ZYXEL





XGS2210/GS2210 Series

8/24/28/48/52-port GbE L2 Switch

The Zyxel XGS2210/GS2210 Series are fully featured Layer 2 Gigabit access switches designed to meet converged data, video and voice networking needs. The Series comes in 8-, 24-, 28-, 48- and 52-port models with a combination of PoE and non-PoE, as well as Gigabit (GS2210 Series) and 10 Gigabit (XGS2210 Series) uplink options. The PoE models comply with the IEEE 802.3af PoE and 802.3at PoE Plus standards and provide a high PoE power budget. In addition, the XGS/GS2210 Series features the built-in smart fan which has been designed to automatically adjust speeds based on the device temperature for silent and reliable switch operation.

Benefits

Agile traffic control for converged networking applications

The Zyxel XGS2210/GS2210 Series has a rich Layer 2 feature set that can shape the traffic for diverse VoIP, video conference, IPTV and IP surveillance deployments. Advanced traffic control features of the GS2210/GS2210 Series such as L2 multicast, IGMP snooping, Multicast VLAN Registration (MVR) provide hotels, businesses and educational institutions greater agility and more effective traffic management for the converged applications of today.



High power budget of 375 W (24HP/28HP/48HP/52HP) and 180 W (8HP)



L2 multicast, IGMP snooping, MVR and voice VLAN for convergence



Enhanced network protection with IP source guard, DHCP snooping, ARP inspection, CPU protection



L2, L3 and L4 filtering, MAC freeze, port isolation, guest VLAN for improved isolation and access control



Physical stacking up to 2 units and 96 Gigabit ports through 2 standard 10G SFP+ ports (XGS2210 Series only)



Zyxel One Network experience

Aiming for relieving our customers from repetitive operations of deploying and managing a network, Zyxel One Network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. Zyxel One Network presents an easy-to-use tool, Zyxel One Network Utility (ZON Utility), to realize speed network setup. Zyxel Smart Connect allows Zyxel networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. Zyxel One Network redefines the network integration across multiple networking products from switch to Wi-Fi AP and to Gateway.

High-powered Power over Ethernet (PoE)

The XGS2210/GS2210 Series PoE switches support the 802.3at PoE Plus standard which provides up to 30 watts of power per port for advanced Powered Devices (PD) like 802.11ac wireless APs and video IP phones. The high power budget enables the XGS2210/GS2210 PoE switches to comfortably accommodate the PDs required in a modern network edge. Especially in consumption mode, the XGS2210/GS2210 PoE switches deliver only the actual power required by the networked devices, reserve the rest and maximize its power budget. This capability increases the number of devices connected and ensures a better ROI for the business.

High level network and access security

Equipped with an extensive array of security features such as IP source guard, DHCP snooping, ARP inspection and CPU protection, the Zyxel XGS2210/GS2210 Series offers enhanced control and isolation for improved convergence of video, voice and data. Combining multiple L2, L3 and L4 filtering mechanisms with such education- and hospitality-friendly features as MAC freeze, port isolation and guest VLAN, the Zyxel XGS2210/GS2210 Series offers a high level of security, flexibility and control for diverse access layer deployments.

Future-proof connectivity and scalability

Full IPv6 support with features including autoconfiguration, duplicate address prevention, dual-stack (IPv4 and IPv6) and neighbor discovery, the Zyxel XGS2210/GS2210 Series helps businesses and organizations stay ahead and get ready for future IPv6 networks. Also, the physical stacking feature of the XGS2210 Series facilitates management for multiple switches with one single interface.

Model List

XGS2210-52

48-port GbE L2 Switch with 10GbE Uplink



- 48 x GbE RJ-45 ports
- 4 x 10 GbE SFP+ slots
- Stackable

XGS2210-28

24-port GbE L2 Switch with 10GbE Uplink



- 24 x GbE RJ-45 ports
- 4 x 10 GbE SFP+ slots
- Stackable

GS2210-48

48-port GbE L2 Switch



- 44 x GbE RJ-45 ports
- 2 x GbE SFP slots
- 4 x GbE combo (RJ-45/SFP) ports
- Standalone

