



ZYXEL XGS1935-28

# XGS1935 Series

24/48-port GbE Lite-L3 Smart Managed Switch with 4 10G Uplink

# **Benefits**

The Zyxel XGS1935 Series is a family of Lite-L3 Smart Managed Switch that consists of four models, including 28- and 52-port, PoE and non-PoE options. The four models all come with four addition 10GbE fiber connectivity cater to your business's increasing need for high network speeds. This Series is built with smart fan designed to automatically adjust speeds based on the device temperature, offering near silence while the Switch is in operation.

# Flexible 10G support - upgrade wired network at a reasonable price

As SMBs generate more data from daily office applications, Gigabit to the desktop raises the importance of 10GbE connectivity to the core that ensures network efficiency for continuous business productivity. With Gigabit connectivity plus four 10GbE uplinks, the XGS1935 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 PoE models XGS1935-28HP/52HP support IEEE 802.3at PoE+ standards to offer 30-watt per port and a 375-watt 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.



Handles the latest high-bandwidth applications easily with four built-in SFP+ uplinks



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



PoE models support 802.3at PoE+ and provide 375W power budget



Easy management and setup with web-based interface and user-friendly wizard



Supports static routing to optimize internal traffic and enhance network performance



Smart fan design offers silent operations in your office





# NebulaFlex - simply manage it your way!

The XGS1935 Series supports NebulaFlex technology which provides extended flexibility for users to easily switch network management modes between standalone and our license-free Nebula cloud management platform. Nebula control center provides single pane of glass for Zyxel products; the local web GUI accesses the full feature set 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 XGS1935 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 Lite-L3 Smart 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.

#### **Built with nature in mind**

The XGS1935 series is built with a more compact chassis, reducing packaging by up to 36% and weight by up to 22% compared to the previous XGS1930 series. These efforts have resulted in a 48% increase in units per pallet and a reduced carbon footprint.

