



Switches

Quick Sales Guide



Modular Switch Quick Finder

- Max. 384 Gbps non-blocking switching fabric, 286 Mpps forwarding rate
- 6 slots (two for management and four for I/O modules), 10U height hardware architecture
- Hot-swappable I/O modules, power supply and fan trays secure network reliability along with easy operation and maintenance
- Intelligent QoS and traffic control for enhanced availability
- Extended L3 routing and L2 switching functions for highest performance



MS-7206S
Switch chassis with 6 slots, including fan module (MF-7201)

MS-7206 PoE starter kit
consists of 1x MS-7206S, 1 x MI-7248PWR, 1 x MM-7201, 1 x MP-7201, 1 x MP-7202

MS-7206 fibre starter kit
consists of 1 x MS-7206S, 1 x MI-7248TF, 1 x MM-7201, 1 x MP-7201



MM-7201
Switch fabric and management module for MS-7206S



MF-7201
Fan module for MS-7206S



EM-412
2-port CX4 module



MI-7248
48 x 1 GbE BASE-T port I/O module for MS-7206S



MP-7201
AC power supply unit 600 W, for MS-7206S



EM-422
2-port XFP module



MI-7248TF
24 x 1 GbE BASE-T port and 24 x 1 GbE SFP slots I/O module for MS-7206S



MP-7202
External PoE power supply with 750 W, for MS-7206S



MI-7248PWR
48 x 1 GbE BASE-T port I/O module with Power over Ethernet support for MS-7206S



MP-7203
DC power supply unit 600 W, for MS-7206S



MI-7526F
20 x 1 GbE SFP slots, 4 dual personality GbE ports (BASE-T/SFP), and 1 x 2-port 10G open slot I/O module for MS-7206S























MPC-7202
Connecting module for external PoE power supply

System Capacity	<ul style="list-style-type: none"> • Switch Fabric Slot: 2 • I/O Module Slot: 4 • Power Supply Unit Slot: 2 • Fan Module Slot: 1 		
Performance	<ul style="list-style-type: none"> • Switching Fabric: 384 Gbps • Forwarding Rate: 286 Mpps 		
Max Port Density	<ul style="list-style-type: none"> • 1000BASE-T: 192 • 1000BASE-T with PoE: 192 (4 x MI-7248PWR) • 1000 SFP: 96 • 10G: 8 (4 x MI-7526F + 4 EM-412/EM-422) 		
Resilience and Availability	<ul style="list-style-type: none"> • IEEE 802.1D STP/802.1w RSTP/802.1s MSTP • Redundant Power supply support • Switch Fabric High Availability 	<ul style="list-style-type: none"> • VRRP • MRSTP • Dual Configuration Files 	<ul style="list-style-type: none"> • Swappable Fan module • IEEE 802.3ad LACP (max # trunks/links per trunk): 24/8
Traffic Control	<ul style="list-style-type: none"> • 4K static VLAN/4K dynamic VLAN • 802.1ad VLAN Stacking (QinQ) • BPDU Transparency • GVRP • VLAN Trunking 		
Security	<ul style="list-style-type: none"> • 802.1X • Intrusion Lock • MAC Filtering • MAC Freeze 	<ul style="list-style-type: none"> • Port Isolation • Port Security • SSH v1/v2 • SSL 	<ul style="list-style-type: none"> • Static MAC Forwarding • ACL (L2/L3/L4) Security Filtering
Management	<ul style="list-style-type: none"> • iStacking • Web Interface • CLI • Syslog • Daylight Saving 	<ul style="list-style-type: none"> • RMON (1, 2, 3, 9) • Port Mirroring • NTP • DHCP Relay per VLAN • RJ-45 Out-of-band Management Port 	<ul style="list-style-type: none"> • DHCP Option 82 • DHCP Client (Management) • RS-232 Out-of-band Console Port • SNMP v1, v2c, v3 • 802.3af PoE Support • Jumbo Frame Support on Gigabit Ports



Fixed-Port Switch Quick Finder

















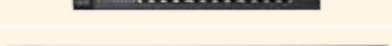

Switch Class	Series	Performance	Model
L3 Managed	4700 Series	Gigabit Ethernet with 10G Uplink	XGS4700-48F 
			XGS-4728F 
	4500 Series	Gigabit Ethernet with 10G Uplink	XGS-4526 
			XGS-4528F 
	4000 Series	Fast Ethernet	ES-4124 
	L2 Managed	3700 Series	Gigabit Ethernet
MGS-3712F 			
Fast Ethernet			MES-3728 
3500 Series		Fast Ethernet	ES3500-24 
3000 Series		Fast Ethernet	ES-3124 
			ES-3124PWR 
			ES-3148 
2200 Series		Gigabit Ethernet	GS2200-8 
			GS2200-8HP 
			GS2200-24 
			GS2200-24P 
			GS2200-48 
2000 Series		Fast Ethernet	ES-2024PWR 
			ES-2108 
			ES-2108-G 
			ES-2108PWR 

