



**PLANET**  
Networking & Communication



# 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. 10G SFP+ Slot	60
	Max. 10/100/1000BASE-T	160
	Max. 1000BASE-SX/LX SFP Slot	156
Hardware Specifications	Switch Processing Scheme	Store-and-Forward
	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
IPv4 Layer 3 Functions	Power Input	AC: Input 100~240V, 50~60 Hz
	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
IPv6 Layer 3 Functions	Routing Interface	Per VLAN
	IP Routing Protocol	RIPng, OSPFv3, BGP4+
Layer 2 Functions	Layer 3 Protocol	Configured Tunnels, ISATAP, CIDR
	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 Spoofing Prevention, ARP Scanning Prevention, IP Source Guard
Authentication	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
	Standards Conformance	Compliance

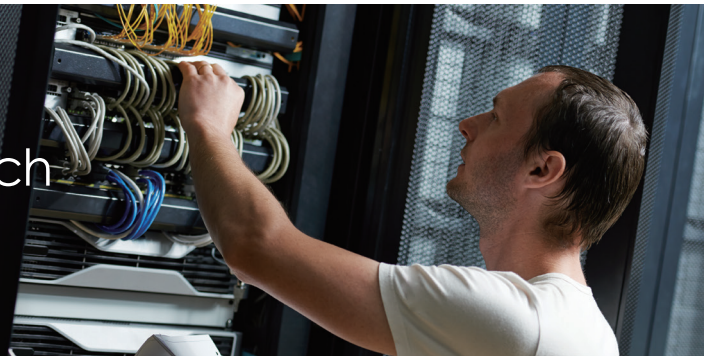
Gigabit/10G		
Model	XGS3-24042	XGS3-24242

Product Image



Hardware	10/100BASE-TX	-	-
	10/100/1000BASE-T	24	8 combo
	100/1000BASE-X SFP	4	24
	QSFP+ Stacking slots	-	2
	1/10G SFP+	4	4
	Switch Fabric	128Gbps	128Gbps
	MAC Table	16K	16K
	Jumbo Frame	10K	10K
	Memory Buffer	1.5MB	1.5MB
	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
Spanning Tree	Protocol-based/GVRP	●	●
	802.1D/802.1w/802.1s	●	●
Quality of Service	Multicast	IGMP Snooping	v1, v2, v3
	802.1p Priority	● / 8 queues	● / 8 queues
	IP TOS/DSCP	●	●
	QoS Mode	Port-CoS, DSCP-CoS	Port-CoS, DSCP-CoS
Data Control	DiffServ Policy QoS	●	●
	Egress	●	●
Access	IP-based ACL	●	●
	Control List	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
	RMON	1,2,3,9	1,2,3,9
	SSH/SSL	●	●
	Firmware Upgrade	●	●
	Configuration Backup/Recovery	●	●
Physical	Single IP Management	●	●
	Syslog	●	●
	Dimensions (W x D x H)	440 x 320 x 43.6 mm	440 x 240 x 43.6 mm
Power Supply	Power Supply	100~240V AC	100~240V AC 36V~75V DC
	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

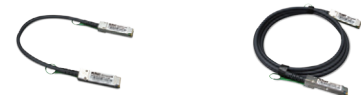


Speed (Gbps)	10G	10G
Connector Interface	Directly Attached Copper Cable	
Fiber Mode	-	-
Distance	Up to 0.5m	Up to 2m
Wavelength (nm)	-	-
Operating Temp.	0 ~ 60 °C	0 ~ 60 °C

### QSFP+ Directly Attached Cable

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



Speed (Gbps)	40G	40G
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

# Layer 3 100G/40G/10G Core Managed Switches





	100G	10G/40G	
Model	XGS-6350-24X4C	XGS-6350-12X8TR	XGS-5240-24X2QR

Product Image



Hardware	10/100/1000BASE-T	-	8	-
	1000BASE-X SFP	-	-	-
	10G SFP+ Slot	24 (1000X Compatible)	12 (1000X Compatible)	24 (1000X Compatible)
	40G QSFP+ Slot	-	-	2
	100G QSFP28 Slot	4 (Compatible with 40G QSFP+)	-	-
	PoE 802.3at Port	-	-	-
	PoE Budget	-	-	-
	Switch Fabric	1.28Tbps	256Gbps	640Gbps
	MAC Table	32K	32K	32K
	Jumbo Frame	9K	9K	9K
	Memory Buffer	4MB	3MB	4MB
	Layer 3 Features	IP Interfaces	128	128
Routing Tables		16K	128	64
Routing Protocols		Static routing, RIP and OSPF	Static routing, RIP and OSPF	Static routing
Accelerated Hardware		●	●	●
Interface	Port Mirror	TX, RX, Both	TX, RX, Both	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●
	LACP	●	●	●
VLAN	802.1Q VLAN	● / 4K	● / 4K	● / 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
	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	●	●	●
	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 318 x 44 mm
	Power Supply	100~240V AC, 50/60Hz	Dual 100~240V AC, 50/60Hz	100~240V AC, 50/60Hz Dual 36~72V DC
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE

# Layer 3 Enterprise Stackable Switches

Gigabit/10G					
Model	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	4 (1000X Compatible)	4 (1000X Compatible)	4 (1000X Compatible)	4 (1000X Compatible)
	PoE 802.3at Port	-	-	-	24
	PoE Budget	-	-	-	370W max.
	Switch Fabric	128Gbps	176Gbps	128Gbps	128Gbps
	MAC Table	16K	16K	16K	16K
	Jumbo Frame	9K	9K	9K	9K
	Memory Buffer	1.5Mbytes	1.5Mbytes	1.5Mbytes	1.5Mbytes
Layer 3 Features	IP Interfaces	128	128	128	128
	Routing Tables	128	1K	1K	1K
	Routing Protocols	Static routing, RIP and OSPF		Static routing, RIP and OSPF	
	Accelerated Hardware	●	●	●	●
Interface	Port Mirror	TX, RX, Both		TX, RX, Both	
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	● / 4K	● / 4K	● / 4K	● / 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	
	MVR	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues		● / 8 queues	
	Priority Mode	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	
	RMON	1, 2, 3, 9		1, 2, 3, 9	
	SSH/SSL	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	FTP, TFTP		FTP, TFTP	
	Configuration Backup/Recovery	●	●	●	●
	Single IP Management	●	●	●	●
Syslog	●	●	●	●	
Physical	Dimensions (W x D x H)	442 x 240 x 43.6 mm	440 x 240 x 44 mm	440 x 240 x 44 mm	440 x 320 x 44 mm
	Power Supply	100~240V AC, 50/60Hz 36~75V DC		100~240V AC, 50/60Hz	
	EMI/Safety	FCC Class A, CE		FCC Class A, CE	

# Layer 3/Layer 2+ IPv6/IPv4 Metro Fiber Switches

## Metro Fiber Switches

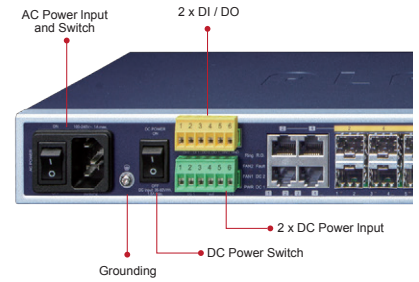
Model	MGSD-10080F	MGSW-24160F	MGSW-28240F
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Product Image



