





# XMG1930 Series

# 24-port 2.5G Multi-Gig Lite-L3 Smart Managed Switch with 6 10G Uplinks

The XMG1930 series is a family of Multi-Gigabit Lite-L3 Smart Managed switches including 2 models, with and without PoE options. On top of its high-density twenty-four 2.5G ports that serve as a top performance access switch to upgrade from standard gigabit network, the switches also offer four 10G Multi-Gigabit ports to expand network connection to WiFi 6/6E and latest WiFi 7 AP or 10G servers along with two additional 10G fiber ports for extensibility and resilience. The PoE model XMG1930-30HP supports both PoE+ and PoE++ with a large power budget of 700 W offering great flexibility to deploy WiFi 6/6E and WiFi 7 wireless access points; while the non-PoE model XMG1930-30 is ideal for high-speed Internet Service Providers to upgrade from traditional 1G/2.5G to every user.



#### Upgrade network with flexible connection choices

The XMG1930 Series Switch supports the IEEE 802.3bz standard and offers both 2.5G and 10G port options, providing increased flexibility for wiring deployments. Each copper port of this Multi-Gigabit switch is able to automatically detect which speed is needed with the connected device. It's common for Multi-Gigabit switches to operate at different link speed for each individual ports, so the XMG1930 Series is designed with a unique 5-color LED, providing an intuitive indication of connection speed for each individual ports.



Multi-Gigabit supports with 2.5G and 10G combinations offering flexibility for high density Multi-Gig deployments



Up to SIX 10G uplinks including both copper and fiber options providing extensibility and resilience for networks



PoE model supports both 802.3bt PoE++ (60 W) and 802.3at PoE+ with a high-power budget of up to 700 W to easily connect WiFi 6/6E APs or IoT devices in your network



Nebula ecosystem offers a unified cloud network experience, from wired, wireless and security gateway



Access and manage the full feature sets included from the first day of purchase through the local web GUI





#### Using your current cabling is fine

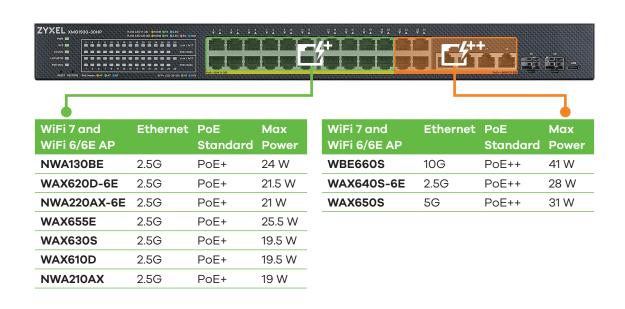
Upgrading to 10 Gigabit Ethernet often require costly wiring upgrades, but thanks to the latest IEEE 802.3bz standard, it can provide Multi-Gigabit technology on existing wiring infrastructure designed for standard Gigabit, protecting your investments while offering up to 10 times more bandwidth capacity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

Cable specs	100 Mbps	1 Gbps	2.5 Gbps	5 Gbps	10 Gbps
Cat 5e	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	-
Cat 6	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	Up to 55M
Cat 6a	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>~</b>

#### Superior PoE paves the way for high performance WiFi 6 and WiFi 7 APs

Upgrading business wireless infrastructure to WiFi 6/6E and WiFi 7 requires a reliable network Switch to provide solid backbone services. The XMG1930-30HP comes with 8 ports of IEEE 802.3bt (PoE++) offering up to 60 W per port, as well as 20 ports of IEEE 802.3at delivering up to 30 W per port to

meet a variety of WiFi 6 and WiFi 7 AP adoptions. Maximize the performance of the 700 W system power budget with a wide range of choices from Zyxel WiFi 6/6E and new WiFi 7 AP family.



#### NebulaFlex – simply manage it your way!

The XMG1930 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. Nebula control center provides a centralized access for Zyxel products; the local web GUI accesses the full feature sets and all configuration options of your switch from the very first release.

