ZYXEL NETWORKS

XGS1930 Series

24/48-port GbE Smart Managed Switch with 4 SFP+ Uplink

Benefits

Introducing the new hybrid switch

The Zyxel XGS1930 Smart Managed Switch Series introduces Zyxel NebulaFlex™ that allows you to easily switch between standalone and our license-free Nebula cloud management platform anytime with just a few simple clicks.

The NebulaFlex™ protects your investment on wired technology by offering the flexibility to transition to the cloud in your own time, without worrying about additional ongoing licensing costs.

Prudent spender organizations can take advantage of Nebula to centrally manage and access real-time network information to have effortless control over the XGS1930 Smart Managed switches and other Hybrid and Nebula devices – all under a single intuitive platform without the need to install any software.

Still like the standalone style?

For those who still stick on standalone management, the XGS1930 Series allow you to set up each switch via its local user-friendly web interface and wizard without learning the complex command line interface (CLI). The wizard quickly guides you to complete the setup process of the most frequently used functions including initial admin setup, VLAN, QoS and protection functions efficiently. Additionally, the XGS1930 Series is also part of the Zyxel One Network, which means that you can use the complimentary ZON Utility to easily perform repetitive operations during the deployment phases.

- NebulaFlex™ gives you the flexibility to switch between standalone and our license-free Nebula cloud management
- Nebula cloud management allows easy deployment, real-time configurations and effortless access to all your cloud devices anytime
- Handles the increasing high-bandwidth applications in your office affordably with four built-in 10G SFP+ uplinks
- Easy management and setup with web-based interface and user-friendly wizard
- Smart fan design offers silent operations in your office
- Check real-time status intuitively by cloud and PoE LED indicators

nebula

Zyxel one network
Redefining network integration

Datasheet XGS1930 Series

What's the benefit of Cloud central management?

When you're ready to join our Nebula cloud management solution, simply register your XGS1930 Series via the Nebula Control Center (NCC); the device automatically joins, provisions and begins to give real-time information. The intuitive platform allows your switches to form a group, controlled centrally and gain access to diagnostics tools all under a single platform. The Nebula platform does not limit the number of your switches to be added, giving you an easy-to-use, scalable platform to access anytime, anywhere. What's more, the Nebula platform offers a mobile app for you to register hundreds of devices quickly on NCC with the built-in QR code scanner as well as to monitor the real-time network status.

Experience whisper-silent operations

The XGS1930 Series includes fanless and built-in smart fan models. The smart fan is designed to automatically adjust speeds based on the device temperature to minimize system acoustic noise, starting at 26.3 dBA max at 25°C ambient with XGS1930-52. You can barely hear the sound while the XGS1930 Series is working. It is ideal for your office environment.

Upgrade wired network at a reasonable price

As SMBs generate more data from daily office applications, Gigabit to the desktop raises the importance of 10G connectivity to the core that ensures network efficiency for continuous business productivity. With Gigabit connectivity plus four 10G uplinks, the XGS1930 Series is an ideal option for those who need basic functions, easier management and a more reasonable price to upgrade their networks.

Powering more devices affordably

The XGS1930 Series PoE switches support 802.3at PoE Plus standards to offer 30-watt per port and a 375-watt high-power budget to meet the needs from power-hungry devices. The default consumption mode allows delivery of only the actual power required by devices connected to the switch for better business ROI. The user-friendly PoE consumption indicator located on the front panel and Web GUI provide real-time power utilization.