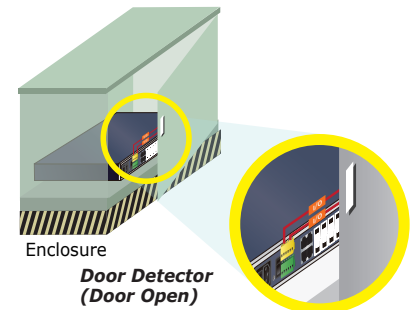
Hardware	10/100BASE-TX	-	-	-
	10/100/1000BASE-T	2	8	4 combo
	Mini-GBIC/SFP	8 (100FX Compatible)	16 (100FX Compatible)	24 (100FX Compatible)
	10G SFP+ Slot	-	-	4 (1000X Compatible)
	PoE 802.3at Port	-	-	-
	PoE Budget	-	-	-
	Switch Fabric	20Gbps	48Gbps	128Gbps
	MAC Table	8K	8K	32K
	Jumbo Frame	9K	9K	10K
	Memory Buffer	4Mbit	4Mbit	32Mbit
Layer 3 Features	IP Interfaces	8 VLAN	8 VLAN	128 VLAN
	Routing Tables	32	32	128
	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	• / 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
	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		
	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
	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)	330 x 155 x 43.5 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



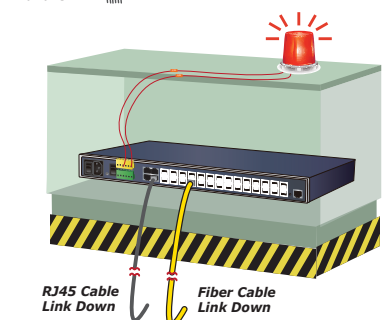
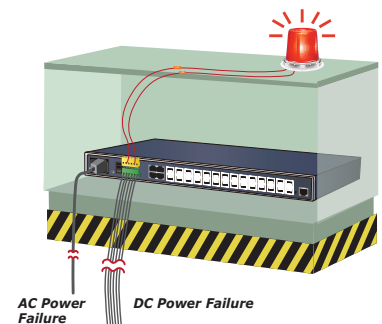
AC Power, DC Power, Digital I/O, and Network Access are all managed on the front panel.

### ► 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-6320-46S2C4XR	
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	2 combo
	100/1000BASE-X SFP	-	-	4 combo	4	48
	10G SFP+ Slot	2, backward compatible with 1000X	4, backward compatible with 1000X	4 (1000X compatible)	2 (1000X compatible)	4 (1000X compatible)
	PoE 802.3at Port	-	-	-	-	-
	PoE Budget	-	-	-	-	-
	Switch Fabric	72Gbps	128Gbps	128Gbps	80Gbps	176Gbps
	MAC Table	16K	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	10K	10K
	Memory Buffer	32Mbit	32Mbit	32Mbit	32Mbit	64Mbit
	Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN
Routing Tables		128	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	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●
	LACP	●	●	●	●	●
VLAN	802.1Q VLAN	● / 4K	● / 4K	● / 4K	● / 4K	● / 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	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	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
	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



## 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	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

\*Compatible with 2500BASE-X SFP

\*\*10 Ports compatible with 2500BASE-X SFP

# Layer 2+ IPv6/IPv4 Managed Gigabit Switches

Stackable 10G								
Model	SGS-5220-24T2X	SGS-5220-24P2X	SGS-5220-24S2XR	SGS-5240-24T4X	SGS-5240-24P4X	SGS-5240-20S4C4XR	SGS-5240-48T4X	
Product Image								
Hardware	10/100BASE-TX	-	-	-	-	-	-	-
	10/100/1000BASE-T	24	24	8 combo	24	24	4 (Combo)	48
	100/1000BASE-X SFP	4 combo	4 combo	24	-	-	24	-
	10G SFP+ Slot	4 (2 for stacking)	4 (2 for stacking)	4 (2 for stacking)	4 (1000X Compatible)		4 (1000X Compatible)	
	PoE 802.3at Port	-	24	-	-	24	-	-
	PoE Budget	-	440W	-	-	370W	-	-
	Switch Fabric	128Gbps	128Gbps	128Gbps	128Gbps	128Gbps	128Gbps	176Gbps
	MAC Table	16K	16K	16K	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	9K	9K	9K	9K
	Memory Buffer	32Mbit	32Mbit	32Mbit	1.5MB	1.5MB	1.5MB	1.5MB
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	32	32	32	32
	Routing Tables	32	32	32	IPv4 256 entries / IPv6 128 entries		IPv4 256 entries / IPv6 128 entries	
	Routing Protocols	IPv4/IPv6 Static Routing			IPv4/IPv6 hardware static routing		IPv4/IPv6 hardware 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	● / 4K	● / 4K	● / 4K	● / 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	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	● / 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	●	●	●	●
	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	HTTP	HTTP	HTTP
	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	440 x 280 x 44 mm	440 x 280 x 44 mm	440 x 280 x 44 mm	440 x 300 x 44 mm
	Power Supply	100-240V AC, 50/60Hz		100-240V AC, 50/60 Hz 36-60V DC	100-240V AC, 50/60Hz		100-240V AC, 50/60Hz DC 36-72V	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+ IPv6/IPv4 Managed Gigabit Switches

	Standalone		Industrial	
Model	WGSW-24040/R	GS-5220-16S8C/R	IGSW-24040T	IGS-5225-16T4S

Product Image



Hardware	10/100BASE-TX	-	-	-	-
	10/100/1000BASE-T	24	8 combo	24	16
	100/1000BASE-X SFP	4 combo	24	4 combo	4
	10G SFP+ Slot	-	-	-	-
	PoE 802.3at Port	-	-	-	-
	PoE Budget	-	-	-	-
	Switch Fabric	48Gbps	48Gbps	48Gbps	40Gbps
	MAC Table	16K	16K	8K	8K
	Jumbo Frame	9K	10K	9K	9K
Layer 3 Features	Memory Buffer	4Mbit	16Mbit	1392KB	1392KB
	IP Interfaces	8 VLAN	128 VLAN	8	8
	Routing Tables	32	32	32	32
	Routing Protocols	IPv4/IPv6 Static Routing	IPv4/IPv6 Static Routing	IPv4/IPv6 Static Routing	IPv4/IPv6 Static Routing
Interface	Accelerated Hardware	-	●	-	-
	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	● / 4K	● / 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	
	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, v2, v3	v1, v2, 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)	440 x 200 x 44 mm	440 x 200 x 44 mm	440 x 200 x 44.5 mm	400 x 200 x 44mm
	Power Supply	100-240V AC, 50/60Hz 36-60V DC (R model only)		100-240V AC, 50/60Hz Dual 36-60V 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 GS-4210-24T2S GS-4210-16T2S GS-4210-24T4S GS-4210-24T4SR GSD-1020S GSD-1002M





