbps 600m: 66Mbps/66Mbps	Coaxial 200m: 480/530 Mbps Coaxial 600m: 100/121 Mbps UTP 200m: 279/295 Mbps UTP 400m: 56/85 Mbps
	Power Output	-	-	-	-
	Total Power Budget	-	-	-	-
PoE Ability	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3at/bt
	PoE Port	1 x RJ45	1 x RJ45	4 x RJ45	1 x BNC female (PSE) 1 x RJ45 copper (PSE)
	PoE Power Output	54V DC, 600mA max.	54V DC, 600mA max.	56V DC, 600mA max.	53V DC, 1200mA max.
Physical	Dimensions (W x Dx H)	90 x 70 x 26 mm	90 x 70 x 26 mm	56 x 87 x 135 mm	135 x 87.8 x 32mm
	Power Requirements	44~57V DC PoC or PoU		Dual 48~56V DC or 44~57V DC PoC	40~54V DC PoC/PoE
	Operating Temperature	-20 ~ 70°C	-20 ~ 70°C	-20 ~ 70°C	-20~70 degrees C
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Fiber Optic Transceivers

Fast Ethernet Transceivers (100BASE-X SFP)							
Model	MFB-FX	MFB-F20	MFB-F40	MFB-F60	MFB-F120	MFB-TFX	MFB-TF20
Product Image							
Speed (Mbps)	100	100	100	100	100	100	100
Connector Interface	LC	LC	LC	LC	LC	LC	LC
Fiber Mode	Multi Mode	Single Mode			Multi Mode	Single Mode	
Distance	2km	20km	40km	60km	120km	2km	20km
Wavelength (nm)	1310nm	1310nm	1310nm	1310nm	1550nm	1310nm	1310nm
Operating Temp.	0 ~ 60 °C				-40 ~ 75 °C		

Fast Ethernet Transceivers (100BASE-BX, Single Fiber Bi-Directional SFP)				
Model	MFB-TSA	MFB-TSB	MFB-FA20	MFB-FB20
Product Image				
Speed (Mbps)	100	100	100	100
Connector Interface	LC	LC	WDM(LC)	WDM(LC)
Fiber Mode	Multi Mode		Single Mode	
Distance	2km	2km	20km	20km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-40 ~ 75 °C		0 ~ 60 °C	

Gigabit Ethernet Transceivers (1000BASE-X/ Fiber Channel SFP)												
Model	MGB-GT	MGB-SX	MGB-SX2	MGB-LX	MGB-L40	MGB-L80	MGB-L120	MGB-TSX	MGB-TSX2	MGB-TLX	MGB-TL40	MGB-TL80
Product Image												
Speed (Mbps)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Connector Interface	Copper	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
Fiber Mode	-	Multi Mode		Single Mode				Multi Mode		Single Mode		
Distance	100m	550m	2km	20km	40km	80km	120km	550m	2km	20km	40km	80km
Wavelength (nm)	-	850nm	1310nm	1310nm	1310nm	1550nm	1550nm	850nm	1310nm	1310nm	1310nm	1550nm
Operating Temp.	0 ~ 60 °C				0 ~ 60 °C				-40 ~ 75 °C			

Gigabit Ethernet Transceivers (1000BASE-BX, Single Fiber Bi-Directional SFP)								
Model	MGB-LA10	MGB-LB10	MGB-LA20	MGB-LB20	MGB-LA40	MGB-LB40	MGB-LA80	MGB-LB80
Product Image								
Speed (Mbps)	1000	1000	1000	1000	1000	1000	1000	1000
Connector Interface	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)
Fiber Mode	Single Mode							
Distance	10km	10km	20km	20km	40km	40km	80km	80km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1490nm	1550nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1490nm
Operating Temp.	0 ~ 60 °C				0 ~ 60 °C			

40Gbps QSFP+ (40Ethernet/40GBASE)	
Model	QSFP-40G-SR4 QSFP-40G-LR4
Product Image	
Speed (Mbps)	40G
Connector Interface	MPO
Fiber Mode	Multi Mode
Distance	Up to 100m
Wavelength (nm)	850nm
Operating Temp.	0 ~ 60 °C

10Gbps SFP+ (10G Ethernet/10GBASE)									
Model	MTB-RJ	MTB-SR	MTB-LR	MTB-LA20	MTB-LB20	MTB-LA40	MTB-LB40	MTB-LA60	MTB-LB60
Product Image									
Speed (Mbps)	10G	10G	10G	10G	10G	10G	10G	10G	10G
Connector Interface	RJ45	LC	LC	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)
Fiber Mode	-	Multi Mode	Single Mode						
Distance	30m	Up to 300m	10km	20km	20km	40km	40km	60km	60km
Wavelength (nm)	-	850nm	1310nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm
Operating Temp.	0 ~ 60 °C				0 ~ 60 °C				

100G QSFP28	
Model	QSFP-100G-SR4 QSFP-100G-LR4
Product Image	
Speed (Mbps)	100G
Connector Interface	MPO
Fiber Mode	Multi Mode
Distance	Up to 100m
Wavelength (nm)	850nm
Operating Temp.	0 ~ 60 °C



Tel: +886-2-2219-9518 Fax: +886-2-2219-9528 E-mail: sales@planet.com.tw  
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