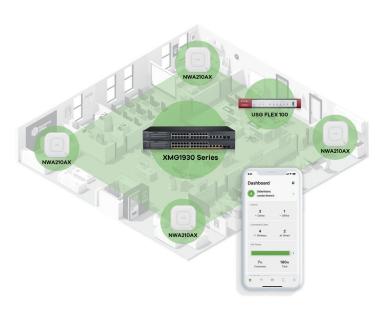


#### The Nebula ecosystem

It's easy to set up the Switch and other network devices to Nebula through the Web Interface and mobile APP with their visual step-by-step guide. SB/SMB users can take advantage of Nebula to centrally manage and access real-time network information to have effortless control over the XMG1930 Smart Managed switches, as well as access points, security firewall, and 5G/LTE mobile routers anywhere, anytime – bringing you an easy and unified network experience without the cost for additional software or hardware controller.

#### Smart managed switch design inside and out

Designed with the concept of Smart L2 managed Switch, you can use the user-friendly local web management for more in-depth configuration tasks such as enhanced QoS, Link Aggregation, IPv6, and IPv4/IPv6 Layer 3 static routing without learning any complex command line interface (CLI). Local web management is included in the purchase price of your switch.



#### **Model List**

#### XMG1930-30

24-port 2.5G Multi-Gig Lite-L3 Smart Managed Switch with 6 10G Uplink



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

#### XMG1930-30HP

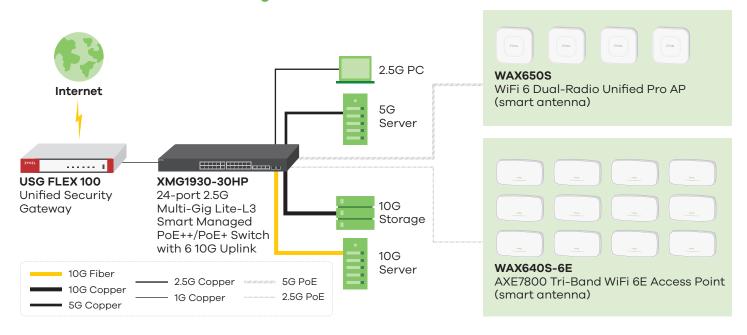
24-port 2.5G Multi-Gig Lite-L3 Smart Managed PoE++/PoE+ Switch with 6 10G Uplink



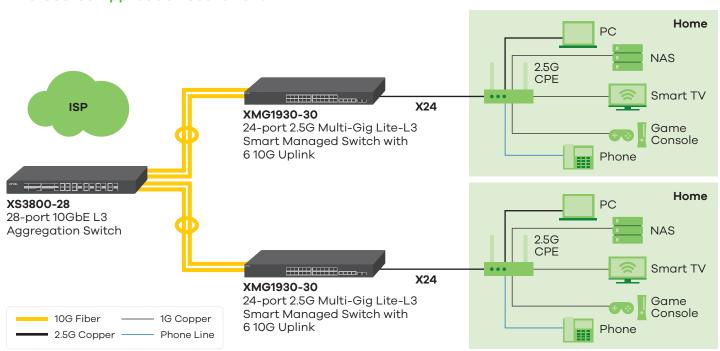
- 20 x Multi-Gigabit (100M/1G/2.5G) RJ-45 PoE+ ports
- 4 x Multi-Gigabit (100M/1G/2.5G) RJ-45 PoE++ (60 W) ports
- 4 x 10G Multi-Gigabit (1G/2.5G/5G/10G) RJ-45 PoE++ (60 W) ports
- 2 x 1G SFP/10G SFP+ slots
- PoE power budget: 700 W