Product Image







PoE PD






Hardware	10/100BASE-TX	-	-	-	-	-	-	-	-
	10/100/1000BASE-T	48	48	24	16	24	24	8	8
	100/1000BASE-X SFP	-	4	2	2	4	4	2	2
	10G SFP+	4 (1000X Compatible)	-	-	-	-	-	-	-
	PoE 802.3at Port	-	-	-	-	-	-	-	-
	PoE Budget	-	-	-	-	-	-	-	-
	Switch Fabric	176Gbps	104Gbps	52Gbps	36Gbps	56Gbps	56Gbps	20Gbps	20Gbps
	MAC Table	16K	16K	8K	8K	8K	8K	8K	8K
	Jumbo Frame	13K	9K	9K	9K	10K	10K	9K	9K
	Memory Buffer	1.5Mbytes	4Mbit	4Mbit	4Mbit	4.1MB	4.1MB	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	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●	●	●	●
	LACP	●	●	●	●	●	●	●	●
VLAN	Port-based	-	-	-	-	-	-	-	-
	802.1Q VLAN	● / 4K	● / 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	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		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	●	●	●	●	●	●	●	●
Management	Port Security	-	●	●	●	●	●	●	●
	IPV6/IPv4	- / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45	● / RJ45	● / RJ45	● / RJ45	●	●	-	-
	Telnet	●	●	●	●	●	●	●	●
	Web Management	●	●	●	●	●	●	●	●
	SNMP	v1, v2c	v1, v2c, v3	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	1,2,3,9
	SSH/SSL	- / -	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP	HTTP, TFTP
	Configuration Backup/Recovery	●	●	●	●	●	●	●	●
Physical	Single IP Management	-	-	-	-	-	-	-	-
	Syslog	●	●	●	●	●	●	●	●
	Dimensions (W x D x H)	440 x 270 x 44 mm	440 x 300 x 44 mm	440 x 207 x 44 mm		441 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 DC 36-72V	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	FCC Class A, CE	

## 19-inch Rack-mountable Switches

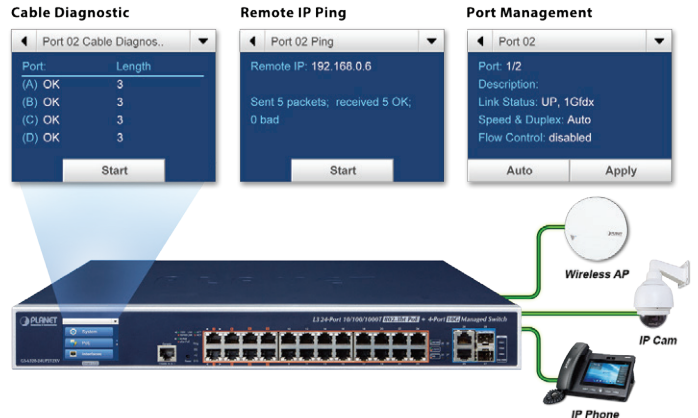
		Fast Ethernet		Gigabit	
Model		FNSW-1601	FNSW-2401	GSW-1601	GSW-2401
Product Image					
Hardware	10/100BASE-TX	16	24	-	-
	10/100/1000BASE-T	-	-	16	24
	Switch Fabric	3.2Gbps	4.8Gbps	32Gbps	48Gbps
	MAC Table	8K	8K	8K	8K
	Jumbo Frame	-	-	9K	9K
	Memory Buffer	1.25Mbits	1.25Mbits	built-in	built-in
Interface	Auto-negotiation	●	●	●	●
	Dimensions (W x D x H)	440 x 140 x 44 mm	441 x 140 x 44 mm	440 x 208 x 44 mm	440 x 208 x 44 mm
Physical	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		Gigabit			
Model		SW-504/FSD-503	SW-804/FSD-803	Model	GSD-503/GSD-504	GSD-803/GSD-804	
Product Image				Product Image			
Hardware	10/100/BASE-TX	5	8	Hardware	10/100/1000BASE-T	5	8
	10/100/1000BASE-T	-	-		1000BASE-X SFP	-	-
	PoE 802.3af Port	-	-		PoE 802.3af Port	-	-
	PoE Budget	-	-		PoE Budget	-	-
	Switch Fabric	1 Gbps	1.6 Gbps		Switch Fabric	10Gbps	16Gbps
	MAC Table	1K/2K	1K/2K		MAC Table	8K	8K
	Jumbo Frame	-	-		Jumbo Frame	9K	9K
	Memory Buffer	384Kb	768Kb/448Kb		Memory Buffer	1Mb	1Mb
Interface	Auto-negotiation	●	●	Interface	Auto-negotiation	●	●
	802.3x Flow Control	●	●		802.3x Flow Control	● / ●	● / ●
Physical	Dimensions (W x D x H)	168 x 100 x 29 mm/155 x 86 x 26 mm		Physical	Dimensions (W x D x H)	168 x 100 x 29 mm/155 x 86 x 26 mm	
	Power Supply	5V DC, 1000mA	5V DC, 1000mA		Power Supply	5V DC, 1000mA	5V DC, 1000mA
	EMI/Safety	FCC Class A, CE	FCC Class A, CE		EMI/Safety	FCC Class A, CE	FCC Class A, CE
	Material	Plastic/Metal	Plastic/Metal		Material	Metal/Plastic	Metal/Plastic
	Rack-mountable	-	-		Rack-mountable	-	-

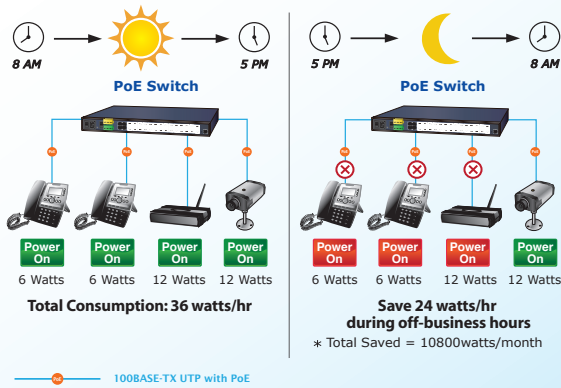
		Gigabit					
Model		GSD-805	GSD-603F	GSD-1603	WGS-803	WGS-810	
Product Image							
Hardware	10/100/1000BASE-T	8	5	16	8	8	
	1000BASE-X SFP	-	-	-	-	-	
	PoE 802.3af Port	-	-	-	-	-	
	PoE Budget	-	-	-	-	-	
	Switch Fabric	16Gbps	12Gbps	32Gbps	16Gbps	16Gbps	
	MAC Table	8K	2K	8K	8K	4K	
	Jumbo Frame	9K	9K	9216Bytes	9K	9K	
	Memory Buffer	1Mb	1.5Mb	Integrated SRAM for packet buffer	1Mb	-	
Interface	Auto-negotiation	●	●	●	●	●	
	802.3x Flow Control	●	●	●	●	●	
Physical	Dimensions (W x D x H)	168 x 93 x 32 mm	162 x 102 x 28 mm	155 x 118 x 46 mm	148 x 25 x 134 mm	148 x 25 x 134 mm	
	Power Supply	Internal Power	5V DC, 1A	12V DC, 1A	12V~48V DC	12V DC	
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Part 15, Class B, CE	FCC Class A, CE	FCC Class A, CE	
	Material	Metal	Metal	Metal	Metal	Metal	
	Rack-mountable	-	-	-	-	-	