Key Features

Model	Ports	Key Features
XGS4700-48F	48 GbE SFP slot 2 optional 2-port 10G open slot	<ul style="list-style-type: none"> IPv4/IPv6 routing L3 advanced routing protocols, OSPF, DVMRP, VRRP and ECMP Optional modular 10 Gigabit Ethernet support Multilayer-aware (L2/L3/L4) ACL for security protection and traffic optimization Guest VLAN IGMP Snooping v1, v2, v3, MVR Removable fan and power modules (XGS4700-48F)
XGS-4728F	24 dual-personality GbE ports 2 12G stacking port 1 optional 2-port 10G open slot	<ul style="list-style-type: none"> Slot for 2-port 10 GbE module Extended L3 routing and L2 switching functions for highest performance Multilayer-aware (L2/L3/L4) ACL for security protection and traffic optimization Port security and enhanced 802.1X port authentication 8 IEEE 802.1p hardware priority queues BPS support
XGS-4526	20-port 1000BASE-T 4 dual-personality GbE ports 1 optional 2-port 10G open slot	<ul style="list-style-type: none"> Empowering converged network for SME Secure multi-service delivery quality Enhanced multi-layer security protection Advanced routing protocol (OSPF, RIP, VRRP and DVMRP)
XGS-4528F	24 dual-personality GbE ports 2 12G stacking ports 1 optional 2-port 10G open slot	<ul style="list-style-type: none"> Policy-based QoS optimizes multi-service quality IGMP snooping v1, v2, v3 and MVR Multilayer-aware (L2/L3/L4) access control list for security protection Architecture with RSTP, VRRP and port trunking IEEE 802.1ag CFM MEF9 and MEF14 certified for EPL, EVPL and ELAN
ES-4124	24-port 10/100BASE-TX 2-port 1000BASE-T 2 dual-personality GbE ports	<ul style="list-style-type: none"> IPv6 management MAC freeze IEEE 802.3az compliant sFlow PPPoE-IA Option 82
MGS-3712	8-port 1000BASE-T 4 dual-personality GbE ports	<ul style="list-style-type: none"> Robust High-Availability system design Strengthened service management and control IEEE 802.1s MSTP and IEEE 802.1w RSTP enable fast recovery networks Policy-based QoS empowered by (L2/L3/L4) ACL VLAN Stacking (Q-in-Q) support for L2VPN Backup Power System (BPS) extends network up time Easy Web GUI for intelligent PoE management (ES-3124PWR)
MGS-3712F	8 GbE SFP slot 4 dual-personality GbE ports	<ul style="list-style-type: none"> Port security and enhanced 802.1X port authentication MAC freeze and intrusion lock 8 IEEE 802.1p hardware priority queues WFQ, WRR and SPQ queuing algorithms MVR and IGMP snooping for IP multicasting optimization Easy Web GUI for intelligent PoE management (GS2200-24P) IEEE 802.3af (GS2200-24P)/IEEE 802.3at (GS2200-8HP)
MES-3728	24-port 10/100BASE-TX 2 GbE SFP slot 2 dual-personality GbE ports	<ul style="list-style-type: none"> WFQ queuing algorithms MVR and IGMP snooping for IP multicasting optimization Easy Web GUI for intelligent PoE management
ES3500-24	24-port 10/100BASE-TX 4 dual-personality GbE ports	<ul style="list-style-type: none"> Fanless hardware design (ES-2108/ES-2108-G) Traffic prioritizing of Intelligent QoS and bandwidth increment of 64 Kbps optimize service quality of application and utilization of bandwidth MVR enables IP multicasting applications across multiple VLANs environments Port-based and 802.1Q-tagged VLAN (4K PVID) MAC filtering/forwarding and MAC freeze
ES-3124	24-port 10/100BASE-TX 2-port 1000BASE-T 2 dual-personality GbE ports	
ES-3124PWR	24-port 10/100BASE-TX PoE 2-port 1000BASE-T 2 dual-personality GbE ports	
ES-3148	48-port 10/100BASE-TX 2-port 1000BASE-T 2 dual-personality GbE ports	
GS2200-8	8-port 1000BASE-T 2 dual-personality GbE ports	
GS2200-8HP	8-port 1000BASE-T PoE 2 dual-personality GbE ports	
GS2200-24	24-port 1000BASE-T 4 dual-personality GbE ports	
GS2200-24P	24-port 1000BASE-T PoE 4 dual-personality GbE ports	
GS2200-48	44-port 1000BASE-T 2 GbE SFP slot 4 dual-personality GbE ports	
ES-2024PWR	24-port 10/100BASE-TX PoE 2 dual-personality GbE ports	
ES-2108	8-port 10/100BASE-TX	
ES-2108-G	8-port 10/100BASE-TX 1 dual-personality GbE port	
ES-2108PWR	8-port 10/100BASE-TX PoE 1 dual-personality GbE port	



Fixed-Port Switch Quick Finder

Switch Class	Series	Performance	Model
Web Managed	1910 Series	Gigabit Ethernet	XGS1910-24 
			XGS1910-48 
			GS1910-24 
			GS1910-24HP 
			GS1910-48 
			GS1910-48HP 
	1510 Series	Gigabit Ethernet	GS1510-16 
			GS1510-24 
	1500 Series	Gigabit Ethernet	GS-1548 
	1500 Series — PoE	Gigabit Ethernet	GS1500-24P 
Unmanaged	1100 Series	Gigabit Ethernet	GS1100-16 
			GS1100-24 
	Fast Ethernet	ES1100-8P 	
		ES1100-16P 	
		ES1100-16 	
		ES1100-24E 	
		ES1100-24 	
		ES1100-24G 	