GS2210-24

24-port GbE L2 Switch



- 24 x GbE RJ-45 ports
- 4 x GbE combo (RJ-45/SFP) ports
- Standalone

GS2210-24LP

24-port GbE L2 Lite-PoE Switch



- 24 x GbE PoE RJ-45 ports
- 4 x GbE combo (RJ-45/SFP) ports
- PoE power budget: 180W
- Standalone

GS2210-8

8-port GbE L2 Switch



- 8 x GbE RJ-45 ports
- 2 x GbE combo (RJ-45/SFP) ports
- Standalone

XGS2210-52HP

48-port GbE L2 PoE Switch with 10GbE Uplink



- 48 x GbE PoE RJ-45 ports
- 4 x 10 GbE SFP+ slots
- PoE power budget: 375W
- Stackable

XGS2210-28HP

24-port GbE L2 PoE Switch with 10GbE Uplink



- 24 x GbE PoE RJ-45 ports
- 4 x 10 GbE SFP+ slots
- PoE power budget: 375W
- Stackable

GS2210-48HP

48-port GbE L2 PoE Switch



- 48 x GbE PoE RJ-45 ports
- 2 x GbE SFP slots
- 4 x GbE combo (RJ-45/SFP) ports
- PoE power budget: 375W
- Standalone

GS2210-24HP

24-port GbE L2 PoE Switch



- 24 x GbE PoE RJ-45 ports
- 4 x GbE combo (RJ-45/SFP) ports
- PoE power budget: 375W
- Standalone

GS2210-8HP

8-port GbE L2 PoE Switch

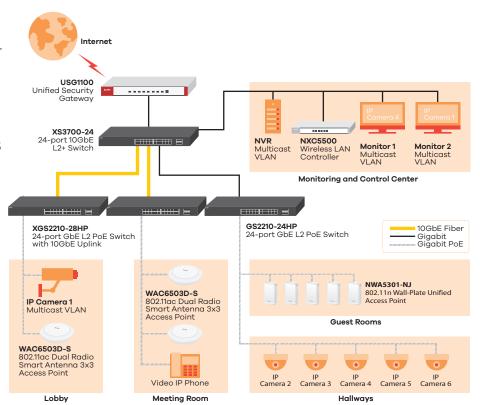


- 8 x GbE PoE RJ-45 ports
- 2 x GbE combo (RJ-45/SFP) ports
- PoE power budget: 180W
- Standalone

Key Applications

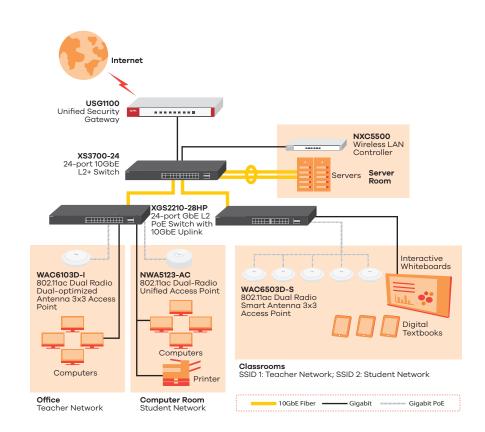
IPTV, surveillance and guest access (hospitality)

- Each guest room can be assigned a dedicated data VLAN to provide better isolation and security to the Internet users
- The MVR function allows a single IPTV multicast VLAN to be shared with all the set-top boxes while the subscribers remain in separate data VLANs
- The total PoE power budget of up to 375 watts provides full supports to wireless APs and IP surveillance devices. (24HP/28HP/48HP/52HP)
- Enabling the IGMP snooping function allows IPTV traffic to be directed to the subscribers only, which reduces the waste of bandwidth caused by multicasting IPTV traffic to all ports
- The rich QoS feature set provides effective bandwidth prioritization and control to ensure various services quality and prevent bandwidth abuse



Robust network infrastructure (education)

- The high power budget makes the XGS2210/GS2210 Series perfect for classroom WLAN deployments with many APs for student digital textbooks
- The XGS2210/GS2210 Series switch can separate the teacher's network from the student's network and grant different bandwidth privileges with port-based and ACL-based bandwidth management
- Support for 8 hardware queues per port and QoS based on 802.1p and DSCP reduces traffic congestions for latency-sensitive interactive learning applications
- Advanced defense mechanisms like IP source guard, DHCP snooping and ARP inspection safeguards the network from intentional attacks