# Power over Ethernet

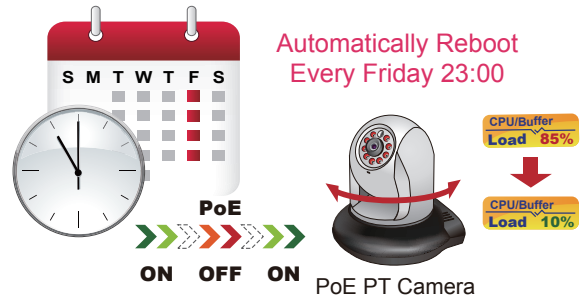


## Intelligent PoE Management

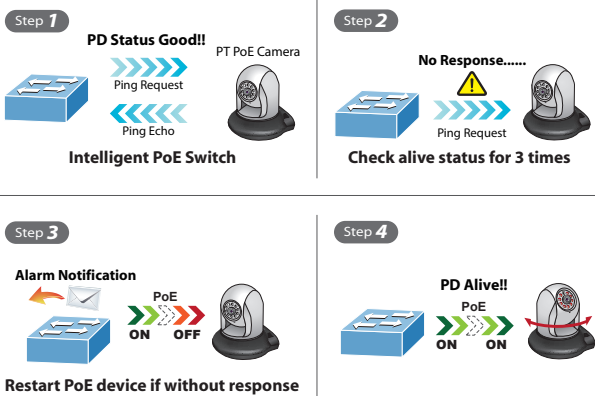
### PoE Schedule for Energy Saving



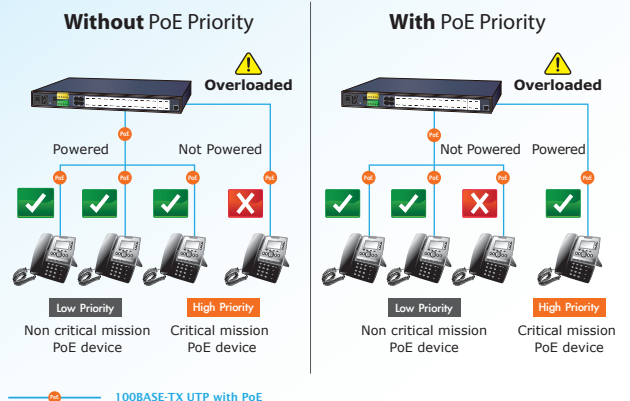
### Scheduled Power Recycling










### PoE PD Alive-checking







### PoE Priority for Critical Services



# Layer 3 IPv6/IPv4 Managed Gigabit 802.3bt PoE++ Switches

Ultra PoE/PoE++						
Model	GS-5220-8UP2T2X	GS-5220-16UP4S2XR	GS-5220-24UP4X GS-5220-24UP4XR	GS-5220-24UPL4X GS-5220-24UPL4XR	GS-6322-24P4X	
Product Image						
						
10/100BASE-TX	10/100/1000BASE-T	10	16	24	24	24
	1000BASE-X SFP	-	4	4 combo	4 combo	-
	10G SFP+ Slot	2, backward compatible with 1000X	2	4	4	2, backward compatible with 1000X
	10G BASE-T	-	-	-	-	2
	PoE 802.3bt Port	8, up to 95W port	8 x 95W 8 x 75W	8 x 95W 16 x 75W	8 x 95W 16 x 75W	24 x 95W
	PoE Budget	240W	400W	400W	600W	2280W
	Switch Fabric	60Gbps	80Gbps	128Gbps	128Gbps	128Gbps
	MAC Table	16K	16K	16K	16K	16K
	Jumbo Frame	10K	10K	10K	10K	10K
	Memory Buffer	32Mbit	32Mbit	32Mbit	32Mbit	32Mbit
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	128 VLAN	128 VLAN	128 VLAN
	Routing Tables	128	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	TX, RX, Both
Link Aggregation	Port Trunk	●	●	●	●	●
	LACP	●	●	●	●	●
VLAN	802.1Q VLAN	● / 4K	● / 4K	● / 4K	● / 4K	● / 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	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/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	● / 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	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	400 x 300 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)	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	FCC Class A, CE

# Layer 3 IPv6/IPv4 Managed Gigabit 802.3bt PoE++ Switches

Ultra PoE/PoE++					
Model	GS-5220-16UP2XV GS-5220-16UP2XVR	GS-5220-24UP4XV GS-5220-24UP4XVR	GS-5220-24UPL4XV GS-5220-24UPL4XVR	GS-6320-24UP2T2XV	
Product Image					
	Touch LCD	Touch LCD	Touch LCD		
	LCD	2.4" Color TFT Touch screen		2.4" Color TFT Touch screen	
10/100BASE-TX	10/100/1000BASE-T	16	24	24	24
	1000BASE-X SFP	-	-	-	-
	10G SFP+ Slot	2, backward compatible with 1000X	4, backward compatible with 1000X	4, backward compatible with 1000X	2, backward compatible with 100/1G/2.5G/5G
	10GBASE-T	-	-	-	2
	PoE 802.3bt Port	8 x 95W 8 x 75W	8 x 95W 16 x 75W	8 x 95W 16 x 75W	8 x 95W 16 x 75W
	PoE Budget	400W	400W	600W	600W
	Switch Fabric	72Gbps	128Gbps	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	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	● / 4K	● / 4K	● / 4K	● / 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	
	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)	400 x 300 x 55 mm	440 x 300 x 56 mm	400 x 300 x 55 mm	400 x 300 x 56 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)	100~240V AC, 50/60Hz 36~60V DC
Regulatory	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE



## Layer 2 Gigabit 802.3bt PoE++ Switches

Managed Switches				
Model	GS-4210-8HP2S	GS-4210-16UP4C	GS-4210-24HP2C	GS-4210-24UP4C



bt Ready

Hardware	10/100BASE-TX	-	-	-	-
	10/100/1000BASE-T	8	20	26	28
	1000BASE-SX/LX	2 SFP	4 SFP	2 SFP	4 SFP
	10GBASE-SR/LR	-	-	-	-
	Switch Fabric	20Gbps	40Gbps	56Gbps	56Gbps
	Throughput	14.88Mpps	29.79Mpps	38.69Mpps	41.66Mpps
PoE Spec.	PoE Standard	802.3bt PoE++ (802.3at Compliant)	802.3bt PoE++ (802.3at Compliant)	802.3bt PoE++ (802.3at Compliant)	802.3bt PoE++ (802.3at Compliant)
	PSE Type	Mid-span + End-span	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(-)	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)	Pair1: 1/2(-), 3/6(+) Pair2: 4/5(+), 7/8(-)
PoE Ability	PoE Port	8	16	24	24
	PoE Power Output	2 x 95W 6 x 36W	8 x 95W 8 x 75W	4 x 95W 20 x 36W	8 x 95W 16 x 75W
	PoE Budget	240 watts with standard 100 watts with fanless	400 watts max.	515 watts with standard 180 watts with fanless	600 watts max.
	Number of Class 2 PDs @ 6.5 watts	8	16	24	24
	Number of Class 3 PDs @ 12.9 watts	8	16	24	24
	Number of Class 4 PDs @ 25 watts	8	16	24	24
Intelligent PoE Control	Over Temperature Protection	●	●	●	●
	PD Alive Check	●	●	●	●
	PoE Schedule	●	●	●	●
	Power Limit	●	●	●	●
	Scheduled Power Recycling	●	●	●	●
	PoE Classification	●	●	●	●
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	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	802.1D/802.1w/802.1s
	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
Management	Interface	Console, Telnet, HTTP	Console, Telnet, HTTP	Console, Telnet, HTTP	Console, Telnet, HTTP
	SNMP	v1, v2c, v3, trap	v1, v2c, v3, trap	v1, v2c, v3, trap	v1, v2c, v3, trap
	SSH/SSL	● / ●	● / ●	● / ●	● / ●
Physical	Dimensions (W x D x H)	280 x 229 x 44 mm	440 x 300 x 44 mm	440 x 330 x 44 mm	440 x 300 x 44 mm
	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz
	Operating Temperature	0~40 degrees C (Fanless mode enabled) 0~50 degrees C (Default)	0~50 degrees C	0~40 degrees C (Fanless mode enabled) 0~50 degrees C (Default)	0~50 degrees C
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 PoE+ Switches