Key Features

Model	Ports	Key Features
XGS1910-24	20-port 1000BASE-T 4 dual-personality GbE ports 2 x 10G SFP+ slot	<ul style="list-style-type: none"> 10G stacking with easy management and shortest recovery time Advanced L2 switching features IPv6 management support
XGS1910-48	44-port 1000BASE-T 4 dual-personality GbE ports 4 x 10G SFP+ slot	<ul style="list-style-type: none"> IEEE 802.3az Energy Efficient Ethernet (EEE) complies with best energy-efficient platforms Supports IEEE 802.1AB LLDP/LLDP-MED to provide easy mapping for network management applications
GS1910-24	20-port 1000BASE-T 4 dual-personality GbE ports	
GS1910-24HP	24-port 1000BASE-T PoE 4 dual-personality GbE ports (shared with the last 4 ports RJ45)	<ul style="list-style-type: none"> Advanced L2 switching features IPv6 management Complies with the IEEE 802.3at standard with budget power (GS1910-24HP/48HP) IEEE 802.3az Energy Efficient Ethernet (EEE) complies with best energy-efficient platforms Fanless design for silent environments (GS1910-24)
GS1910-48	48-port 1000BASE-T 4 GbE SFP slot	<ul style="list-style-type: none"> Supports IEEE 802.1AB LLDP/LLDP-MED to provide easy mapping for network management applications
GS1910-48HP	48-port 1000BASE-T PoE 4 GbE SFP slot	
GS1510-16	16-port 1000BASE-T	<ul style="list-style-type: none"> Securing network with Web authentication support Easy installation and management IEEE 802.3az draft Energy Efficient Ethernet compliant Fanless design for silent environments
GS1510-24	24-port 1000BASE-T 2 GbE SFP open slot	
GS-1548	44-port 1000BASE-T 4 dual-personality GbE ports	<ul style="list-style-type: none"> Robust system design Intuitive and streamlined Web-based management interface Auto DoS attack prevention Auto VoIP optimization Port security 4 IEEE 802.1p hardware priority queues WRR and SPQ queuing algorithms
GS1500-24P	24-port 1000BASE-T PoE 4 dual-personality GbE ports	<ul style="list-style-type: none"> Intuitive and streamlined Web-based management interface 8 IEEE 802.1p hardware priority queues WRR, WFQ and SPQ queuing algorithms Easy Web GUI for intelligent PoE management
GS1100-16	16-port 1000BASE-T	<ul style="list-style-type: none"> Non-blocking, wire-speed transmission Auto MDI/MDI-X support IEEE 802.3az draft Energy Efficient Ethernet compliant
GS1100-24	24-port 1000BASE-T 2 GbE SFP open slot	
ES1100-8P	4-port 10/100BASE-TX 4-port 10/100BASE-TX PoE	
ES1100-16P	8-port 10/100BASE-TX 8-port 10/100BASE-TX PoE	
ES1100-16	16-port 10/100BASE-TX	<ul style="list-style-type: none"> Non-blocking, wire-speed transmission Auto MDI/MDI-X support IEEE 802.3az draft Energy Efficient Ethernet compliant (ES1100-16/24/24E) Fanless design for silent operations (ES1100-8P/16/24E/24/24G) IEEE 802.3x flow control supported IEEE 802.1p CoS supported
ES1100-24E	24-port 10/100BASE-TX	
ES1100-24	24-port 10/100BASE-TX	
ES1100-24G	24-port 10/100BASE-T 2 dual-personality GbE ports	



LAN Switches Feature Matrix

Model	Switch 4700 Series		Switch 4500 Series		Switch 4000 Series	Switch 3700 Series			
	XGS4700-48F	XGS-4728F	XGS-4526	XGS-4528F	ES-4124	MGS-3712	MGS-3712F	MES-3728	
Switch Class	Layer 3	Layer 3	Layer 3	Layer 3	Layer 3	Layer 2	Layer 2	Layer 2	
Hardware									
100 Mbit RJ45 ports	-	-	-	-	24	-	-	24	
100 Mbit RJ45 PoE ports	-	-	-	-	-	-	-	-	
100 Mbit SFP slots	-	-	-	-	-	-	-	-	
1 Gigabit RJ45 ports	-	-	20	-	2	8	-	-	
1 Gigabit RJ45 PoE ports	-	-	-	-	-	-	-	-	
1 Gigabit SFP slots	48	-	-	-	-	-	8	2	
Dual personality Gigabit ports (RJ45/SFP)	-	24	4	24	2	4	4	2	
12 Gigabit CX4 ports	-	2	-	2	-	-	-	-	
10 Gigabit module	2	1	1	1	-	-	-	-	
10 Gigabit SFP slots	-	-	-	-	-	-	-	-	
Backplane bandwidth (Gbps)	192	144	96	144	12.8	24	24	12.8	
Forwarding rate (Mpps)	143	100	71.4	100	9.6	17.8	17.8	9.6	
MAC addresses	32000	16000	8000	8000	16000	16000	16000	16000	
Management									
IPv6 management	Yes	Yes	Yes	Yes	-	-	-	-	
CLI, web GUI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
iStacking (single IP management)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Out-of-band management port	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Routing/Redundancy									
OSPF	Yes	Yes	Yes	Yes	Yes	-	-	-	
RIP v1, v2	Yes	Yes	Yes	Yes	Yes	-	-	-	
Static IP routing	Yes	Yes	Yes	Yes	Yes	-	-	-	
VRRP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Spanning Tree (STP/MSTP/RSTP)	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	
Backup power support	Dual power	Yes	Yes	Yes	Yes	Dual power	Dual power	Dual power	
Quality of Service									
Priority queues	8	8	8	8	8	8	8	8	
Data prioritization (SPQ/WRR/WFQ)	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/-	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	
Guest VLAN	Yes	Yes	Yes	Yes	-	-	-	-	
IGMP snooping (v1/v2/v3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
MVR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Jumbo frame forwarding	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DVMRP	Yes	Yes	Yes	Yes	Yes	-	-	-	
802.1p class of service	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Security									
MAC freeze/intrusion lock	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
802.1X authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
TACACS+/RADIUS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
ACL security filter L2/L3/L4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sflow	Yes	Yes	Yes	Yes	-	-	-	-	
CPU protection	Yes	Yes	Yes	Yes	-	-	-	-	
Green Features									
Fanless	-	-	-	-	-	-	-	-	
IEEE Energy-Efficient-Ethernet	-	-	-	-	-	-	-	-	
Others									
MTBF (hrs)	77451	119814	119814	125667	241846.74	320302	220339	307007	
Heat dissipation (BTU/hr)	487.63	289.85	289.85	245.52	118.33	86.61	101.62	68.20	
Physical Specifications									
Dimensions (WxDxH)(mm/in.)	438 x 425 x 44.5/ 17.24 x 16.73 x 1.75	438 x 310 x 44.5/ 17.24 x 12.20 x 1.75	438 x 310 x 44.5/ 17.24 x 12.20 x 1.75	438 x 310 x 44.5/ 17.24 x 12.20 x 1.75	438 x 270 x 44.5/ 17.24 x 10.63 x 1.75	438 x 225 x 44.5/ 17.24 x 8.86 x 1.75	438 x 225 x 44.5/ 17.24 x 8.86 x 1.75	438 x 225 x 44.5/ 17.24 x 8.86 x 1.75	438 x 225 x 44.5/ 17.24 x 8.86 x 1.75
Weight (kg/lb.)	6.4/14.11	4.9/10.80	4.8/10.58	4.9/10.80	3.6/7.96	3.4/7.5	3.4/7.5	3.4/7.5	

