



LAN 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 port (BASE-T/SFP), and 1 x 2-port 10G open slot I/O module for MS-7206S






















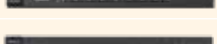
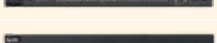
MPC-7202

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-3712
Gigabit Ethernet			MGS-3712F	
Fast Ethernet			MES-3728	
3500 Series		Fast Ethernet	MES-3528	
3000 Series		Fast Ethernet	ES-3124	
			ES-3124F	
			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-slot GbE open SFP 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
XGS-4728F	24 dual-personality GbE ports 2 12G stacking port 1 optional 2-port 10G open slot	<ul style="list-style-type: none"> • 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-4526	20-port 1000BASE-T 4 dual-personality GbE ports 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
XGS-4528F	24 dual-personality GbE ports 2 12G stacking ports 1 optional 2-port 10G open slot	<ul style="list-style-type: none"> • Port security and enhanced 802.1X port authentication • 8 IEEE 802.1p hardware priority queues • BPS support
ES-4124	24-port 10/100BASE-TX 2-port 1000BASE-T 2 dual-personality GbE ports	<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)
MGS-3712	8-port 1000BASE-T 4 dual-personality GbE ports	<ul style="list-style-type: none"> • Policy-based QoS optimizes multi-service quality
MGS-3712F	8 GbE SFP open slot 4 dual-personality GbE ports	<ul style="list-style-type: none"> • 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
MES-3728	24-port 10/100BASE-TX 2 GbE open SFP slots 2 dual-personality GbE ports	<ul style="list-style-type: none"> • IEEE 802.1ag CFM • MEF9 and MEF14 certified for EPL, EVPL and ELAN
MES-3528	24-port 10/100BASE-TX 4 dual-personality GbE ports	<ul style="list-style-type: none"> • 24 x 100BASE-TX ports, 4 x 1000BASE-T/Mini-GBIC combo ports • 12.8 Gbps non-blocking switching fabric • Policy-based Quality of Service (QoS) and IGMP v1/2/3 support • Intelligent ACL • External alarm block (4 inputs, 1 output)
ES-3124	24-port 10/100BASE-TX 2-port 1000BASE-T 2 dual-personality GbE ports	
ES-3124F	24 FE SFP open slot 2 GbE SFP open slot 2 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
ES-3124PWR	24-port 10/100BASE-TX PoE 2-port 1000BASE-T 2 dual-personality GbE ports	<ul style="list-style-type: none"> • 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)
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	<ul style="list-style-type: none"> • Port security and enhanced 802.1X port authentication • MAC freeze and intrusion lock
GS2200-24	24-port 1000BASE-T 4 dual-personality GbE ports	<ul style="list-style-type: none"> • 8 IEEE 802.1p hardware priority queues • WFQ, WRR and SPQ queuing algorithms
GS2200-24P	24-port 1000BASE-T PoE 4 dual-personality GbE ports	<ul style="list-style-type: none"> • 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)
GS2200-48	44-port 1000BASE-T 2 GbE SFP open slot 4 dual-personality GbE ports	
ES-2024PWR	24-port 10/100BASE-TX PoE 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
ES-2108	8-port 10/100BASE-TX	<ul style="list-style-type: none"> • Fanless hardware design (ES-2108/ES-2108-G)
ES-2108-G	8-port 10/100BASE-TX 1 dual-personality GbE port	<ul style="list-style-type: none"> • Traffic prioritizing of Intelligent QoS and bandwidth increment of 64 Kbps optimize service quality of application and utilization of bandwidth
ES-2108PWR	8-port 10/100BASE-TX PoE 1 dual-personality GbE port	<ul style="list-style-type: none"> • MVR enables IP multicasting applications across multiple VLANs environments • Port-based and 802.1Q-tagged VLAN (4K PVID) • MAC filtering/forwarding and MAC freeze