## Standalone PoE+

Model	GS-5220-16P2XV GS-5220-16P2XVR	GS-5220-24P4X GS-5220-24P4XR	GS-5220-24PL4X GS-5220-24PL4XR
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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	4K	4K	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
	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/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
	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-5220-48PL4XR
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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	
Link Aggregation	Port Trunk	●	●	●	●
	LACP	●	●	●	●
VLAN	802.1Q VLAN	4K	4K	4K	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	
	MVR	●	●	●	●
Quality of Service	802.1p Priority	● / 8 queues		● / 8 queues	
	Priority Mode	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/Engress	● / ●	● / ●	● / ●	● / ●
	IP-based	●	●	●	●
Security	MAC-based	●	●	●	●
	802.1x Port-based Authentication	●	●	●	●
	MAC Filtering	●	●	●	●
Management	Port Security	●	●	●	●
	IPv6/IPv4	● / ●	● / ●	● / ●	● / ●
	Console	● / RJ45		● / RJ45	
	Telnet	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3		v1, v2c, v3	
	RMON	1, 2, 3, 9		1, 2, 3, 9	
	SSH/SSL	● / ●	● / ●	● / ●	● / ●
	Firmware Upgrade	HTTP, TFTP		HTTP, TFTP	
	Configuration Backup/Recovery	●	●	●	●
Physical	Single IP Management	-	-	-	-
	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		

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

Standalone PoE+						
Model	GS-5220-8P2T2X	MGS-5220-8P2X	GS-5220-8P2T2S	WGSW-20160HP	WGSW-24040HP4	
Product Image						
Hardware	LCD	-	-	-	-	-
	10/100/1000BASE-T	10	8 x 2500/1000/100/10BASE-T	10	20	24
	100/1000BASE-X SFP	-	-	2	4 combo	4 combo
	10G SFP+ Slot	2, backward compatible with 1000X		-	-	-
	PoE 802.3at Port	8, up to 36W per port		8	16	24
	PoE Budget	240W	240W	240W	220W	440W
	Switch Fabric	60Gbps	56Gbps	24Gbps	40Gbps	48Gbps
	MAC Table	16K	16K	8K	8K	8K
	Jumbo Frame	10K	10K	9K	9K	9K
	Memory Buffer	32Mbit	32Mbit	1392KB	4Mbit	4Mbit
Layer 3 Features	IP Interfaces	128 VLAN	128 VLAN	8 VLAN	8 VLAN	8 VLAN
	Routing Tables	128	128	32	32	32
	Routing Protocols	IPv4/IPv6 Static Routing, OSPFv2		IPv4/IPv6 Static Routing		
	Accelerated Hardware	●	●	-	-	-
Interface	Port Mirror TX, RX, Both		TX, RX, Both	TX, RX, Both		
Link Aggregation	Port Trunk	●	●	●	●	●
	LACP	●	●	●	●	●
VLAN	802.1Q VLAN	● / 4K	● / 4K	● / 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	●	●
	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	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	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	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
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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
	Memory Buffer	4Mbit	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	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256	● / 256
	Q-in-Q VLAN	●	●	●	●	●	●	●
	Private VLAN	●	●	●	●	●	●	●
Spanning Tree	802.1D	●	●	●	●	●	●	●
	802.1w	●	●	●	●	●	●	●
	802.1s	●	●	●	●	●	●	●
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	● / 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		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	● / RJ45	● / RJ45
	Telnet	●	●	●	●	●	●	●
	Web Ma-gement	●	●	●	●	●	●	●
	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	-	-	-	-	-	-	-
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		
	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 2/4 Managed 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 802.3at Port	8	16	24	24
	PoE Budget	120W	240W	240W	370W
	Switch Fabric	5.5Gbps	7.2Gbps	8.8Gbps	8.8Gbps
	MAC Table	16K	16K	16K	16K
	Jumbo Frame	16K	16K	16K	16K
	Memory Buffer	4Mbit	4Mbit	4Mbit	4Mbit
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	● / 256	● / 256	● / 256	● / 256
Spanning Tree Protocol	802.1D STP	●	●	●	●
	802.1w RSTP	●	●	●	●
Multicast	IGMP Snooping	v1, v2, v3	v1, v2, v3	v1, v2, v3	v1, v2, v3
Quality of Service	802.1p Priority	● / 8 queues	● / 8 queues	● / 8 queues	● / 8 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	●	●	●	●
	Mac-based	●	●	●	●
Security	802.1x Port-based Authentication	-	-	-	-
	Static MAC	●	●	●	●
	MAC Filter	●	●	●	●
	IP Filter	-	-	-	-
Management	Console	●	●	●	●
	Web Management	●	●	●	●
	SNMP	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3	v1, v2c, v3
	Management Utility	●	●	●	●
	Firmware Upgrade	HTTP	HTTP	HTTP	HTTP
	Cable Diagnostic	-	-	-	-
Physical	Dimensions (W x D x H)	280 x 180 x 44 mm	440 x 208 x 44 mm	440 x 208 x 44 mm	440 x 208 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+/PoE++ Switches

		Fast Ethernet/PoE+			Fast Ethernet/PoE++	Gigabit/PoE+		
Model		FGSD-1022VHP	FGSW-1822VHP	FGSW-2622VHP	FGSW-2022VHP	GSD-1222VHP	GSW-1820VHP	GSW-2620VHP
Product Image								
Hardware	LCD	2" mono	2" color	2" color	2" color	2" mono	2" color	2" color
	10/100BASE-TX	8	16	24	16	-	-	-
	10/100/1000BASE-T	2	2	2	2	10	16	24
	Mini-GBIC/SFP	2	2	2	2	2	2	2
	PoE 802.3bt	-	-	-	4	-	-	-
	PoE 802.3af/at Port	8	16	24	16	8	16	24
	PoE Budget	120W	220W	300W	300W	120W	300W	300W
	Switch Fabric	5.6Gbps	11.2Gbps	12.8Gbps	11.2Gbps	24Gbps	36Gbps	52Gbps
	MAC Table	8K	8K	8K	8K	8K	8K	8K
	Jumbo Frame	9K	9K	9K	9K	9K	9K	9K
Memory Buffer	2.75Mb	2.75Mb	2.75Mb	4.1Mb	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	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, 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	FCC Class A, CE
	Material	Metal	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	FGSW-2511P
Product Image							
Hardware	10/100BASE-TX	5	6	10	8	16	24
	10/100/1000BASE-T	-	-	-	1	-	1
	Mini-GBIC/SFP	-	-	-	1	-	1
	PoE 802.3af/at Port	4 (802.3at)	4 (802.3at)	8 (802.3at)	8 (802.3at)	16 (802.3at)	24 (802.3at)
	PoE Budget	60W	60W	120W	120W	125W	190W
	Switch Fabric	1Gbps	1.2Gbps	2Gbps	5.6Gbps	3.2Gbps	6.8Gbps
	MAC Table	1K	2K	8K	4K	8K	16K
	Jumbo Frame	-	1536 bytes	1522 bytes	9K bytes	-	16K bytes
	Memory Buffer	384K Bytes	2Mb	2Mb	2Mb	2Mb	2Mb
	DIP Switch	Standard/Extend (250m)		Standard/VLAN/Extend (250m)		-	Standard/QoS/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	440 x 200 x 45 mm
	Power Supply	51V DC, 1.25A	100~240V AC	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	FCC Class A, CE
	Material	Metal	Metal	Metal	Metal	Metal	Metal
	Rack mountable	-	●	●	●	●	●