Model	Switch 3500 Series	Switch 3000 Series			Switch 2200 Series				
	ES3500-24	ES-3124	ES-3124PWR	ES-3148	GS2200-8	GS2200-8HP	GS2200-24	GS2200-24P	GS2200-48
Switch Class	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2
Hardware									
100 Mbit RJ45 ports	24	24	-	48	-	-	-	-	-
100 Mbit RJ45 PoE ports	-	-	24	-	-	-	-	-	-
100 Mbit SFP slots	-	-	-	-	-	-	-	-	-
1 Gigabit RJ45 ports	-	2	2	2	8	-	24	-	44
1 Gigabit RJ45 PoE ports	-	-	-	-	-	8	-	24	-
1 Gigabit SFP slots	-	-	-	-	-	-	-	-	2
Dual personality Gigabit ports (RJ45/SFP)	4	2	2	2	2	2	4	4	4
12 Gigabit CX4 ports	-	-	-	-	-	-	-	-	-
10 Gigabit module	-	-	-	-	-	-	-	-	-
10 Gigabit SFP slots	-	-	-	-	-	-	-	-	-
Backplane bandwidth (Gbps)	12.8	12.8	12.8	17.6	20	20	56	56	100
Forwarding rate (Mpps)	9.6	9.6	9.6	13.1	14.9	14.9	41.7	41.7	74.4
MAC addresses	16000	16000	16000	16000	16000	16000	16000	16000	8000
Management									
IPv6 management	Yes	-	-	-	Yes	Yes	Yes	Yes	-
CLI, web GUI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
iStacking (single IP management)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Out-of-band management port	-	Yes	Yes	Yes	-	-	-	-	Yes
Routing/Redundancy									
OSPF	-	-	-	-	-	-	-	-	-
RIP v1, v2	-	-	-	-	-	-	-	-	-
Static IP routing	-	-	-	-	-	-	-	-	-
VRRP	-	-	-	-	-	-	-	-	-
Spanning Tree (STP/MSTP/RSTP)	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Backup power support	-	Yes	Yes	Yes	-	-	-	-	Yes
Quality of Service									
Priority queues	8	8	8	8	8	8	8	8	8
Data prioritization (SPQ/WRR/WFQ)	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Guest VLAN	Yes	-	-	-	Yes	Yes	Yes	Yes	-
IGMP snooping (v1/v2/v3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MVR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jumbo frame forwarding	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DVMRP	-	-	-	-	-	-	-	-	-
802.1p class of service	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security									
MAC freeze/intrusion lock	Yes/-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
802.1X authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TACACS+/RADIUS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ACL security filter L2/L3/L4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sflow	Yes	-	-	-	-	-	-	-	-
CPU protection	Yes	-	-	-	Yes	Yes	Yes	Yes	-
Green Features									
Fanless	Yes	-	-	-	Yes	-	Yes	-	-
IEEE Energy-Efficient-Ethernet	Yes	-	-	-	Yes	Yes	-	-	-
Others									
MTBF (hrs)	-	222625.47	269316.74	176244.06	399727	553307	248240	257506	307007.44
Heat dissipation (BTU/hr)	-	204.6	2046	153.45	41.94	784.3	105.71	913.88	333.50
Physical Specifications									
Dimensions (WxDxH)(mm/in.)	438 x 180 x 44.5/ 17.24 x 7.09 x 1.75	438 x 270 x 44.5/ 17.24 x 10.63 x 1.75	438 x 420 x 44.5/ 17.24 x 16.54 x 1.75	438 x 300 x 44.5/ 17.24 x 11.81 x 1.75	250 x 150 x 44/ 9.75 x 5.85 x 1.72	330 x 230.5 x 44/ 12.87 x 8.99 x 1.72	440 x 173 x 44/ 17.32 x 6.81 x 1.73	440 x 310 x 43/ 17.32 x 12.20 x 1.69	438 x 300 x 44.5/ 17.24 x 11.81 x 1.75
Weight (kg/lb.)	2.4/5.29	3.6/7.94	6.8/14.99	4.2/9.26	1.34/2.95	2.66/5.86	2.5/5.51	4.8/10.58	4.5/9.92



