ZYXEL
NETWORKS

XS1930 Series

10/12-port 10G Multi-Gigabit Lite-L3 Smart Managed Switch

Business needs to reserve room for greater bandwidth demands, including growing number of Multi-Gigabit devices such as servers, APs and other devices supporting beyond the standard gigabit, as well as increasing wireless and IoT traffic.

Introducing Zyxel's new family of Multi-Gigabit smart managed switch series that is purpose-built for today's network while providing future-proof technology for agile network expansion. The XS1930 series consists of 3 models: XS1930-10 with 8 Multi-Gigabit ports and XS1930-12HP with 10 Multi-Gigabit PoE ports providing up to 60 W per port, both equipped with additional 2 SFP+ uplink ports; the fiber model XS1930-12F containing 10 SFP+ ports and 2 Multi-Gigabit ports provides high-bandwidth aggregation connectivity to multiple switches across network. Each of the Multi-Gigabit ports support speed 100M/1G/2.5G/5G/10G that are suitable for every network device.

Support Multi-Gigabit for 100M/1G/2.5G/5G/10G connections with its unique and intuitive 5-color LED port speed indication

PoE model supports 802.3bt PoE++ offering a maximum of 60 W per port and with a maximum power budget of 375 W

Smart fan design delivers near silent Multi-Gigabit operation

NebulaFlex gives you the flexibility to switch between standalone and our license-free Nebula cloud management

Rich L2 feature set with L3 static route makes it an affordable choice for aggregation switch

nebula

Zyxel**one**network
Redefining network integration

Benefits

5-color LED makes network upgrade visible

Upgrading to 10 Gigabit Ethernet often require costly wiring upgrades, but thanks to the latest IEEE 802.3bz standard, it can provide Multi-Gigabit technology on existing wiring infrastructure designed for standard Gigabit, protecting your investments while offering up to 10 times more bandwidth capacity without the expensive and disruptive cable upgrades.

Each copper port of the new Multi-Gigabit switch is able to automatically detect which speed is needed with the connected device. It may not always operate at the maximum port speed due to quality or length of the cable used by the network. It's common for Multi-Gigabit switches to operate at different link speed for each individual ports. The XS1930 Series is designed with unique 5-color LED, providing an intuitive indication of connection speed for each individual ports.

For example, when a WiFi 6 (11ax) access point connects to a XS1930-12HP switch, the LED of the connected port will instantly and clearly light up with a color that represents the best achievable performance beyond Gigabit.

Superior PoE paves the way for high performance WiFi 6 APs

The demand for increased bandwidth of wireless networks such as the skyrocketing use of modern smartphones, tablets, and IoT devices never ends. The 802.11ac standard has pushed wireless capacity beyond the traditional 1 Gbps limit, the rapid adoption of high-performance wireless infrastructure are now moving towards the latest WiFi 6 (11ax) standard.

The XS1930-12HP supports new high power IEEE 802.3bt (PoE++) offering up to 60 W per port. The PoE++ backwards compatibility with existing PoE/PoE+ devices allow customers to continue to power existing APs and accessories at the same time, offering enough power for 11AX AP that requires more than the traditional 30 W per port. XS1930-12HP provides a large power budget of up to 375 W which gives enough headroom for connections up to 8 WiFi 6 (11ax) APs. The user-friendly PoE consumption indicator located on the front panel and Web GUI provides real-time power utilization.

Trustworthy aggregation switch for agile network expansion

When your business adopts the XGS1930 access switch series (Gigabit switch with 10G uplinks), it carries up to four 10G fiber ports for uplinks and server connections. These 10G fiber ports can also be used in time of network expansion when connecting to a 10G fiber aggregation switch. Incorporated with its advanced features, XS1930-12F with up to ten SFP+ fiber ports provide high-bandwidth backbone connectivity for multiple access switches to flexibly address versatile network infrastructure demands.

Near silent Multi-Gigabit operation

The XS1930 Series brings more speed silently to your network with Zyxel's advanced smart fan design, it is able to automatically adjust speeds based on the device temperature to minimize system acoustic noise, offering near silent network environment while your upgrade your home or office networks to 10G high speed connection.