# **Model List**

#### XGS1935-28

24-port GbE Lite-L3 Smart Managed Switch with 410G Uplink



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

#### XGS1935-52

48-port GbE Lite-L3 Smart Managed Switch with 4 10G Uplink



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

#### XGS1935-28HP

24-port GbE PoE Lite-L3 Smart Managed Switch with 4 10G Uplink



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

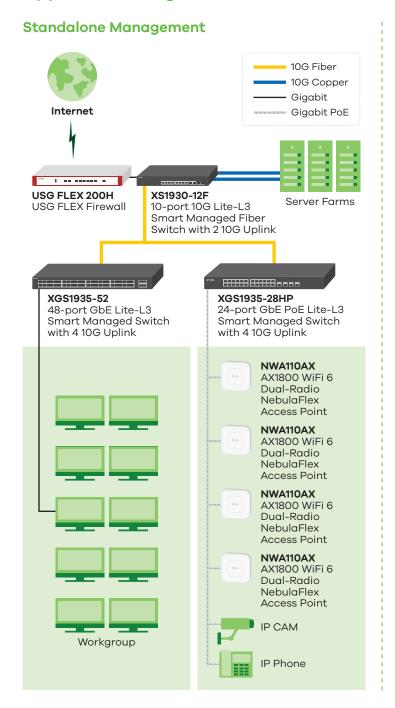
#### XGS1935-52HP

48-port GbE PoE Lite-L3 Smart Managed Switch with 4 10G Uplink

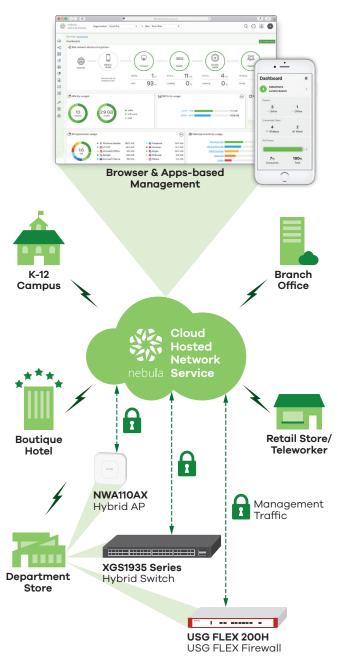


- 48 x GbE PoE RJ-45 ports
- 4 x 10GbE SFP+ slots
- PoE power budget: 375W

# **Application Diagram**



# **Cloud Management**



# **Specifications**

Madal		XGS1935-28	XGS1935-28HP	XGS1935-52	XGS1935-52HP
Product name					
		24-port GbE Lite-L3 Smart Managed Switch with 4 10G Uplink	24-port GbE PoE Lite-L3 Smart Managed Switch with 4 10G Uplink	48-port GbE Lite-L3 Smart Managed Switch with 4 10G Uplink	48-port GbE PoE Lite-L3 Smart Managed Switch with 4 10G Uplink
Switch class		Smart Managed	Smart Managed	Smart Managed	Smart Managed
Port Density			<u> </u>	<u> </u>	
Total port cou	int	28	28	52	52
100/1000Mbps		24	24	48	48
10 Gigabit SFP+		4	4	4	4
PoE					
IEEE 802.3at (	PoE+)	-	24	-	48
Total PoE bud	get (watts)	_	375	-	375
Performance					
Switching cap	acity (Gbps)	128	128	176	176
Forwarding ro	<u> </u>	95.2	95.2	130.9	130.9
Packet buffer (byte)		1.5M	1.5M	1.5M	1.5M
MAC address	<u> </u>	16K	16K	16K	16K
Jumbo frame (byte)		9K	9K	9K	9K
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
VLAN routing		Yes	Yes	Yes	Yes
IP interface (IPv4/IPv6)		32/32	32/32	32/32	32/32
Flash/RAM		32MB/512MB	32MB/512MB	32MB/512MB	32MB/512MB
Power					
Input		100 to 240V AC, 50/60Hz	100 to 240V AC, 50/60Hz	100 to 240V AC, 50/60Hz	100 to 240V AC, 50/60Hz
	onsumption (watts)	23.2	452.6	45.6	470.1
-	nsumption (watts)	11.5	15.9	24.7	32.2
Physical Spec	ifications				
Item	Dimensions (WxDxH)(mm/in.)	440 x 270 x 43/ 17.32 x 10.63 x 1.69	440 x 270 x 43/ 17.32 x 10.63 x 1.69	440 x 270 x 43/ 17.32 x 10.63 x 1.69	440 x 270 x 43/ 17.32 x 10.63 x 1.69
	Weight (kg/lb.)	3.1/6.83	3.6/7.94	3.7/8.16	4.1/9.04
Packing	Dimensions (WxDxH)(mm/in.)	508 x 394 x 90/ 20 x 15.51 x 3.54	508 x 394 x 90/	508 x 394 x 90/	508 x 394 x 90/
			20 x 15.51 x 3.54	20 x 15.51 x 3.54	20 x 15.51 x 3.54
In aliceland mana	Weight (kg/lb.)	4.58/10.1	5.13/11.31	5.16/11.38	5.64/12.43
Included accessories  Green Feature		<ul><li>Power cord</li><li>Rack mounting kit</li></ul>	<ul><li>Power cord</li><li>Rack mounting kit</li></ul>	<ul><li>Power cord</li><li>Rack mounting kit</li></ul>	<ul><li>Power cord</li><li>Rack mounting kit</li></ul>
Energy-Efficie		Yes	Yes	Yes	Yes
ESD/Surge Pro		103	103	103	103
_	surge protection	4KV	4KV	4KV	4KV
Power	Line-GND	2KV	2KV	2KV	2KV
supply surge protection	Line-Line	1KV	1KV	1KV	1KV
Ethernet port (air/contact)	ESD protection	8KV/6KV	8KV/6KV	8KV/6KV	8KV/6KV
Enviro <u>nmento</u>	ıl 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	-20°C to 50°C/ -4°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	-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)		518,332	786,686	919,583	562,941
Heat dissipation (BTU/hr)		79.162	264.782	155.594	324.495
Acoustic noise @25°C (min/max, dBA)		Fanless, 0	23.9/48.8	25.2/50.2	24.9/50.4

# **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)

# **Quality of Service (QoS)**

- No. of hardware queues per port: 8\*
- 802.1p queuing methods: SPQ, WRR, WFO\*
- 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\*

# **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**

- Support NebulaFlex<sup>™</sup> for hybrid mode
- 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
- Display port utilization\*
- Port mirroring\*
- Scheduled PoE\*
- PoE default consumption mode\*
- PoE power management extended configuration\*
- Web login warning page
- Restore to last custom default

#### MIR

- 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

#### **EMC**

- FCC Part 15 (Class A)
- CE (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)
- Automatic detection of the latest firmware
- Displays device serial number and hardware version
- Cloud mode on/off option for Hybrid series devices
- 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)

#### 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> <u>Licensing Table</u>.
- \*\* Warranty terms, service availability, and service response times may vary from country or region to country or region.

# **Accessories**

## **Transceivers (Optional)**

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

# **Direct Attach Cables (Optional)**

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

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

Copyright © 2024 Zyxel and/or its affiliates. All rights reserved. All specifications are subject to change without notice.