Model	Switch 2000 Series				Switch 1910 Series					
	ES-2024PWR	ES-2108	ES-2108-G	ES-2108PWR	XGS1910-24	XGS1910-48	GS1910-24	GS1910-24HP	GS1910-48	GS1910-48HP
Switch Class	Layer 2	Layer 2	Layer 2	Layer 2	Web-managed	Web-managed	Web-managed	Web-managed	Web-managed	Web-managed
Hardware										
100 Mbit RJ45 ports	-	8	8	-	-	-	-	-	-	-
100 Mbit RJ45 PoE ports	24	-	-	8	-	-	-	-	-	-
100 Mbit SFP slots	-	-	-	-	-	-	-	-	-	-
1 Gigabit RJ45 ports	-	-	-	-	20	44	20	-	48	-
1 Gigabit RJ45 PoE ports	-	-	-	-	-	-	-	24	-	48
1 Gigabit SFP+	-	-	-	-	-	-	-	-	4	4
Dual personality Gigabit ports (RJ45/SFP)	2	-	1	1	4	4	4	4*	-	-
12 Gigabit CX4 ports	-	-	-	-	-	-	-	-	-	-
10 Gigabit module	-	-	-	-	-	-	-	-	-	-
10 Gigabit SFP slots	-	-	-	-	2	4	-	-	-	-
Backplane bandwidth (Gbps)	8.8	1.6	3.6	3.6	88	176	48	48	104	104
Forwarding rate (Mpps)	6.6	1.2	2.7	2.7	65.5	131	35.7	35.7	77.4	77.4
MAC addresses	8000	8000	8000	8000	32000	32000	8000	8000	32000	32000
Management										
IPv6 management	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
CLI, web GUI	Yes	Yes	Yes	Yes	Web GUI	Web GUI	Web GUI	Web GUI	Web GUI	Web GUI
iStacking (single IP management)	Yes	Yes	Yes	Yes	-	-	-	-	-	-
Out-of-band management port	-	-	-	-	-	-	-	-	-	-
Routing/Redundancy										
OSPF	-	-	-	-	-	-	-	-	-	-
RIP v1, v2	-	-	-	-	-	-	-	-	-	-
Static IP routing	-	-	-	-	-	-	-	-	-	-
VRRP	-	-	-	-	-	-	-	-	-	-
Spanning Tree (STP/MSTP/RSTP)	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Backup power support	-	-	-	-	-	-	-	-	-	-
Quality of Service										
Priority queues	4	4	4	4	8	8	8	8	8	8
Data prioritization (SPQ/WRR/WFQ)	Yes/Yes/-	Yes/Yes/-	Yes/Yes/-	Yes/Yes/-	Yes/-/Yes	Yes/-/Yes	Yes/-/Yes	Yes/-/Yes	Yes/-/Yes	Yes/-/Yes
Guest VLAN	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
IGMP snooping (v1/v2/v3)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MVR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jumbo frame forwarding	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
DVMRP	-	-	-	-	-	-	-	-	-	-
802.1p class of service	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security										
MAC freeze/intrusion lock	Yes	Yes	Yes	Yes	-	-	-	-	-	-
802.1X authentication	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TACACS+/RADIUS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ACL security filter L2/L3/L4	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
Sflow	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
CPU protection	-	-	-	-	-	-	-	-	-	-
Green Features										
Fanless	-	Yes	Yes	-	-	-	Yes	-	-	-
IEEE Energy-Efficient-Ethernet	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
Others										
MTBF (hrs)	221655	112901	109634	109497	-	-	-	-	-	-
Heat dissipation (BTU/hr)	682	34.1	34.1	682	-	-	-	-	-	-
Physical Specifications										
Dimensions (WxDxH)(mm/in.)	438 x 270 x 44.5/17.24 x 10.63 x 1.75	250 x 124 x 37/9.84 x 4.88 x 1.46	250 x 124 x 37/9.84 x 4.88 x 1.46	250 x 235 x 44.5/9.84 x 13.98 x 1.75	430 x 180 x 44.5/16.9 x 7.08 x 1.75	430 x 250 x 44.5/16.9 x 9.84 x 1.75	430 x 180 x 44.5/16.9 x 7.08 x 1.75	440 x 350 x 44.5/17.3 x 13.8 x 1.75	430 x 250 x 44.5/16.9 x 9.84 x 1.75	440 x 350 x 44.5/17.3 x 13.8 x 1.75
Weight (kg/lb.)	4/8.82	1.2/2.65	1.2/2.65	2.4/5.29	2.1/4.63	3.1/6.83	2/4.41	4.08/8.99	3/6.61	4.71/10.38