## Unmanaged PoE/PoE+/PoE++ Switches

Gigabit PoE+/PoE++						
Model	GSD-504UP	GSD-804P	GSD-604HP	WGS-804HP WGS-814HP WGS-818HP	GSD-908HP	
Product Image						
Hardware	10/100BASE-TX	-	-	-	-	-
	10/100/1000BASE-T	5	8	6	8	9
	Mini-GBIC/SFP	-	-	-	-	-
	PoE 802.3bt Port	2	-	-	-	-
	PoE 802.3at Port	2	4	4	4/8	8
	PoE Budget	120W	55W	60W	60W/120W	100W
	Switch Fabric	10Gbps	16Gbps	12Gbps	16Gbps	18Gbps
	MAC Table	2K	8K	8K	4K/8K	4K
	Jumbo Frame	9K	9K	9K	9K	9K
	Memory Buffer	-	1Mb	1Mb	-	-
DIP Switch	Standard/Legacy	Standard/ Extend (200m)	Standard/ Extend (200m)	Standard/VLAN/Extend (WGS-814HP and WGS-818HP)	Standard/VLAN	
Interface	Auto-negotiation	●	●	●	●	●
	802.3x Flow Control	●	●	●	●	●
Physical	Dimensions (W x D x H)	168 x 93 x 32 mm	217 x 135 x 43 mm	160 x 92.5 x 28 mm	148 x 25 x 134 mm	168 x 94 x 32 mm
	Power Supply	55V DC	100~240V AC	55V DC	48~56V DC	55V DC
	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	IP30 Metal	Metal
	Rack mountable	-	Optional kit	-	-	-

## Unmanaged PoE/PoE+/PoE++ Switches







Gigabit PoE+/PoE++				
Model	GSD-1008HP	GSD-2022P	GSW-1820HP GSW-2620HP	
Product Image				
Hardware	10/100BASE-TX	-	-	-
	10/100/1000BASE-T	10	18	16/24
	Mini-GBIC/SFP	-	-	-/2
	PoE 802.3bt Port	-	-	-
	PoE 802.3at Port	8	16	16/24
	PoE Budget	120W	185W	240W
	Switch Fabric	20Gbps	40Gbps	36Gbps/52Gbps
	MAC Table	8K	8K	8K
	Jumbo Frame	9K bytes	9K	9K
	Memory Buffer	2Mb	-	4.1Mb
DIP Switch	Standard/VLAN/Extend (250m)		Standard/VLAN/Extend	
Interface	Auto-negotiation	●	●	●
	802.3x Flow Control	●	●	●
Physical	Dimensions (W x D x H)	220 x 150 x 43 mm	280 x 180 x 44 mm	440 x 208 x 44 mm
	Power Supply	100~240V AC	100~240V AC	100~240V AC
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE
	Material	Metal	Metal	Metal
	Rack mountable	●	●	●

## 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		
PoE	802.3at/af	802.3at/af	
OS Support	Windows 10	●	●
	Windows 8	●	●
	Windows 7	●	●
	Windows XP	●	●
	Windows 2008	●	●
	Linux	●	●



## 802.3bt PoE++ Injector Hubs

		Managed Injector Hubs				Unmanaged	
Model		UPOE-2400G	UPOE-1600G	UPOE-800G	UPOE-400	IPOE-270 IPOE-270-12V	IPOE-470 IPOE-470-12V
Product Image							
Hardware	RJ45 Data Input Ports	24	16	8	4	2	4
	RJ45 Data + Power Output Ports	24	16	8	4	2	4
	Pass-through Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000/ 2500/5000Mbps	10/100/1000/ 2500/5000Mbps	10/100/1000Mbps
PoE Spec.	PoE Standard	802.3bt, PoH (802.3at Compliant)	802.3bt, PoH (802.3at Compliant)	802.3bt, PoH (802.3at Compliant)	802.3bt, PoH (802.3at Compliant)	802.3bt, PoH (802.3at Compliant)	802.3bt, PoH (802.3at Compliant)
	PSE Type	End-span + Mid-span/ End-span/Mid-span	Mid-span + End-span	Mid-span + End-span	Mid-span + End-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(-)	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(-)
PoE Ability	PoE Port	24	16	8	4	2	4
	PoE Power Output	8 x 95W max. 16 x 75W max.	8 x 95W max. 8 x 75W max.	95W max.	95W max.	90W max.	95W max.
	PoE Budget	800 watts max.	600 watts max.	440 watts max.	160 watts max.	180 watts max.	240 watts max.
	Number of Class 2 PDs @ 6.5 watts	24	16	8	4	2	4
	Number of Class 3 PDs @ 12.9 watts	24	16	8	4	2	4
	Number of Class 4 PDs @ 25 watts	24	16	8	4	2	4
Intelligent PoE Control	Over Temperature Protection	●	●	●	-	-	-
	PD Alive Check	●	-	-	-	-	-
	PoE Schedule	●	●	●	-	-	-
	Power Limit	●	●	●	-	-	-
	PoE Priority	●	●	●	-	-	-
	PoE Classification	●	●	●	-	-	-
	PoE Event/Threshold Trap	●	●	●	-	-	-
Management	Force mode	●	●	●	-	-	-
	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	94 x 70.3 x 39.2mm	41 x 70 x 115 mm	50 x 87.8 x 135 mm
	Rackmountable	●	●	●	-	-	-
	Power Supply	Internal	Internal	Internal	External	External	External
Regulatory	Power Requirements	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	100~240V AC, 50/60Hz	52~54V DC	12~56V DC	12~54V DC
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C	0~50 degrees C	-40~75 degrees C	-40~75 degrees C
	EMI/Safety	FCC Class A, CE	FCC Class A, CE	FCC Class A, CE	FCC Class B, CE	FCC Class A, CE	FCC Class A, CE

## 60-watt/95-watt 802.3bt PoE++/Ultra 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	IPOE-175	
Product Image									
Hardware	RJ45 Data Input Port	1	1	1	1	1	1	1	1
	RJ45 Data + Power Output Port	1	1	1	1	1	1	1	1
	Data Rate	10/100/1000Mbps		10/100/1000Mbps		10/100/1000Mbps		10/100/1000Mbps	
PoE Spec.	PoE Standard	Ultra PoE (802.3at Compliant)		Ultra PoE (802.3at Compliant)		802.3bt (802.3atCompliant)		802.3bt (802.3atCompliant)	
	PSE Type	Mid-span + End-span		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 (-)		Pair 1: 1/2 (-), 3/6 (+) Pair 2: 4/5 (+), 7/8 (-)	
PoE Ability	PoE Port	1	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	55V DC
	PoE Ability	60 watts	60 watts 95 watts	60 watts	60 watts	95 watts	60 watts	95 watts	60 watts
Physical	Dimensions (W x D x H)	90 x 70 x 26 mm		115 x 62.5 x 31 mm		170 x 100 x 40 mm	135 x 87.8 x 32 mm		150 x 43.8 x 72.94 mm
	Power Supply	External	External	Internal	Internal	Internal	External	External	External
	Power Requirements	100~240V AC, 50/60Hz		100~240V AC, 50/60Hz			48~56V DC	12~48V DC	24~56V 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		