Specifications

Model		XGS2210-52	XGS2210-52HP	XGS2210-28	XGS2210-28HP
Product name		48-port GbE L2 Switch with 10GbE Uplink	48-port GbE L2 PoE Switch with 10GbE Uplink	24-port GbE L2 Switch with 10GbE Uplink	24-port GbE L2 PoE Switch with 10GbE Uplink
		**************************************	(((((((((((((((((((((((((((((((((((((····
Switch clas	ss	Layer 2	Layer 2	Layer 2	Layer 2
Port Densit	:y				
Total port	count	52	52	28	28
100/1000	Mbps	48	-	24	-
100/1000	Mbps PoE		48	_	24
10 Gigab		4	4	4	4
Gigabit 9				_	-
	combo (SFP/RJ-45)	_			_
Stacking		Yes	Yes	Yes	Yes
Performan		103	103	103	103
	capacity (Gbps)	176	176	128	128
		130.9		95.2	95.2
	rate (Mpps)		130.9		
Packet buff	-	1.5 M	1.5 M	1.5 M	1.5 M
MAC addre		16 K	16 K	16 K	16 K
L3 forwardi	ing table	Max. 1 K IPv4 entries;	Max. 1K IPv4 entries;	Max. 1 K IPv4 entries;	•
01 - 11 1		Max. 512 IPv6 entries			
Static rout		64	64	64	64
IP interface		32	32	32	32
Power					
Input		100 - 240 V AC, 50/60 Hz			
Max. power consumption (watt)		45	495	20	453
Total PoE p	ower budget (watt)	-	375	-	375
Physical Sp	ecifications				
Item	Dimensions	441 x 270 x 45/ 17.36 x	440 x 330 x 44.5/	441 x 270 x 45/17.36 x	440 x 330 x 44.5/
	(WxDxH)(mm/in.)	10.63 x 1.77	17.32 x 12.99 x 1.75	10.63 x 1.77	17.32 x 12.99 x 1.75
	Weight (kg/lb.)	3.86/8.51	5.38/11.86	3.7/8.16	5.06/11.16
Packing	Dimensions	622 x 358 x 108/	586 x 452 x 97/	622 x 358 x 108/	586 x 452 x 97/ 23.07
	(WxDxH)(mm/in.)	24.49 x 14.09 x 4.25	23.07 x 17.8 x 3.82	24.49 x 14.09 x 4.25	x 17.8 x 3.82
	Weight (kg/lb.)	4.92/10.85	6.75/14.9	4.8/10.58	6.4/14.1
Included ac	ccessories	Power cordRack mounting kit			
Green Feat	ure				
Fanless		-	-	Yes	-
Environme	ntal Specifications				
Operating	Temperature	0°C to 50°C/ 32°F to 122°F			
	Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)
Storage	Temperature	-40°C to 70°C/ -40°F to 158°F			
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
		970,594	500,904	831,699	560,726
MTRF (hr)			000,00	001,000	0001120
MTBF (hr)	ation (RTII/hr)		· · · · · · · · · · · · · · · · · · ·	68.2	14834
	ation (BTU/hr)	153.3 51.6	1,688 57.6	68.2 0	1,483.4 57