* share with the last 4 RJ-45

Model	Switch 1510 Series		Switch 1500 Series	Switch 1500 Series — PoE
	GS1510-16	GS1510-24	GS-1548	GS1500-24P
Switch Class	Web-managed	Web-managed	Web-managed	Web-managed
Hardware				
100 Mbit RJ45 ports	-	-	-	-
100 Mbit RJ45 PoE ports	-	-	-	-
100 Mbit SFP slots	-	-	-	-
1 Gigabit RJ45 ports	16	24	44	-
1 Gigabit RJ45 PoE ports	-	-	-	24
1 Gigabit SFP slots	-	2	-	-
Dual personality Gigabit ports (RJ45/SFP)	-	-	4	4
12 Gigabit CX4 ports	-	-	-	-
10 Gigabit module	-	-	-	-
10 Gigabit SFP slots	-	-	-	-
Backplane bandwidth (Gbps)	32	52	96	56
Forwarding rate (Mpps)	23.8	38.7	71.4	41.67
MAC addresses	16000	16000	8000	16000
Management				
IPv6 management	-	-	-	-
CLI, web GUI	GUI	GUI	GUI	GUI
iStacking (single IP management)	-	-	-	-
Out-of-band management port	-	-	-	-
Routing/Redundancy				
OSPF	-	-	-	-
RIP v1, v2	-	-	-	-
Static IP routing	-	-	-	-
VRRP	-	-	-	-
Spanning Tree (STP/MSTP/RSTP)	Yes/-/Yes	Yes/-/Yes	-	Yes/-/Yes
Backup power support	-	-	-	-
Quality of Service				
Priority queues	8	8	4	8
Data prioritization (SPQ/WRR/WFQ)	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/-	Yes/Yes/Yes
Guest VLAN	-	-	-	-
IGMP snooping (v1/v2/v3)	Yes	Yes	-	-
MVR	-	-	-	-
Jumbo frame forwarding	Yes	Yes	Yes	Yes
DVMRP	-	-	-	-
802.1p class of service	Yes	Yes	Yes	Yes
Security				
MAC freeze/intrusion lock	-	-	-	-
802.1X authentication	Yes	Yes	-	Yes
TACACS+/RADIUS	-	-	-	-
ACL security filter L2/L3/L4	-	-	-	-
Sflow	-	-	-	-
CPU protection	-	-	-	-
Green Features				
Fanless	Yes	Yes	-	-
IEEE Energy-Efficient-Ethernet	Yes	Yes	-	-
Others				
MTBF (hrs)	1182081	1007139	50422	73618
Heat dissipation (BTU/hr)	61.38	68.2	264.62	729.06
Physical Specifications				
Dimensions (WxDxH)(mm/in.)	440 x 170 x 44/17.32 x 6.69 x 1.73	440 x 170 x 44/17.32 x 6.69 x 1.73	441 x 311 x 45/17.36 x 12.24 x 1.77	441 x 311 x 45/17.36 x 12.24 x 1.77
Weight (kg/lb.)	2.3/5.07	2.4/5.29	4.1/9.06	4.7/10.39

Model	Switch 1100 Series								
	GS1100-16	GS1100-24	ES1100-8P	ES1100-16P	ES1100-16	ES1100-24	ES1100-24E	ES1100-24G	ES1100-24G
Switch Class	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged
Hardware									
100 Mbit RJ45 ports	-	-	4	8	16	24	24	24	24
100 Mbit RJ45 PoE ports	-	-	4	8	-	-	-	-	-
100 Mbit SFP slots	-	-	-	-	-	-	-	-	-
1 Gigabit RJ45 ports	16	24	-	-	-	-	-	-	-
1 Gigabit RJ45 PoE ports	-	-	-	-	-	-	-	-	-
1 Gigabit SFP slots	-	2	-	-	-	-	-	-	-
Dual personality Gigabit ports (RJ45/SFP)	-	-	-	-	-	-	-	-	2
12 Gigabit CX4 ports	-	-	-	-	-	-	-	-	-
10 Gigabit module	-	-	-	-	-	-	-	-	-
10 Gigabit SFP slots	-	-	-	-	-	-	-	-	-
Backplane bandwidth (Gbps)	32	52	1.6	3.2	3.2	4.8	4.8	8.8	8.8
Forwarding rate (Mpps)	23.8	38.7	1.2	2.4	2.4	3.6	3.6	6.6	6.6
MAC addresses	8000	8000	1000	8000	8000	8000	8000	8000	8000
Management									
IPv6 management	-	-	-	-	-	-	-	-	-
CLI, web GUI	-	-	-	-	-	-	-	-	-
iStacking (single IP management)	-	-	-	-	-	-	-	-	-
Out-of-band management port	-	-	-	-	-	-	-	-	-
Routing/Redundancy									
OSPF	-	-	-	-	-	-	-	-	-
RIP v1, v2	-	-	-	-	-	-	-	-	-
Static IP routing	-	-	-	-	-	-	-	-	-
VRRP	-	-	-	-	-	-	-	-	-
Spanning Tree (STP/MSTP/RSTP)	-	-	-	-	-	-	-	-	-
Backup power support	-	-	-	-	-	-	-	-	-
Quality of Service									
Priority queues	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes
Data prioritization (SPQ/WRR/WFQ)	-	-	-	-	-	-	-	-	-
Guest VLAN	-	-	-	-	-	-	-	-	-
IGMP snooping (v1/v2/v3)	-	-	-	-	-	-	-	-	-
MVR	-	-	-	-	-	-	-	-	-
Jumbo frame forwarding	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-
DVMRP	-	-	-	-	-	-	-	-	-
802.1p class of service	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes
Security									
MAC freeze/intrusion lock	-	-	-	-	-	-	-	-	-
802.1X authentication	-	-	-	-	-	-	-	-	-
TACACS+/RADIUS	-	-	-	-	-	-	-	-	-
ACL security filter L2/L3/L4	-	-	-	-	-	-	-	-	-
Sflow	-	-	-	-	-	-	-	-	-
CPU protection	-	-	-	-	-	-	-	-	-
Green Features									
Fanless	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
IEEE Energy-Efficient-Ethernet	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-
Others									
MTBF (hrs)	48385	47531	164603	75888	322400	295895	295895	100833	100833
Heat dissipation (BTU/hr)	30.69	60.36	255.41	551.06	8.18	13.3	13.3	50.13	50.13
Physical Specifications									
Dimensions (WxDxH)(mm/in.)	215 x 133 x 42/ 8.46 x 5.24 x 1.65	441 x 131 x 44/ 17.36 x 5.16 x 1.73	262 x 184 x 41/ 10.31 x 7.24 x 1.61	262 x 184 x 41/ 10.31 x 7.24 x 1.61	216 x 133 x 42/ 8.50 x 5.24 x 1.65	441 x 131 x 44/ 17.36 x 5.16 x 1.73	267 x 162 x 42/ 10.51 x 6.38 x 1.65	441 x 131 x 44/ 17.36 x 5.16 x 1.73	441 x 131 x 44/ 17.36 x 5.16 x 1.73
Weight (kg/lb.)	1.0/2.20	2.0/4.41	1.4/3.09	1.7/3.75	0.77/1.70	1.35/2.98	1.28/2.82	1.5/3.31	1.5/3.31