NebulaFlex — simply manage it your way!

The XS1930 Series supports NebulaFlex technology which provides extended flexibility, especially for those who hesitate to step up for cloud networking. You can easily switch network management modes between standalone, and our license-free Nebula cloud management platform. The NebulaFlex even allows you to change your mind at any time without additional cost while protecting previous investments on wired technology.

Smart managed switch design inside and out

Under the stylish carbon-like cover comes a new hardware and software that widens user experience and control with intuitive features like the One-touch 'Restore' button on the front panel. SMB features such as VLAN, enhanced QoS, Link Aggregation, IPv6 and DoS prevention along with IPv4/IPv6 Layer 3 static routing all can be configured through its user-friendly web interface without learning any complex command line interface (CLI).

Model List

XS1930-10
8-port 10G Multi-Gig Lite-L3 Smart Managed Switch with 2 SFP+

- 8 x Multi-Gigabit (100M/1G/2.5G/5G/10G) RJ-45 ports
- 2 x 10 GbE SFP+ slots

XS1930-12HP
8-port 10G Multi-Gig PoE Lite-L3 Smart Managed Switch with 2 10G Multi-Gig Ports & 2 SFP+

- 8 x Multi-Gigabit (100M/1G/2.5G/5G/10G) PoE RJ-45 ports
- 2 x Multi-Gigabit (100M/1G/2.5G/5G/10G) RJ-45 ports
- 2 x 10 GbE SFP+ slots
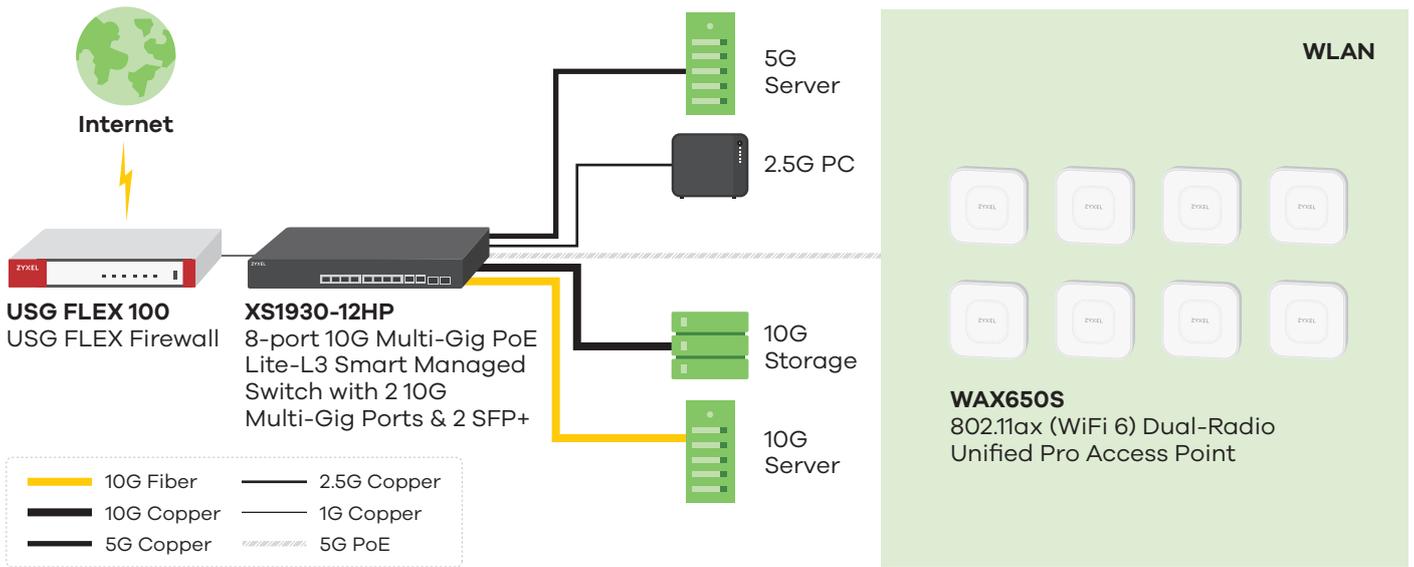- PoE power budget: 375 W