Model List

XGS1930-28
24-port GbE Smart Managed Switch
with 4 SFP+ Uplink

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

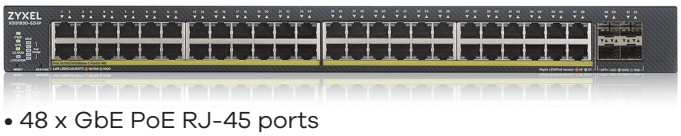
XGS1930-52
48-port GbE Smart Managed Switch
with 4 SFP+ Uplink

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

XGS1930-28HP
24-port GbE Smart Managed PoE Switch
with 4 SFP+ Uplink

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

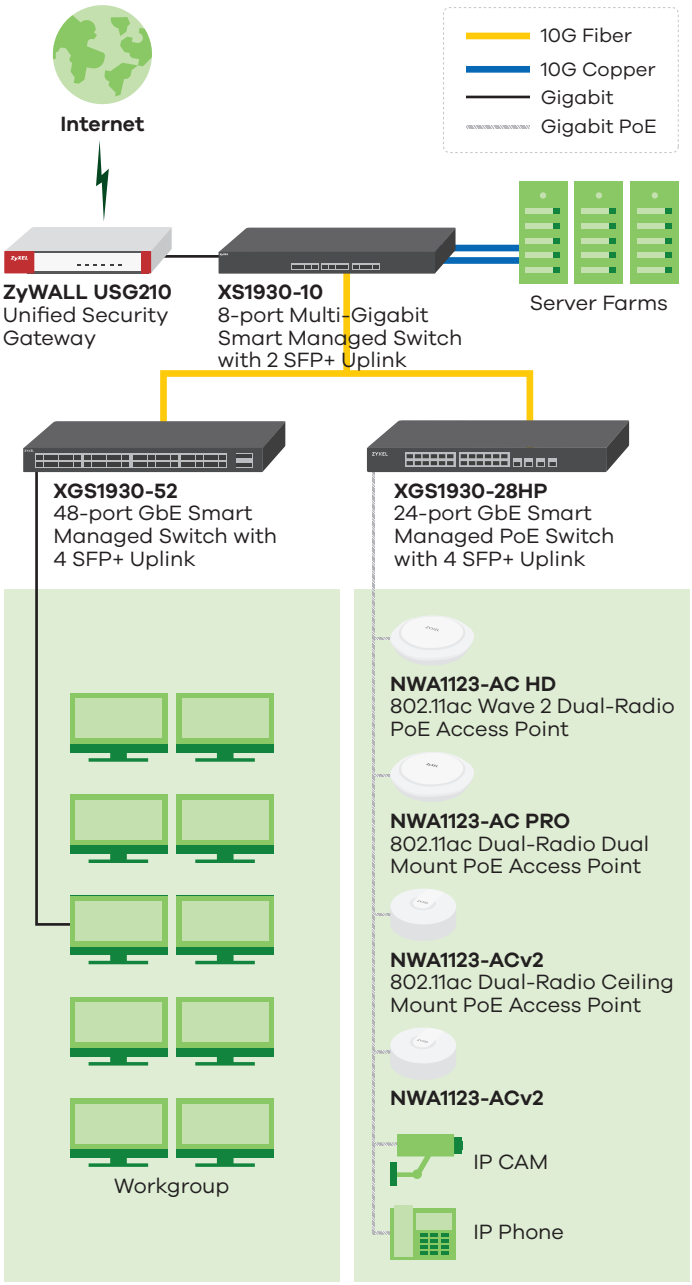
XGS1930-52HP
48-port GbE Smart Managed PoE Switch
with 4 SFP+ Uplink