Accessories

10G Module

Product	EM-412	EM-422
Specifications	<ul style="list-style-type: none"> • 2-port CX4 module • Extended 10 GbE CX4 module for short distance deployment 	<ul style="list-style-type: none"> • 2-slot XFP module • Extended 10 GbE XFP module for long distance deployment (Requires purchase of 10 GbE XFP transceivers)


Media Converter

Product	MC1000-SFP-FP	MC100FX-SC30-A	MC100FX-SC2-A
Specifications	<ul style="list-style-type: none"> • 1000BASE-T RJ-45 to Gigabit fiber • Fiber protection mechanism • 1 mini-GBIC SFP slot for flexible choice of SFP • Multimode and singlemode supported • Up to 80 km reach (depends on mini-GBIC SFP) • Max. power consumption: 9.6 watt 	<ul style="list-style-type: none"> • 10/100BASE-TX RJ-45 to 100FX singlemode • For use with singlemode fiber, SC connector • Up to 30 km reach • Max. power consumption: 2.4 watt 	<ul style="list-style-type: none"> • 10/100BASE-TX RJ-45 to 100FX multimode • For use with multimode fiber, SC connector • Up to 2 km reach • Max. power consumption: 2.4 watt
Dimensions (WxDxH)(mm/in.)	194 x 129 x 25/7.64 x 5.08 x 0.98	74 x 109 x 23.4/2.91 x 4.29 x 0.92	74 x 109 x 23.4/2.91 x 4.29 x 0.92

PoE Injector and Extender

Product	PoE-12	PoE12-HP
Specifications	<ul style="list-style-type: none"> • IEEE 802.3af 15.4 watt PoE injector • Fanless design, noiseless • Max. power consumption: 17.3 watt 	<ul style="list-style-type: none"> • Install anywhere taking advantage of PoE technology • Simple installation for IEEE 802.3at compatible wireless LAN APs or IP video cameras • Up to 100 m coverage via CAT-5 Ethernet cable
Dimensions (WxDxH)(mm/in.)	117 x 60 x 35/4.61 x 2.36 x 1.38	207 x 65 x 38.5/8.15 x 2.56 x 1.52

Backup Power System

Product	BPS-120
	
Specifications	<ul style="list-style-type: none"> • Up to 6 switches from the 4500/4000/3000 series and GS2200-48 can be connected to one BPS-120 • Provides power to one switch without traffic or user interruption or switch rebooting in the event of a switch internal power supply failure • Temperature, power and fan speed monitoring
Dimensions (WxDxH)(mm/in.)	438 x 270 x 44.5/17.24 x 10.63 x 1.75

External PoE Power

Product	PPS250
	
Specifications	<ul style="list-style-type: none"> • RoHS compliant, green product • Provision of more/external PoE power budget (225 W) • For GS2200-24P only
Dimensions (WxDxH)(mm/in.)	280 x 206 x 44/11.02 x 8.11 x 1.73

FAN Module

Product	FAN4700-48F
	
Specifications	<ul style="list-style-type: none"> • Removable fan module for XGS4700-48F

Power Module

Product	ACP4700-48F	DCP4700-48F
		
Specifications	<ul style="list-style-type: none"> • Removable AC power module for XGS4700-48F • Requires 100 VAC to 240 VAC, 1.4 A power 	<ul style="list-style-type: none"> • Removable DC power module for XGS4700-48F • Requires DC power supply input of -36 VDC to -72 VDC, 3 A Max no tolerance

Transceiver Series

Transceiver Class	10 Gigabit XFP			Gigabit SFP						Fast Ethernet SFP					
	FTLX8511D3 (XFP-SR)	FTLX1611M3 (XFP-ER)	FTLX1412D3BCL (XFP-LR)	SFP-1000T	SFP-SX-D	SFP-LX-10-D	SFP-BX1310-10-D	SFP-BX1490-10-D	SFP-LHX1310-40-D	SFP-ZX-80-D	SFP-100FX-2	SFP-100TX	SFP-100LX-20	SFP-100BX1310-20-D	SFP-100BX1550-20-D



Features	<ul style="list-style-type: none"> • Industry standards compliant • SFP MSA (Multi-Source Agreement) compliant • Hot-pluggable with maximum flexibility • Compact size, high port density • Low power dissipation • Support DDMI (Digital Diagnostics Monitoring Interface) features 														
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Specifications															
Connector	LC	LC	LC	RJ-45	LC	LC	LC	LC	LC	LC	LC	RJ-45	LC	LC	LC
Wavelength	850 nm	1550 nm	1310 nm	-	850 nm	1310 nm	1310 nm (TX) 1490 nm (RX)	1490 nm (TX) 1310 nm (RX)	1310 nm	1550 nm	1550 nm	-	1310 nm	1310 nm (TX) 1550 nm (RX)	1550 nm (TX) 1310 nm (RX)
Max Transmission Distance	300 m	40 km	10 km	100 m	550 m	10 km	10 km	10 km	40 km	80 km	2 km	-	20 km	20 km	20 km
Support DDMI Features	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes

Corporate Headquarters

ZyXEL Communications Corp.