XS1930-12F
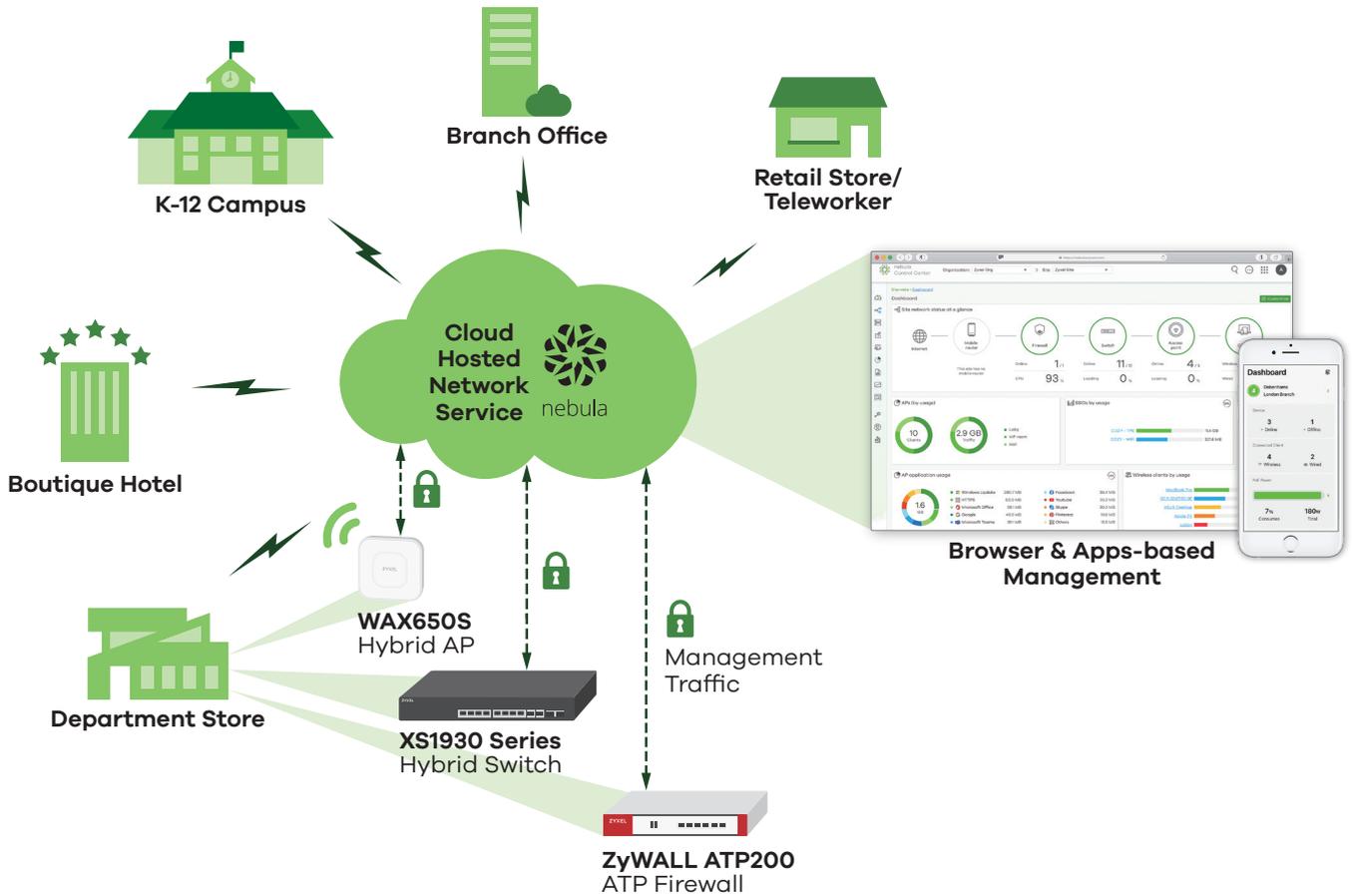10-port 10G Lite-L3 Smart Managed Fiber Switch with 2 10G Multi-Gig Ports