Model		GS2210-48	GS2210-48HP	GS2210-24	GS2210-24HP	GS2210-24LP
Product name		48-port GbE L2	48-port GbE L2	24-port GbE L2	24-port GbE L2	24-port GbE L2
		Switch	PoE Switch	Switch	PoE Switch	Lite-PoE Switch
			***************************************			***************************************
Switch clas	s	Layer 2				
Port Densit	У					
Total port o	ount	50	50	28	28	28
100/1000	Mbps	44	-	24	-	-
100/1000	Mbps PoE	_	48	-	24	24
Gigabit S	SFP .	2	2	_	-	-
Gigabit o (SFP/RJ-		4	4	4	4	4
Performan	ce					
Switching o	capacity (Gbps)	100	100	56	56	56
Forwarding	rate (Mpps)	74	74	41.67	41.67	41.67
Packet buf	fer (byte)	1.5 M				
MAC addre	ss table	16 K				
Power						
Input		100 - 240 V AC, 50/60 Hz				
Max. power	consumption (watt)	40	461	27.2	476.7	253.4
Total PoE p	ower budget (watt)	-	375	-	375	180
Physical Sp	ecifications					
Item	Dimensions (WxDxH)(mm/in.)	440 x 200 x 44.5/ 17.32 x 7.87 x 1.75	440 x 330 x 44.5/ 17.32 x 12.99	441 x 131 x 44.5/ 17.36 x 5.16 x 1.75	440 x 330 x 44.5/ 17.32 x 12.99 x	440 x 330 x 44.5 / 17.32 x 12.99 x
			x 1.75		1.75	1.75
	Weight(kg/lb.)	3.04/6.7	5.13/11.3	2.62/5.78	4.79/10.56	4.40/9.7
Packing	Dimensions (WxDxH)(mm/in.)	512 x 293 x 92/ 20.15 x 11.53 x 3.62	586 x 452 x 97/ 23.06 x 17.79 x 3.82	561 x 220 x 82/ 22.08 x 8.66 x 3.23	583 x 451 x 98/ 22.95 x 17.75 x 3.86	583 x 451 x 98/ 22.95 x 17.75 x 3.86
	Weight (kg/lb.)	4.10/9.06	6.25/13.81	3.41/7.54	5.90/13.03	5.58/12.3
Included ac	cessories	Power cordRack mounting kit				
Green Feat	ure					
Fanless		_	-	Yes	-	-
	ntal Specifications					
	Temperature	0°C to 50°C/ 32°F to 122°F				
	Humidity	10% to 95% (non-condensing)				
Storage	Temperature	-40°C to 70°C/ -40°F to 158°F				
	Humidity	10% to 90% (non-	10% to 90% (non-	10% to 90% (non-	10% to 90% (non-cond	10% to 90% (non-
MTBF (hr)		condensing) 631,451	condensing) 337,690	condensing)	ensing) 949,326	condensing) 616,247.3
Heat dissip	ation	136.8	1,572.01	92.75	1,625.55	864.094
(BTU/hr) Acoustic no	nise (dBA)	40.9	43.6	0	59.6	54
Acoustic no	JISE (UDA)	40.3	40.0	U	03.0	U -1

Model		GS2210-8	GS2210-8HP
Product name		8-port GbE L2 Switch	8-port GbE L2 PoE Switch
		 	
Switch clas	SS	Layer 2	Layer 2
Port Densit	:y		
Total port o	count	10	10
100/1000) Mbps	8	-
100/1000	Mbps PoE	_	8
Gigabit 9	SFP	-	-
Gigabit o (SFP/RJ-		2	2
Performan	ce		
Switching o	capacity (Gbps)	20	20
Forwarding	rate (Mpps)	15	15
Packet buf	fer (byte)	1.5 M	1.5 M
MAC addre	ess table	16 K	16 K
Power			
Input		100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz
Max. powei	r consumption (watt)	12.3	230
Total PoE power budget (watt)		-	180
Physical Sp	pecifications		
ltem	Dimensions (WxDxH)(mm/in.)	250 x 150 x 44/9.84 x 5.91 x 1.73	330 x 230.5 x 44.5/12.99 x 9.07 x 1.75
	Weight(kg/lb.)	1.425/3.14	2.703/5.96
Packing	Dimensions (WxDxH)(mm/in.)	366 x 214 x 79/14.41 x 8.43 x 3.11	389 x 337 x 79/15.31 x 13.27 x 3.11
	Weight (kg/lb.)	2.27/5	3.65/8.05
Included ac	ccessories	Power cordWall mount kitRack mounting kit	Power cordRack mounting kit
Green Feat	ure		
Fanless		Yes	-
Environme	ntal Specifications		
Operating	Temperature	0°C to 50°C/32°F to 122°F	0°C to 50°C/32°F to 122°F
	Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)
Storage	Temperature	-40°C to 70°C/-40°F to 158°F	-40°C to 70°C/-40°F to 158°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)		1,382,030	1,155,719
Heat dissip (BTU/hr)	ation	41.94	784.30
	oise (dBA)	0	37.7