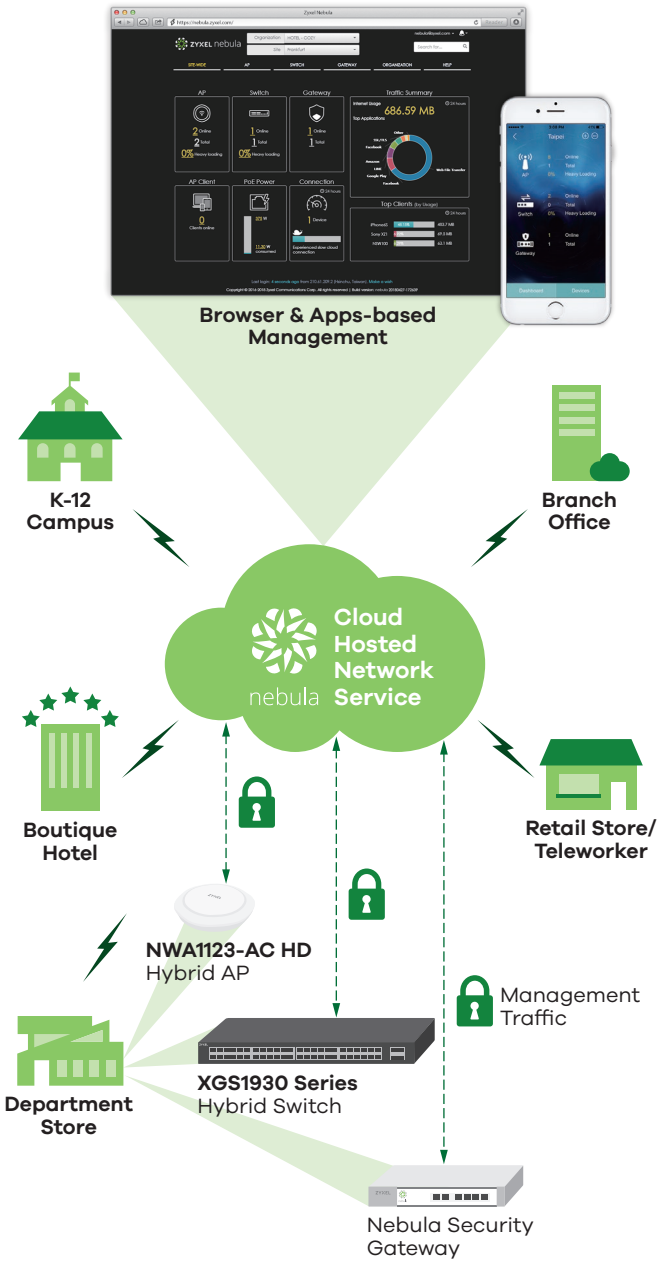
- 48 x GbE PoE RJ-45 ports
- 4 x 10 GbE SFP+ slots
- PoE power budget: 375 W

Application Diagram

Standalone Management



Cloud Management



Specifications

Model		XGS1930-28	XGS1930-28HP	XGS1930-52	XGS1930-52HP
Product name		24-port GbE Smart Managed Switch with 4 SFP+ Uplink	24-port GbE Smart Managed PoE Switch with 4 SFP+ Uplink	48-port GbE Smart Managed Switch with 4 SFP+ Uplink	48-port GbE Smart Managed PoE Switch with 4 SFP+ Uplink
Switch class		Smart Managed	Smart Managed	Smart Managed	Smart Managed
Port Density					
Total port count		28	28	52	52
100/1000 Mbps		24	24	48	48
10 Gigabit SFP+		4	4	4	4
PoE					
PoE ports		-	24	-	48
Total PoE budget (Watts)		-	375	-	375
High power PoE 802.3at		-	Yes	-	Yes
Performance					
Switching capacity (Gbps)		128	128	176	176
Forwarding rate (Mpps)		95.2	95.2	130.9	130.9
Packet buffer (byte)		1.5 M	1.5 M	1.5 M	1.5 M
MAC address table		16 K	16 K	16 K	16 K
L3 forwarding table		Max. 512 IPv4 entries; Max. 512 IPv6 entries	Max. 512 IPv4 entries; Max. 512 IPv6 entries	Max. 512 IPv4 entries; Max. 512 IPv6 entries	Max. 512 IPv4 entries; Max. 512 IPv6 entries
Routing table		32	32	32	32
IP interface (IPv4/IPv6)		32/32	32/32	32/32	32/32
Flash/RAM		32 MB/512 MB	32 MB/512 MB	32 MB/512 MB	32 MB/512 MB
Power					
Input		100 to 240 V AC, 50/60 Hz	100 to 240 V AC, 50/60 Hz	100 to 240 V AC, 50/60 Hz	100 to 240 V AC, 50/60 Hz
Max. power consumption (watt)		24.6	471	55.7	498.4
Physical Specifications					
Item	**Dimensions (WxDxH) (mm/in.)**	441 x 270 x 44/ 17.36 x 10.63 x 1.73	441 x 330 x 44/ 17.36 x 12.99 x 1.73	441 x 270 x 44/ 17.36 x 10.63 x 1.73	441 x 330 x 44/ 17.36 x 12.99 x 1.73
	Weight (kg/lb.)	3.4/7.5	4.6/10.14	3.7/8.16	5.1/11.24
Packing	**Dimensions (WxDxH) (mm/in.)**	616 x 355 x 107/ 24.45 x 13.98 x 4.21	585 x 503 x 95/ 23.03 x 19.8 x 3.74	616 x 355 x 107/ 24.45 x 13.98 x 4.21	585 x 503 x 95/ 23.03 x 19.8 x 3.74
	Weight (kg/lb.)	4.47/9.85	5.82/12.83	4.78/10.54	6.31/13.91
Included accessories		• Power cord • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit
Green Feature					
Fanless		Yes	-	-	-
Environmental Specifications					
Operating environment	**Temperature**	0°C to 50°C/ 32°F to 122°F	0°C to 50°C/ 32°F to 122°F	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)	10% to 95% (non-condensing)	10% to 95% (non-condensing)
Storage environment	**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	-40°C to 70°C/ -40°F to 158°F
	Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)
MTBF (hr)		1,211,024	1,369,432	827,093	494,960
Heat dissipation (BTU/hr)		83.886	1,606.11	189.937	1,699.544
Acoustic noise @ 25°C (dBA)		0	28.5	26.3	28.4