# **Application Diagram**

#### **XMG1930-30HP Standalone Management**



### XMG1930-30 Application Scenario for FTTX



# **Specifications**

Model		XMG1930-30	XMG1930-30HP	
Product name		24-port 2.5G Multi-Gig Lite-L3 Smart Managed Switch with 6 10G Uplink	24-port 2.5G Multi-Gig Lite-L3 Smart Managed PoE++/PoE+ Switch with 6 10G Uplink	
Switch class		Smart Managed	Smart Managed	
Port Density				
Total port cou	nt	30	30	
100M/1G/2.5	G Ethernet (RJ-45)	24	24	
1G/2.5G/5G/	10G Ethernet (RJ-45)	4	4	
1G SFP/10G	SFP+	2	2	
PoE				
PoE ports		-	28	
Total PoE budg	get (Watts)	-	700	
IEEE 802.3at (F	PoE+)	-	Port 1 - 20	
IEEE 802.3bt (F	PoE++, 60 W)	-	• 100M/1G/2.5G: Port 21 - 24 • 1G/2.5G/5G/10G: Port 25 - 28	
Performance				
Switching cap	acity (Gbps)	240	240	
Forwarding ra	te (Mpps)	178.5	178.5	
Packet buffer	(byte)	2 MB	2 MB	
MAC address t	table*	16 K	16 K	
Jumbo frame	(byte)	12 K	12 K	
L3 forwarding	table*	512 IPv4 entries; Max. 512 IPv6 entries	512 IPv4 entries; Max. 512 IPv6 entries	
Routing table*		32	32	
VLAN routing		Yes	Yes	
IP interface		32/32	32/32	
Flash/RAM		32 MB/256 MB	32 MB/256 MB	
Power				
Input		100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz	
Max. power co	nsumption (watts)	67.1	864.1	
Min. power cor Physical Speci	nsumption (watts) ifications	43.2	47.8	
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	
	Weight (kg/lb.)	3.81/8.4	4.85/10.69	
Packing	Dimensions (WxDxH)(mm/in.)	622 x 357 x 109/24.49 x 14.06 x 4.29	592 x 505 x 97/23.31 x 19.88 x 3.82	
•	Weight (kg/lb.)	4.91/10.82	6.04/13.32	
Included acces	ssories	Power cord     Rack mounting kit	Power cord     Rack mounting kit	
ESD/Surge Pro	otections			
_	surge protection	1KV	2 KV	
Power supply surge	Line-GND	4 KV	6 KV	
protection	Line-Line	2 KV	6 KV	
	ESD protection (air/contact)	8 KV/4 KV	8 KV/4 KV	
	l Specifications			
Operating	Temperature	-20°C to 50°C/-4°F to 122°F	-20°C to 50°C/-4°F to 122°F	
	Humidity	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	
	Humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	
MTBF (hr)		532,217.59	587,922.31	
Heat dissipation	on (BTU/hr)	67.1	864.1	
Acoustic noise	(min/max, dBA)	26/47.6	27.9/51.6	
* ^ 1 0 !!-	conso comos with larger table size to ever			

<sup>\*</sup> 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 802.3bz 2.5GBASE-T/5GBASE-T\*
- 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): 15/8
- 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)
- 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
- New for V4.80 Multicast load sharing over trunking port\*

#### 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<sup>™</sup> 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
- DHCP relay per VLAN
- DHCP client IPv4\*
  DHCP client IPv6
- DHCP option 82
- Daylight saving\*
- NTP Server (IPv4/IPv6) Support DNS format
- Scheduled PoE\*
- PoE default consumption mode\*
- PoE power management extended configuration\*
- Restore to last custom default
- Fiber module rescue

#### **MIB**

- Zyxel 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: up to 4,094
  - IPv4 Address table: up to 1,024
  - MAC table: up to 32K
  - IPv4/IPv6 Static route: up to 64/64
  - ACL: up to 256
- 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+
- Zvxel Private MIB

#### 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 <u>Nebula</u> Licensing Table.
- \*\* The license needs to be purchased separately..
- \*\*\* 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
XMG1930-30	Life Time	Access L3 License
XMG1930-30HP	Life Time	Access L3 License

<sup>\*</sup> For FW V4.80 or above