Features

Standard Compliance

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Ethernet
- IEEE 802.3ab 1000BASE-T Ethernet
- IEEE 802.3z 1000BASE-X
- IEEE 802.3af PoE
- IEEE 802.3at PoE plus
- IEEE 802.3az EEE
- IEEE 802.3x flow control
- IEEE 802.3ad LACP aggregation
- IEEE 802.1AB LLDP/LLDP-MED
- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- IEEE 802.1Q VLAN tagging
- IEEE 802.1p Class of Service (CoS) prioritization
- IEEE 802.1X port authentication

Resilience and Availability

- IEEE 802.1D Spanning Tree Protocol (STP)
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- IEEE 802.3ad LACP
- Loop guard
- Root guard
- BPDU guard
- ErrDisable recovery
- MRSTP (Zyxel Proprietary)
- Dual configuration files
- Dual images
- Physical stacking (XGS2210 series only)

Traffic Control

- 802.1Q static VLANs/dynamic VLANs: 1 K/4 K
- Port-based VLAN
- Protocol-based VLAN
- IP subnet-based VLAN
- MAC-based VLAN
- Private VLAN
- Voice VLAN
- VLAN ingress filtering
- LACP algorithm of source/ destination IP or MAC
- GVRP
- L2PT
- New for V4.50 VLAN mapping (XGS2210 series only)

Security

- Port security
- Layer 2 MAC filtering
- Layer 3 IP filtering
- Layer 4 TCP/UDP socket filtering
- Static MAC forwarding
- Multiple RADIUS servers
- Multiple TACACS+ servers
- 802.1x VLAN and 802.1p assignment by RADIUS
- Login authentication by RADIUS
- Login authentication by TACACS+
- TACACS+ accounting
- RADIUS accounting
- Authorization on RADIUS
- Authorization on TACACS+
- SSH v2
- SSL
- Intrusion lock
- MAC freeze
- DHCP snooping
- ARP inspection
- Static IP-MAC-Port binding
- Policy-based security filtering
- Port isolation
- IP source guard (IPv4/IPv6)
- MAC search
- Guest VLAN
- ACL packet filtering (IPv4/IPv6)
- CPU protection
- Interface related trap enable/ disable (by port)
- MAC-based authentication per VLAN

Quality of Service (QoS)

- No. of hardware queues per port:
- Storm control and event log:
 Broadcast, multicast, unknown unicast (DLF)
- Port-based rate limiting (ingress/ egress)
- Rate limiting per IP/TCP/UDP per port
- Policy-based rate limiting
- 802.3x flow control
- 802.1p Class of Service (SPQ, WFQ, WRR, hybrid-SPQ combination capable)
- DiffServ (DSCP)

Layer 2 Multicast

- L2 multicast
- IGMP snooping (v1, v2, v3)
- IGMP snooping fast leave
- Configurable IGMP snooping timer and priority
- IGMP snooping statistics
- IGMP throttling
- MVR support
- IGMP filtering
- IGMP snooping immediate leave
- IGMP proxy mode & snooping mode selection
- MLD snooping
- New for V4.50 IGMP leave proxy (GS2210 series only)

Routing (XGS2210 Series only)

- Static route
- IP port moving
- New for V4.50 Assigned DHCP relay with specific source IP interface

Manageability

- SNMP v1, v2c, v3
- SNMP trap group
- RMON (1, 2, 3, 9)
- ICMP echo/echo reply
- Syslog
- IEEE 802.1AB LLDP
- IEEE 802.1AB LLDP-MED
- New for V4.50 Custom default
- New for V4.50 Syslog (IPv4/IPv6)
- New for V4.50 Display port utilization

IPv6 Management

- IPv6 over Ethernet (RFC 2464)
- IPv6 addressing architecture (RFC
- Dual stack (RFC 4213)
- ICMPv6 (RFC 4443)
- Path MTU (RFC 1981)
- Minimum path MTU size of 1280 (RFC 5095)
- Encapsulation for maximum PMTU of 1500
- Neighbor discovery (RFC 4861)
- DHCPv6 relay
- Default DHCP client mode