Splitters						Extenders			
Model	POE-171S	POE-172S	POE-173S	IPOE-173S	IPOE-175S	POE-E304	IPOE-E174	IPOE-E302	
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	1 x RJ45	1 x RJ45
	Data Power Output Port	1 x RJ45	1 x RJ45	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/19V/24V DC, Max. 2A		12V max 5A	PoE 44~57V DC	PoE 44~57V DC	PoE 44~57V DC
	DIP Switch	Adjustable 12V/19V/24V		Adjustable 12V/19V/24V		-	-	-	-
	Data Rate	10/100/1000Mbps		10/100/1000Mbps			10/100/1000Mbps		
PoE Spec.	PoE Standard	4-Pair PoE/Ultra PoE/PoH		802.3bt/PoH	802.3bt/PoH	802.3bt/PoH	802.3bt/Ultra PoE (802.3at Compliant)		
	PD Type	Both Mid-span and End-span		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	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	150 x 43.8 x 72.94 mm	160 x 92.5 x 28 mm	56 x 87.8 x 135 mm	150 x 43.8 x 72.94 mm
	Operating Temperature	0~50 degrees C		0~50 degrees C	-40~75 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		

# 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, 36 watts max.	52V DC, 36 watts max.	52V DC, 36 watts max.	52V DC, 36 watts max.	52V DC, 36 watts max.
	PoE Budget	600 watts max.	420 watts max.	420 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	IPOE-162	IPOE-165	IPOE-260	
Product Image							
Hardware	RJ45 Data Input Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	2 x RJ45
	RJ45 Data + Power Output Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	2 x RJ45
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100Mbps	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	802.3af/802.3at
	PSE Type	Mid-span	Mid-span	Mid-span	Mid-span	End-span	Mid-span
	Power Pin Assignment	4/5(+), 7/8(-)	4/5(+), 7/8(-)	4/5(+), 7/8(-)	4/5(+), 7/8(-)	1/2(+), 3/6(-)	4/5(+), 7/8(-)
	PoE Port	1	1	1	1	1	2
	PoE Power Output	56V DC	53V DC	53V DC	56V DC	54V DC	54V/56V DC
	PoE Ability	30 watts	30 watts	30 watts	30 watts	30 watts	36 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	32 x 87 x 135 mm	150 x 43.8 x 72.94 mm	30 x 70 x 105 mm
	Power Supply	External	Internal	Internal	External	External	External
	Power Requirements	100~240V AC, 50/60Hz			12-48V DC	24-56V DC	12-56V DC
	Operating Temperature	0~50 degrees C	0~50 degrees C	0~50 degrees C	-40~75 degree C	-40~75 degree C	-40~75 degree 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

802.3at PoE+			802.3af PoE				
Model	GTP-805A	IGTP-815AT	POE-151/POE-152	FTP-802	FTP-802S15		
Product Image							
Hardware	RJ45 Data Input Port	1 x 1000X/LC/Vary on Module		1 x RJ45	1 x 100FX/SC/MM/2km	1 x 100FX/SC/MM/15km	
	RJ45 Data + Power Output Port	1 x RJ45	2 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	
	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100Mbps	10/100Mbps	
PoE Spec.	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af	802.3af	802.3af	
	PSE Type	Mid-span	End-span	End-span	End-span	End-span	
	Power Pin Assignment	4/5(+), 7/8(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	1/2(+), 3/6(-)	
	PoE Port	1	1	1	1	1	
	PoE Power Output	52V DC	56V DC	48V DC	48V DC	48V DC	
	PoE Ability	30 watts	36 watts	15.4 watts	15.4 watts	15.4 watts	
Physical	Dimensions ( W x D x H)	97 x 70 x 26 mm	30 x 70 x 104 mm	73 x 55 x 24 mm	97 x 70 x 26 mm	97 x 70 x 26 mm	
	Power Supply	External	External	External	External	External	
	Power Requirements	100~240V AC, 50/60Hz	48-56V DC	100~240V AC, 50/60Hz			
	Operating Temperature	0~50 degrees C	-40~75 degree 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 Extenders & Splitters

PoE Extenders							
Model	POE-E101	POE-E201	POE-E202	POE-E304	IPOE-E174	IPOE-E302	
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	2 x RJ45	4 x RJ45	4 x RJ45	2 x RJ45
	DC Output Voltage	PoE 48V DC, max. 270mA	PoE 48~56V DC, max. 510mA		PoE 44~55V DC, max. 510mA		PoE 48~56V DC, max. 510mA
	DIP Switch	-	-	-	-	-	-
	Data Rate	10/100Mbps	10/100/1000Mbps	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	mid-span
	PoE Power Input	48V DC	52~56V DC	52~56V DC	52~56V DC	44~55V DC	50~57V 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	32 x 85 x 135 mm	150 x 43.8 x 72.94 mm
	Operating Temperature	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

## PoE Extenders & Splitters

		PoE Splitters			PoE Tester
Model		POE-161S	POE-162S	IPOE-162S	POE-TESTER+
Product Image					
Hardware	Data + Power Input Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
	Data Output Port	1 x RJ45	1 x RJ45	1 x RJ45	-
	DC Output Voltage	5V/12V	12V/24V DC, max. 2A	12V/24V DC, max. 2A	-
	DIP Switch	Adjustable 5V/12V DC	Adjustable 12V/24V DC	Adjustable 12V/24V DC	-
PoE Spec.	Data Rate	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps
	PoE Standard	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at	802.3af/802.3at/802.3bt/Ultra PoE
	PD Type	Both Mid-span and End-span	Both Mid-span and End-span	Both Mid-span and End-span	Mid-span and End-span
Physical	PoE Power Input	52-56V DC	52-56V DC	52-56V DC	36-57V DC
	Dimensions (W x D x H)	97 x 70 x 25 mm	97 x 70 x 25 mm	135 x 87.8 x 32 mm	70 x 23 x 22 mm
Regulatory	Operating Temperature	0-50 degrees C	0-50 degrees C	-40-75 degrees C	-10-60 degrees C
	EMI/Safety	FCC Class A, CE	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		
	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		
PoE Ability	PoE Standard	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		
	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		
	SNMP	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		
	Operating Temperature	0-50 degrees C	0-50 degrees C	-40-75 degrees C
Regulatory	EMI/Safety	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.
	Encryption	AES 128-bit	AES 128-bit	AES 128-bit
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: 802.3at input	DC: 48~56V DC PoE: 802.3at input	DC: 48~54V, PoE: 802.3at/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	1 x RJ45 w/ 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	-	-	-	-
	Encryption	AES 128-bit	AES 128-bit	AES 128-bit	AES 128-bit
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	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	Single Mode	Single Mode	Single Mode	Multi Mode	Single Mode
Distance	2km	20km	40km	60km	120km	2km	20km
Wavelength (nm)	1310nm	1310nm	1310nm	1310nm	1550nm	1310nm	1550nm
Operating Temp.	0 - 60°C					-40 - 75°C	