Fixed-Port Switch Quick Finder

Switch Class	Series	Performance	Model
L2 Managed	300 Series	Fast Ethernet	ES-315 
			ES-315-F 
Web Managed	1510 Series	Gigabit Ethernet	GS1510-16 
			GS1510-24 
	1500 Series	Gigabit Ethernet	GS-1548 
			1500 Series — PoE
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
ES-315	5-port 10/100BASE-TX	<ul style="list-style-type: none"> • 1K Layer 2 MAC Addresses Table • Support 512K bits SRAM for Packet Buffer • 802.1D Transparent Bridging • IEEE 802.1Q Tag-based VLAN • IGMP Snooping, IGMP Filtering • Fanless Design • MVR
ES-315-F	4-port 10/100BASE-TX 1 FE SFP open 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			Switch 3500 Series
	XGS4700-48F	XGS-4728F	XGS-4526	XGS-4528F	ES-4124	MGS-3712	MGS-3712F	MES-3728	MES-3528
Switch Class	Layer 3	Layer 3	Layer 3	Layer 3	Layer 3	Layer 2	Layer 2	Layer 2	Layer 2
Hardware									
100 Mbit RJ45 ports	-	-	-	-	24	-	-	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	4
12 Gigabit CX4 ports	-	2	-	2	-	-	-	-	-
10 Gigabit module	2	1	1	1	-	-	-	-	-
Backplane bandwidth (Gbps)	192	144	96	144	12.8	24	24	12.8	12.8
Forwarding rate (Mpps)	143	100	71.4	100	9.6	17.8	17.8	9.6	9.6
MAC addresses	32000	16000	8000	8000	16000	16000	16000	16000	16000
Management									
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	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	Yes/Yes/Yes
Backup power support	-	Yes	Yes	Yes	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
ACL data prioritization (L2/L3/L4)	Yes	Yes	Yes	Yes	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	Yes	Yes	Yes	Yes	Yes	-	-	-	-
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+	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ACL security filter L2/L3/L4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RADIUS MAC login	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VLAN stacking (Q-in-Q)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
Green Features									
Fanless	-	-	-	-	-	-	-	-	-
IEEE Energy-Efficient-Ethernet	-	-	-	-	-	-	-	-	-
Others									
MTBF (hrs)	77451	119814	119814	125667	241846.74	320302	220339	307007	161039
Heat dissipation (BTU/hr)	487.63	289.85	289.85	245.52	118.33	86.61	101.62	68.20	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 174 x 44.5/ 17.24 x 6.85 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	2.8/6.17

Model	Switch 3000 Series				Switch 2200 Series				
	ES-3124	ES-3124F	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	-	-	48	-	-	-	-	-
100 Mbit RJ45 PoE ports	-	-	24	-	-	-	-	-	-
100 Mbit SFP slots	-	24	-	-	-	-	-	-	-
1 Gigabit RJ45 ports	2	-	2	2	8	-	24	-	44
1 Gigabit RJ45 PoE ports	-	-	-	-	-	8	-	24	-
1 Gigabit SFP slots	-	2	-	-	-	-	-	-	2
Dual personality Gigabit ports (RJ45/SFP)	2	2	2	2	2	2	4	4	4
12 Gigabit CX4 ports	-	-	-	-	-	-	-	-	-
10 Gigabit module	-	-	-	-	-	-	-	-	-
Backplane bandwidth (Gbps)	12.8	12.8	12.8	17	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									
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	-	-	-	-	Yes
Routing/Redundancy									
OSPF	-	-	-	-	-	-	-	-	-
RIP v1, v2	-	-	-	-	-	-	-	-	-
Static IP routing	Yes	Yes	Yes	Yes	-	-	-	-	-
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	-	-	-	-	Yes
Quality of Service									
Priority queues	8	8	8	8	8	8	8	8	8
Data prioritization (SPQ/WRP/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
ACL data prioritization (L2/L3/L4)	Yes	Yes	Yes	Yes	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+	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ACL security filter L2/L3/L4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RADIUS MAC login	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VLAN stacking (Q-in-Q)	Yes	Yes	Yes	Yes	-	-	-	-	Yes
Green Features									
Fanless	-	-	-	-	Yes	-	Yes	-	-
IEEE Energy-Efficient-Ethernet	-	-	-	-	Yes	Yes	-	-	-
Others									
MTBF (hrs)	222625.47	220339.54	269316.74	176244.06	N/A	N/A	248240	257506	307007.44
Heat dissipation (BTU/hr)	204.6	197.78	2046	153.45	N/A	N/A	105.71	913.88	333.50
Physical Specifications									
Dimensions (WxDxH)(mm/in.)	438 x 270 x 44.5/ 17.24 x 10.63 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.)	3.6/7.94	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 300 Series		Switch 1510 Series		Switch 1500 Series
	ES-2024PWR	ES-2108	ES-2108-G	ES-2108PWR	ES-315	ES-315-F	GS1510-16	GS1510-24	GS-1548
Switch Class	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Web-managed	Web-managed	Web-managed
Hardware									
100 Mbit RJ45 ports	-	8	8	-	5	4	-	-	-
100 Mbit RJ45 PoE ports	24	-	-	8	-	-	-	-	-
100 Mbit SFP slots	-	-	-	-	-	1	-	-	-
1 Gigabit RJ45 ports	-	-	-	-	-	-	16	24	44
1 Gigabit RJ45 PoE ports	-	-	-	-	-	-	-	-	-
1 Gigabit SFP slots	-	-	-	-	-	-	-	2	-
Dual personality Gigabit ports (RJ45/SFP)	2	-	1	1	-	-	-	-	4
12 Gigabit CX4 ports	-	-	-	-	-	-	-	-	-
10 Gigabit module	-	-	-	-	-	-	-	-	-
Backplane bandwidth (Gbps)	8.8	1.6	3.6	3.6	1	1	32	52	96
Forwarding rate (Mpps)	6.6	1.2	2.7	2.7	0.74	0.74	23.8	38.7	71.4
MAC addresses	8000	8000	8000	8000	1000	1000	16000	16000	8000
Management									
CLI, web, GUI	Yes	Yes	Yes	Yes	Yes	Yes	GUI	GUI	GUI
iStacking (single IP management)	Yes	Yes	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	-
Backup power support	-	-	-	-	-	-	-	-	-
Quality of Service									
Priority queues	4	4	4	4	4	4	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/-
ACL data prioritization (L2/L3/L4)	-	-	-	-	-	-	-	-	-
IGMP snooping (v1/v2/v3)	Yes	Yes	Yes	Yes	v1/v2/-	v1/v2/-	Yes	Yes	-
MVR	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-
Jumbo frame forwarding	-	-	-	-	-	-	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	-	-	-	-	-
802.1X authentication	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes
TACACS+	Yes	Yes	Yes	Yes	-	-	-	-	-
ACL security filter L2/L3/L4	-	-	-	-	-	-	-	-	-
RADIUS MAC login	Yes	Yes	Yes	Yes	-	-	Yes	Yes	-
VLAN stacking (Q-in-Q)	-	-	-	-	-	-	-	-	-
Green Features									
Fanless	-	Yes	Yes	-	Yes	Yes	Yes	Yes	-
IEEE Energy-Efficient-Ethernet	-	-	-	-	-	-	Yes	Yes	-
Others									
MTBF (hrs)	221655	112901	109634	109497	N/A	N/A	1182081	1007139	50422
Heat dissipation (BTU/hr)	682	34.1	34.1	682	N/A	N/A	61.38	68.2	264.62
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	181 x 127 x 33/ 7.06 x 5 x 1.29	194 x 130 x 26/ 7.57 x 5.07 x 1.01	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
Weight (kg/lb.)	4/8.82	1.2/2.65	1.2/2.65	2.4/5.29	0.227/0.5	0.325/0.72	2.3/5.07	2.4/5.29	4.1/9.06