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 802.3ae 10-Gigabit Ethernet Over Fiber*
- IEEE 802.3af PoE*
- IEEE 802.3at PoE Plus*
- IEEE 802.3az EEE*
- IEEE 802.3x flow control
- IEEE 802.3ad LACP aggregation*
- IEEE 802.1D 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): 12/8 for 28/28HP, 24/8 for 52/52HP*
- 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*
- 802.1x VLAN and bandwidth assignment by RADIUS*
- ACL packet filtering (IPv4/IPv6)

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

Layer 3 Routing

- Static route
- Assigned DHCP relay with specific source IP interface

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 (RFC4884)
- 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*
- Setup Wizard
- Management through Telnet
- 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

* Cloud and standalone modes supported features.

- 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

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**

* Cloud and standalone modes supported features.
** 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	0.3 km (984 ft)	Yes
SFP10G-SR-E	10-Gigabit SFP+	LC	850 nm	0.3 km (984 ft)	Yes
SFP10G-LR	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP10G-LR-E	10-Gigabit SFP+	LC	1310 nm	10 km (10936 yd)	Yes
SFP-1000T	Gigabit	RJ-45	-	0.1 km (109 yd)	-
SFP-SX-D	Gigabit	LC	850 nm	0.55 km (601 yd)	Yes
SFP-SX-E	Gigabit	LC	850 nm	0.55 km (601 yd)	Yes
SFP-LX-10-D	Gigabit	LC	1310 nm	10 km (10936 yd)	Yes
SFP-LX-10-E	Gigabit	LC	1310 nm	10 km (10936 yd)	Yes
SFP-LHX1310-40-D	Gigabit	LC	1310 nm	40 km (43744 yd)	Yes
SFP-ZX-80-D	Gigabit	LC	1550 nm	80 km (87488 yd)	Yes
SFP-BX1310-10-D	Gigabit	LC	1310 nm (Tx) 1490 nm (Rx)	10 km (10936 yd)	Yes
SFP-BX1310-E	Gigabit	LC	1310 nm (TX) 1550 nm (RX)	20 km (21872 yd)	Yes
SFP-BX1490-10-D	Gigabit	LC	1490 nm (Tx) 1310 nm (Rx)	10 km (10936 yd)	Yes
SFP-BX1550-E	Gigabit	LC / SC	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)

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