Tel: +886-3-578-3942
Fax: +886-3-578-2439
Email: sales@zyxel.com.tw
<http://www.zyxel.com>

■ Asia

ZyXEL China (Shanghai)

China Headquarters
Tel: +86-021-611199055
Fax: +86-021-52069033
Email: sales@zyxel.cn
<http://www.zyxel.cn>

ZyXEL China (Beijing)

Tel: +86-010-62602249
Email: sales@zyxel.cn
<http://www.zyxel.cn>

ZyXEL China (Tianjin)

Tel: +86-022-87890440
Fax: +86-022-87892304
Email: sales@zyxel.cn
<http://www.zyxel.cn>

ZyXEL India

Tel: +91-11-4760-8800
Fax: +91-11-4052-3393
Email: info@zyxel.in
<http://www.zyxel.in>

ZyXEL Kazakhstan

Tel: +7-727-2-590-699
Email: info@zyxel.kz
<http://www.zyxel.kz>

ZyXEL Malaysia

Tel: +603-7960-0088
Fax: +603-7960-8802
Email: sales@zyxel.com.my
<http://www.zyxel.com.my>

ZyXEL Pakistan

Tel: +92 213 4310194-5
Fax: +92 213 4310196
Email: sales@zyxel.pk
<http://www.zyxel.com.pk>

ZyXEL Singapore

Tel: +65-6899-6678
Fax: +65-6899-8887
Email: sales@zyxel.com.sg
<http://www.zyxel.com.sg>

ZyXEL Taiwan (Taipei)

Tel: +886-2-2739-9889
Fax: +886-2-2735-3220
Email: sales_tw@zyxel.com.tw
<http://www.zyxel.com.tw>

ZyXEL Thailand

Tel: +66-(0)-2831-5315
Fax: +66-(0)-2831-5395
Email: info@zyxel.co.th
<http://www.zyxel.co.th>

■ Europe

ZyXEL Belarus

Tel/Fax: +375 17 334-60-99
Email: info@zyxel.by
<http://www.zyxel.by>

ZyXEL Benelux

Tel: +31 23 5553689
Fax: +31 23 5578492
Email: sales@zyxel.nl
<http://www.zyxel.nl>
<http://www.zyxel.be>

ZyXEL Bulgaria

Tel: +359 2 4443343
Email: info@zyxel.bg
<http://www.zyxel.bg>

ZyXEL Czech

Tel: +420 241 091 350
Fax: +420 241 091 359
Email: info@cz.zyxel.com
<http://www.zyxel.cz>

ZyXEL Denmark A/S

Tel: +45 39 55 07 00
Fax: +45 39 55 07 07
Email: sales@zyxel.dk
<http://www.zyxel.dk>

ZyXEL Finland

Tel: +358-9-4780 8400
Email: myynti@zyxel.fi
<http://www.zyxel.fi>

ZyXEL France

Tel: +33 (0)4 72 52 97 97
Fax: +33 (0)4 72 52 19 20
Email: info@zyxel.fr
<http://www.zyxel.fr>

ZyXEL Germany GmbH

Tel: +49 (0) 2405-6909 0
Fax: +49 (0) 2405-6909 99
Email: sales@zyxel.de
<http://www.zyxel.de>

ZyXEL Hungary & SEE

Tel: +36-1-336-1640
Fax: +36-1-325-9100
Email: info@zyxel.hu
<http://www.zyxel.hu>

ZyXEL Italy

Tel: 800 99 26 04
Fax: +39 011 274 7647
Email: sales@zyxel.it
<http://www.zyxel.it>

ZyXEL Norway

Tel: +47 22 80 61 80
Fax: +47 22 80 61 81
Email: salg@zyxel.no
<http://www.zyxel.no>

ZyXEL Poland

Tel: +48 (22) 333 8250
Fax: +48 (22) 333 8251
Email: info@pl.zyxel.com
<http://www.zyxel.pl>

ZyXEL Russia

Tel: +7 (495) 542-8920
Fax: +7 (495) 542-8925
Email: info@zyxel.ru
<http://www.zyxel.ru>

ZyXEL Slovakia

Tel: +421 243 193 989
Fax: +421 243 193 990
Email: info@sk.zyxel.com
<http://www.zyxel.sk>

ZyXEL Spain

Tel: +34 902 195 420
Fax: +34 913 005 345
Email: sales@zyxel.es
<http://www.zyxel.es>

ZyXEL Sweden A/S

Tel: +46 8 5776060
Fax: +46 8 5776061
Email: sales@zyxel.se
<http://www.zyxel.se>

ZyXEL Switzerland

Tel: +41 (0)44 806 51 00
Fax: +41 (0)44 806 52 00
Email: info@zyxel.ch
<http://www.zyxel.ch>

ZyXEL Turkey A.S.

Tel: +90 212 314 18 00
Fax: +90 212 220 25 26
Email: bilgi@zyxel.com.tr
<http://www.zyxel.com.tr>

ZyXEL UK Ltd.

Tel: +44 (0) 118 9121 700
Fax: +44 (0) 118 9797 277
Email: sales@zyxel.co.uk
<http://www.zyxel.co.uk>

ZyXEL Ukraine

Tel/Fax: +380 44 494-49-31
Email: sales@modem.com.ua
<http://www.ua.zyxel.com>

■ The Americas

ZyXEL USA

North America Headquarters

Tel: +1-714-632-0882
Fax: +1-714-632-0858
Email: sales@zyxel.com
<http://us.zyxel.com>