- 10 x 10 GbE SFP+ slots
- 2 x Multi-Gigabit (100M/1G/2.5G/5G/10G) RJ-45 ports

Application Diagram

Standalone Management

Internet

USG FLEX 100
USG FLEX Firewall

XS1930-12HP
8-port 10G Multi-Gig PoE
Lite-L3 Smart Managed
Switch with 2 10G
Multi-Gig Ports & 2 SFP+

5G
Server

2.5G PC

10G
Storage

10G
Server

WLAN

WAX650S
802.11ax (WiFi 6) Dual-Radio
Unified Pro Access Point

▬▬▬ 10G Fiber	▬▬▬ 2.5G Copper
▬▬▬ 10G Copper	─── 1G Copper
▬▬ 5G Copper	▬▬▬ 5G PoE

Cloud Management

K-12 Campus

Branch Office

**Retail Store/
Teleworker**

Boutique Hotel

**Cloud
Hosted
Network
Service** nebula

**Browser & Apps-based
Management**

Department Store

WAX650S
Hybrid AP

XS1930 Series
Hybrid Switch

Management
Traffic

ZyWALL ATP200
ATP Firewall

Specifications

Model	XS1930-10	XS1930-12HP	XS1930-12F
Product name	8-port 10G Multi-Gig Lite-L3 Smart Managed Switch with 2 SFP+	8-port 10G Multi-Gig PoE Lite-L3 Smart Managed Switch with 2 10G Multi-Gig Ports & 2 SFP+	10-port 10G Lite-L3 Smart Managed Fiber Switch with 2 10G Multi-Gig Ports
Switch class	Smart Managed	Smart Managed	Smart Managed
Port Density			
Total port count	10	12	12
100M/1G/2.5G/5G/10G Ethernet (RJ-45)	8	10	2
10-Gigabit SFP+	2	2	10
PoE			
PoE ports	-	8	-
Total PoE budget (watts)	-	375	-
IEEE 802.3bt (PoE++)	-	Yes	-
Performance			
Switching capacity (Gbps)	200	240	240
Forwarding rate (Mpps)	148.8	178.5	178.5
Packet buffer (byte)	2 MB	2 MB	2 MB
MAC address table*	16 K	16 K	16 K
Jumbo frame (byte)	12 KB	12 KB	12 KB
L3 forwarding table*	512 IPv4 entries; Max. 512 IPv6 entries	512 IPv4 entries; Max. 512 IPv6 entries	512 IPv4 entries; Max. 512 IPv6 entries
Routing table*	32	32	32
VLAN routing	Yes	Yes	Yes
IP interface (IPv4/IPv6)	32/32	32/32	32/32
Flash/RAM	32 MB/256 MB	32 MB/256 MB	32 MB/256 MB
Power			
Input	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz
Max. power consumption (watts)	44.3	493	24.9
Min. power consumption (watts)	18.9	33.5	12.7
Physical Specifications			
Item — Dimensions (WxDxH)(mm/in.)	330 x 230 x 44/ 12.99 x 9.06 x 1.73	330 x 230 x 44/ 12.99 x 9.06 x 1.73	330 x 230 x 44/ 12.99 x 9.06 x 1.73
Item — Weight (kg/lb.)	2.4/5.29	2.8/6.17	2.2/4.85
Packing — Dimensions (WxDxH)(mm/in.)	484 x 337 x 79/ 19.06 x 13.27 x 3.11	484 x 337 x 79/ 19.06 x 13.27 x 3.11	484 x 337 x 79/ 19.06 x 13.27 x 3.11
Packing — Weight (kg/lb.)	3.5/7.72	4.0/8.82	3.63/8
Included accessories	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit
ESD/Surge Protections			
Ethernet port surge protection	1 KV	1 KV	2 KV
Power supply surge protection — Line-GND	4 KV	4 KV	2 KV
Power supply surge protection — Line-Line	2 KV	2 KV	1 KV
Ethernet port ESD protection (air/contact)	8 KV/15 KV	8 KV/15 KV	6 KV/15 KV
Environmental Specifications			
Operating — Temperature	-20°C to 50°C/-4°F to 122°F	-20°C to 50°C/-4°F to 122°F	-20°C to 50°C/-4°F to 122°F
Operating — Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% 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	-40°C to 70°C/-40°F to 158°F
Storage — Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
MTBF (hr)	778,690	582,873	1,254,657
Heat dissipation (BTU/hr)	151.06	1,681.13	84.91
Acoustic noise (min/max, dBA)	28/50	28/51	26/44

* Access Layer 3 license comes with larger table size to expand network capacity for broader access network deployment.