Device Management

- Zyxel iStacking™
- Web interface
- Management through Console, Telnet, SNMP
- Remote firmware upgrade by FTP/ Web/TFTP
- Configuration saving and retrieving
- Multiple logins supported
- Configure clone
- Multilevel CLI
- CLI (Cisco-like)
- DHCP relay per VLAN
- DHCP client
- DHCP option 82
- New for V4.50 DHCP Auto (GS2210 series only)
- Daylight saving
- New for V4.50 NTP supports IPv4/ IPv6
- Port mirroring
- RS-232 out-of-band console port
- Scheduled PoE
- **New for V4.50** PoE default consumption mode
- sFlow (XGS2210 series only)

MIB

- Zyxel new private MIB
- RFC 1066 TCP/IP-based MIB

- RFC 1213, 1157 SNMPv2c/v3 MIB
- RFC 1493 bridge MIB
- RFC 1643 Ethernet MIB
- RFC 1757 RMON group 1, 2, 3, 9
- RFC 2011, 2012, 2013 SNMPv2 MIB
- RFC 2233 SMIv2 MIB
- RFC 2358 Ethernet-like MIB
- RFC 2674 bridge MIB extension
- RFC 2819, 2925 remote management MIB
- RFC 3621 power Ethernet MIB
- RFC 4022 management information base for transmission control protocol
- RFC 4113 management information base for user datagram protocol
- RFC 4292 IP forwarding table MIB
- RFC 4293 Management Information Base (MIB) for IP
- New for V4.50 Cable diagnostic MIB

Certifications

Safety

- LVD
- BSMI

EMC

- FCC Part 15 (Class A)
- CE EMC (Class A)
- BSMI EMC

RoHS

• Level A

Zyxel One Network

ZON Utility

- Discovery of Zyxel switches, APs and gateways
- Centralized and batch configurations
- IP configuration
- IP renew
- Device factory reset
- Device reboot
- Device locating
- Web GUI access
- Password configuration
- One-click quick association with Zyxel AP Configurator (ZAC)

Smart Connect

- Discover neighboring devices
- One-click remote management access to the neighboring Zyxel devices
- Reset neighboring devices remotely to factory defaults
- Power cycle neighboring powered devices (PoE switches only)

Warranty

• Limited life-time warranty

*Warranty terms, service availability, and service response times may vary from country or region to country or region.

Accessories

Transceivers (Optional)

Model	Speed	Connector	Wavelength	Max. Distance	DDMI
SFP10G-SR*	10-Gigabit SFP+	Duplex LC	850 nm	300 m (984 ft)	Yes
SFP10G-LR*	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP-1000T	Gigabit	RJ-45	-	100 m (109 yd)	-
SFP-BX1310-10-D	Gigabit	LC	1310 nm (Tx); 1490 nm (Rx)	10 km (10936 yd)	Yes
SFP-BX1490-10-D	Gigabit	LC	1490 nm (Tx); 1310 nm (Rx)	10 km (10936 yd)	Yes
SFP-LHX1310-40-D	Gigabit	LC	1310 nm	40 km (43744 yd)	Yes
SFP-LX-10-D	Gigabit	LC	1310 nm	10 km (10936 yd)	Yes
SFP-SX-D	Gigabit	LC	850 nm	550 m (601 yd)	Yes
SFP-ZX-80-D	Gigabit	LC	1550 nm	80 km (87488 yd)	Yes
SFP-100BX1310- 20-D**	Fast Ethernet	LC	1310 nm (Tx); 1550 nm (Rx)	20 km (21872 yd)	Yes
SFP-100BX1550- 20-D**	Fast Ethernet	LC	1550 nm (Tx); 1310 nm (Rx)	20 km (21872 yd)	Yes
SFP-100FX-2**	Fast Ethernet	LC	1310 nm	2 km (2187 yd)	-
SFP-100LX-20**	Fast Ethernet	LC	1310 nm	20 km (21872 yd)	-
SFP-100TX**	Fast Ethernet	RJ-45	-	100 m (109 yd)	-

^{*} Refers to XGS models

Direct Attach Cables (Optional)

Model	Connector	Cable Length
DAC10G-1M	SFP+ to SFP+	1 m (39.37 inch)
DAC10G-3M	SFP+ to SFP+	3 m (118.11 inch)

^{**} Refers to GS models

Note