Model	Switch 1500 Series — PoE	Switch 1100 Series							
	GS1500-24P	GS1100-16	GS1100-24	ES1100-8P	ES1100-16P	ES1100-16	ES1100-24	ES1100-24E	ES1100-24G
Switch Class	Web-managed	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged
Hardware									
100 Mbit RJ45 ports	-	-	-	4	8	16	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	24	-	-	-	-	-	-	-	-
1 Gigabit SFP slots	-	-	2	-	-	-	-	-	-
Dual personality Gigabit ports (RJ45/SFP)	4	-	-	-	-	-	-	-	2
12 Gigabit CX4 ports	-	-	-	-	-	-	-	-	-
10 Gigabit module	-	-	-	-	-	-	-	-	-
Backplane bandwidth (Gbps)	56	32	52	1.6	3.2	3.2	4.8	4.8	8.8
Forwarding rate (Mpps)	41.67	23.8	38.7	1.2	2.4	2.4	3.6	3.6	6.6
MAC addresses	16000	8000	8000	1000	8000	8000	8000	8000	8000
Management									
CLI, web, 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	-	-	-	-	-	-	-	-
Backup power support	-	-	-	-	-	-	-	-	-
Quality of Service									
Priority queues	8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data prioritization (SPQ/WRR/WFQ)	Yes/Yes/Yes	-	-	-	-	-	-	-	-
ACL data prioritization (L2/L3/L4)	-	-	-	-	-	-	-	-	-
IGMP snooping (v1/v2/v3)	-	-	-	-	-	-	-	-	-
MVR	-	-	-	-	-	-	-	-	-
Jumbo frame forwarding	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	-	-	-	-	-	-	-	-	-
802.1X authentication	Yes	-	-	-	-	-	-	-	-
TACACS+	-	-	-	-	-	-	-	-	-
ACL security filter L2/L3/L4	-	-	-	-	-	-	-	-	-
RADIUS MAC login	-	-	-	-	-	-	-	-	-
VLAN stacking (Q-in-Q)	-	-	-	-	-	-	-	-	-
Green Features									
Fanless	-	Yes	Yes	Yes	-	Yes	Yes	Yes	-
IEEE Energy-Efficient-Ethernet	-	Yes	Yes	-	-	Yes	Yes	Yes	-
Others									
MTBF (hrs)	73618	200000	200000	200000	100000	200000	200000	200000	200000
Heat dissipation (BTU/hr)	729.06	30.69	60.36	255.41	551.06	8.18	13.3	13.3	50.13
Physical Specifications									
Dimensions (WxDxH)(mm/in.)	441 x 311 x 45/ 17.36 x 12.24 x 1.77	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
Weight (kg/lb.)	4.7/10.39	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






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


FAN Module

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

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

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



SFP Transceiver

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
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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



For more product information, visit us on the web at www.ZyXEL.com

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