Features

Standard Compliance

- IEEE 802.3z 1000BASE-X*
- IEEE 802.3ab 1000BASE-T Ethernet*
- IEEE 802.3an 10G BASE-T Ethernet*
- IEEE 802.3ae 10 Gbit/s Ethernet over fiber*
- IEEE 802.3af PoE*
- IEEE 802.3at PoE plus*
- IEEE 802.3bt (60 W) PoE over 4 pair*
- IEEE 802.3x flow control
- IEEE 802.3ad LACP aggregation*
- IEEE 802.1D Spanning Tree Protocol (STP)*
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)*
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- IEEE 802.1p 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* (Max # Trunks/ Links per Trunk):
  - XS1930-10: 5/8
  - XS1930-12HP: 6/8
  - XS1930-12F: 6/8
- Loop guard*
- Dual configuration files
- Dual images*

Traffic Control

- 802.1Q Static VLANs*/Dynamic VLANs: 1K/4K
- Support up to 4K VLAN ID*
- Independent VLAN Learning (IVL)*
- L2PT
- Port-based VLAN*
- Voice VLAN*
- VLAN trunking
- GVRP

Security

- 802.1X*
- Port security*
- MAC authentication*
- Static MAC forwarding
- SSL
- Static ARP

- Policy-based security filtering
- Port isolation*
- MAC search
- Guest VLAN*
- PPPoE relay agent
- PPPoE option 82
- PPPoE IA
- Interface related trap enable/disable (by port)
- CPU protection
- SHA2 HTTPS certification*
- Login authentication by RADIUS*
- RADIUS accounting
- Authorization on RADIUS*
- Multiple RADIUS servers (IPv4*/IPv6)
- VLAN and bandwidth assignment via RADIUS with 802.1x authentication*
- ACL packet filtering* (IPv4)

Quality of Service (QoS)

- No. of hardware queues per port: 8*
- 802.1p queuing methods: SPQ, WRR, WFQ*
- Storm control: broadcast, unknown L2MC, unknown unicast (DLF)*
- Rate limiting per port
- Policy-based rate limiting
- Policy-based prioritization

Layer 2 Multicast

- L2 multicast group: 1K
- IGMP snooping (v1, v2, v3)*
- Configurable IGMP snooping timer and priority
- IGMP snooping statistics
- IGMP throttling
- IGMP filtering
- Static multicast

Routing

- Static route*
- DHCP Relay

Manageability

- SNMP* v1, v2c, v3
- SNMP trap group
- RMON (1, 2, 3, 9)
- Syslog (IPv4/v6)*
- IEEE 802.1AB LLDP*
- IEEE 802.1AB LLDP-MED*
- Custom default
- Display port utilization*
- Support NebulaFlex™ for hybrid mode

IPv6 Management

- IPv6 over Ethernet (RFC 2464)
- IPv6 addressing architecture (RFC 4291)
- Dual stack (RFC 4213)
- ICMPv6 (RFC 4884)
- Path MTU (RFC 1981)
- Minimum path MTU size of 1280 (RFC 5095)
- Encapsulation for maximum MTU of 1500
- Neighbor discovery (RFC 4861)
- DHCPv6 relay
- Default DHCP client mode*
- Duplicated Address Detection (DAD)

Device Management

- Standalone management by Web interface
- Cloud management by Nebula Control Center*
- Management through Telnet
- **New for V4.80** Auto configuration recovery (only for cloud mode)
- **New for V4.80** New Web interface
- Zyxel iStacking™
- Management through Web, SNMP
- Firmware upgrade by FTP/Web
- Configuration saving and retrieving
- Multiple login supported
- Configure clone
- DHCP relay per VLAN
- DHCP client IPv4*
- DHCP client IPv6
- DHCP option 82
- Daylight saving*
- NTP Server (IPv4/IPv6) – Support DNS format
- Port mirroring*
- Scheduled PoE*
- PoE default consumption mode*
- PoE power management extended configuration*
- Web login warning page
- Restore to last custom default