## Fast Ethernet Transceivers (100BASE-BX, Single Fiber Bi-Directional SFP)

Model	MFB-FA20	MFB-FB20	MFB-TFA20	MFB-TFB20	MFB-TFA40	MFB-TFB40	MFB-TSA	MFB-TSB
Product Image								
Speed (Mbps)	100	100	100	100	100	100	100	100
Connector Interface	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	LC	LC
Fiber Mode	Single Mode	Single Mode	Single Mode	Single Mode	Multi Mode	Multi Mode	Multi Mode	Multi Mode
Distance	20km	20km	20km	20km	40km	40km	2km	2km
Wavelength (nm)	TX: 1310nm RX: 1550nm	TX: 1550nm RX: 1310nm	TX: 1310nm RX: 1550nm	TX: 1550nm RX: 1310nm	TX: 1310nm RX: 1550nm	TX: 1550nm RX: 1310nm	TX: 1310nm RX: 1550nm	TX: 1550nm RX: 1310nm
Operating Temp.	0 - 60°C				-40 - 75°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-TGT	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	1000
Connector Interface	Copper	LC	LC	LC	LC	LC	LC	Copper	LC	LC	LC	LC	LC
Fiber Mode	-	Multi Mode		Single Mode			Single Mode		-	Multi Mode		Single Mode	
Distance	100m	550m	2km	20km	40km	80km	120km	100m	550m	2km	20km	40km	80km
Wavelength (nm)	-	850nm	1310nm	1310nm	1310nm	1550nm	1550nm	-	850nm	1310nm	1310nm	1310nm	1550nm
Operating Temp.	0 - 60°C							-40 - 75°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	MGB-TSA
Product Image									
Speed (Mbps)	1000	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)	Simplex LC/UPC
Fiber Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single-mode
Distance	10km	10km	20km	20km	40km	40km	80km	80km	10km
Wavelength (TX)	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm
Wavelength (RX)	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm
Operating Temp.	0 - 60°C	0 - 60°C	0 - 60°C	0 - 60°C	0 - 60°C	0 - 60°C	0 - 60°C	0 - 60°C	-40 - 75°C

## Gigabit Ethernet Transceivers (1000BASE-BX, Single Fiber Bi-Directional SFP)

Model	MGB-TSB	MGB-TLA10	MGB-TLB10	MGB-TLA20	MGB-TLB20	MGB-TLA40	MGB-TLB40	MGB-TLA80	MGB-TLB80
Product Image									
Speed (Mbps)	1000	1000	1000	1000	1000	1000	1000	1000	1000
Connector Interface	Simplex LC/UPC	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)
Fiber Mode	Single-mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode	Single Mode
Distance	10km	10km	10km	20km	20km	40km	40km	80km	80km
Wavelength (TX)	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm
Wavelength (RX)	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm	1550nm	1310nm
Operating Temp.	-40 - 75°C	-40 - 75°C	-40 - 75°C	-40 - 75°C	-40 - 75°C	-40 - 75°C	-40 - 75°C	-40 - 75°C	-40 - 75°C

### Gigabit Ethernet Transceivers (2500BASE-X, SFP)

Model	MGB-2GSR	MGB-2GLR2	MGB-2GLR20	MGB-2GLA20	MGB-2GLB20	MGB-2GTSR	MGB-2GTLR2	MGB-2GTLR20	MGB-2GTLA20	MGB-2GTLB20
Product Image										
Speed (Mbps)	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Connector Interface	Dual LC/UPC			Simplex LC/UPC		Dual LC/UPC	Duplex LC/UPC		Simplex LC/UPC	
Fiber Mode	Multi-mode	Single Mode		Single Mode		Multi-mode	Single Mode		Single Mode	
Distance	300m	2km	20km	20km	20km	300m	2km	20km	20km	20km
Wavelength (nm)	850nm	1310nm	1310nm	TX:1310nm RX:1550nm	TX:1550nm RX:1310nm	850nm	1310nm	1310nm	TX:1310nm RX:1550nm	TX:1550nm RX:1310nm
Operating Temp.	0~70°C	0~70°C	0~70°C	0~70°C	0~70°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C

### 10Gbps SFP+ (10G Ethernet/10GBASE)

Model	MTB-RJ	MTB-SR	MTB-SR2	MTB-LR	MTB-LR20	MTB-LR40	MTB-LR60	MTB-LR80	MTB-LA10	MTB-LB10	MTB-LA20
Product Image											
Speed (Mbps)	10G	10G	10G	10G	10G	10G	10G	10G	10G	10G	10G
Connector Interface	RJ45	LC	LC	LC	LC	LC	LC	LC	WDM(LC)	WDM(LC)	WDM(LC)
Fiber Mode	-	Multi Mode		Single Mode		Single Mode		Single Mode		Single Mode	
Distance	300m	Up to 300m	Up to 2km	10km	20km	40km	60km	80km	10km	10km	20km
Wavelength (nm)	-	850nm	1310nm	1310nm	1310nm	1310nm	1550nm	1550nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm
Operating Temp.	0 ~ 70°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C

### 10Gbps SFP+ (10G Ethernet/10GBASE)

Model	MTB-LB20	MTB-LA40	MTB-LB40	MTB-LA60	MTB-LB60	MTB-LA70	MTB-LB70	MTB-TSR	MTB-TSR2	MTB-TLR
Product Image										
Speed (Mbps)	10G	10G	10G	10G	10G	10G	10G	10G	10G	10G
Connector Interface	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	LC	LC	LC
Fiber Mode	Single Mode			Single Mode		Single Mode		Multi Mode		Single Mode
Distance	20km	40km	40km	60km	60km	70km	70km	Up to 300m	Up to 2km	10km
Wavelength (nm)	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	TX:1270nm RX:1330nm	TX:1330nm RX:1270nm	850nm	1310nm	1310nm
Operating Temp.	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	0 ~ 60°C	-40~75°C	-40~75°C	-40~75°C

### 10Gbps SFP+ (10G Ethernet/10GBASE)

Model	MTB-TLR20	MTB-TLR40	MTB-TLR60	MTB-TLA20	MTB-TLB20	MTB-TLA40	MTB-TLB40	MTB-TLA60	MTB-TLB60
Product Image									
Speed (Mbps)	10G	10G	10G	10G	10G	10G	10G	10G	10G
Connector Interface	LC	LC	LC	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)	WDM(LC)
Fiber Mode	Single Mode		Single Mode		Single Mode			Single Mode	
Distance	20km	40km	60km	20km	20km	40km	40km	60km	60km
Wavelength (nm)	1310nm	1310nm	1550nm	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.	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C	-40~75°C

### 100G QSFP28

### 40Gbps QSFP+ (40Ethernet/40GBASE)

Model	QSFP-100G-SR4		QSFP-100G-LR4		QSFP-40G-SR4		QSFP-40G-LR4	
Product Image								
Speed (Mbps)	100G		100G		40G		40G	
Connector Interface	MPO		LC		MPO		LC	
Fiber Mode	Multi Mode		Single Mode		Multi Mode		Single Mode	
Distance	Up to 100m		10km		Up to 100m		10km	
Wavelength (nm)	850nm		1310nm		850nm		1310nm	
Operating Temp.	0 ~ 60°C		0 ~ 60°C		0 ~ 70°C		0 ~ 70°C	