MIB

- Zyxel private common 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

Certifications
- Safety
  - LVD
  - BSMI Safety
- EMC
  - FCC Part 15 (Class A)
  - CE (Class A)
  - BSMI EMC
- RoHS

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)

- Automatic detection of the latest firmware
- Displays device serial number and hardware version
- Cloud mode on/off option for Hybrid series devices
- **New for V4.80** Intuitive Cloud connection status

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)

Access L3 License**
(New for V4.80)
- Multilevel CLI
- CLI (Cisco-like)
- Expanding Network Capacity
  - IEEE 802.1Q Static VLAN
  - IPv4 Address table
  - MAC table
  - IPv4/IPv6 Static route
  - ACL
- Networked AV Mode
- Protocol-Based VLAN
- IP subnet-based VLAN
- MAC-based VLAN
- VLAN isolation
- IEEE 802.1AD VLAN stacking (QinQ)
- VLAN mapping
- MRSTP (Zyxel Proprietary)
- BPDU transparency
- Flex link

- IEEE 802.3ah OAM (Link Discovery, Loopback)
- BPDU Guard
- Root Guard
- IP source guard (IPv4/IPv6)
- DHCPv6 Snooping
- IPv6 DHCP trust
- ARP Inspection
- ARP Freeze
- Anti-ARP Scan
- MAC Freeze
- DHCP Server Guard
- MVR support
- IGMP Snooping Immediate Leave
- MLD Snooping (MLD v1)
- sFlow
- IEEE 802.3x Flow Control
- Diffserv (DSCP)
- Auto PD recovery
- ZUID
- MAC-based authentication per VLAN
- Compound Authentication
- DHCP Client Option60
- Multiple TACACs+ server
- Login authentication by TACACS+
- TACACS+ Accounting
- Authorization on TACACS+

Warranty
- Limited life-time warranty***

* Nebula Cloud and Standalone modes supported features. Some Nebula features may need an extra license to work. For more details on the features and licenses, check Nebula Licensing Table.

** The license needs to be purchased separately, and is only for standalone mode.

*** 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-T	10-Gigabit SFP+	RJ-45	–	0.03 km (32.8 yd)	Yes
SFP10G-SR	10-Gigabit SFP+	Duplex LC	850 nm	0.3 km (328 yd)	Yes
SFP10G-SR-E	10-Gigabit SFP+	Duplex LC	850 nm	0.3 km (328 yd)	Yes
SFP10G-LR	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP10G-LR-E	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP-1000T	Gigabit	RJ-45	–	0.1 km (109 yd)	–
SFP-SX-D	Gigabit	Duplex LC	850 nm	0.55 km (601 yd)	Yes
SFP-SX-D-E	Gigabit	Duplex LC	850 nm	0.55 km (601 yd)	Yes
SFP-LX-10-D	Gigabit	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP-LX-10-D-E	Gigabit	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP-LHX1310-40-D	Gigabit	Duplex LC	1310 nm	40 km (43744 yd)	Yes
SFP-ZX-80-D	Gigabit	Duplex LC	1550 nm	80 km (87488 yd)	Yes
SFP-BX1310-10-D	Gigabit	Single LC	1310 nm (Tx); 1490 nm (Rx)	10 km (10936 yd)	Yes
SFP-BX1310-E	Gigabit	Single LC	1310 nm (Tx); 1550 nm (Rx)	20 km (21872 yd)	Yes
SFP-BX1490-10-D	Gigabit	Single LC	1490 nm (Tx); 1310 nm (Rx)	10 km (10936 yd)	Yes
SFP-BX1550-E	Gigabit	Single LC	1550 nm (Tx); 1310 nm (Rx)	20 km (21872 yd)	Yes

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)

License* (Optional)

Model	Service Duration	Description
XS1930-10	Life Time	Access L3 License
XS1930-12HP	Life Time	Access L3 License
XS1930-12F	Life Time	Access L3 License

* For FW V4.80 or above

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Datasheet XS1930 Series