ZYXEL

GS1920 Series
24/48-port GbE Smart Managed Switch

Today's small and medium-sized businesses (SMBs) expect a higher level of performance from their networks—more connections to support diverse applications, fewer network disruptions, and easier management. The GS1920 Series is ideal for SMB deployments in multiple scenarios by providing up to 28 Gigabit copper ports for 24-port models or up to 6 Gigabit fiber ports for 48-port models.

The built-in smart fan design allows GS1920 Series to control fan speeds according to the temperature to provide silent, reliable operations. To create a one-network experience, the GS1920 Series features inter-device discovery and reset, which along with the ZON utility, reduces the time and effort needed to initialize the network. Easy deployment, smart management and quiet operation—the GS1920 Series is the best solution for SMB networks.

Benefits

Smart management with intuitive web-based interface
With rich L2 features such as LACP, advanced QoS, VLAN, ACL and multicast IGMP snooping, the GS1920 Series offers intuitive web-based interface for you to access them without learning complex command-line interface(CLI).

Advanced standard compliance with intelligent power function support
Zyxel GS1920 Series PoE switches support 802.3at PoE Plus standards, with a 375-watt high-power budget to meet the connectivity needs of additional powered devices like 802.11ac WLAN access points, VoIP phones and IP cameras. Not only do the GS1920 Series switch PoE models feature full PoE ports, they also employ intelligent technology.

Easy to manage rich L2 features with user-friendly Web browser-based management GUI

Supports PoE+ standard to offer 30 W per port and a high PoE power budget of 375 W

Smart fan design offers silent operation in both desktop or rack mount environment

Supports ZON Utility and Smart Connect to simplify network management and maintenance

Zyxel **one** network
Redefining network integration

While set to Consumption Mode, switches reserve the actual required power automatically, and you can set power feeding priorities on different ports to get the optimized use of power resource. This capability increases the number of devices connected and deliver a better ROI for the business.

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 WiFi AP and to Gateway.

Feel the silence with smart fan

Silent, reliable switch operation is ideal for office environments with either place on a desktop or install in a switch rack. The built-in smart fan has been designed to automatically adjust speeds based on the device temperature.

Model List

GS1920-24
24-port GbE Smart Managed Switch

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

GS1920-24HP
24-port GbE Smart Managed PoE Switch

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

GS1920-48
48-port GbE Smart Managed Switch

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

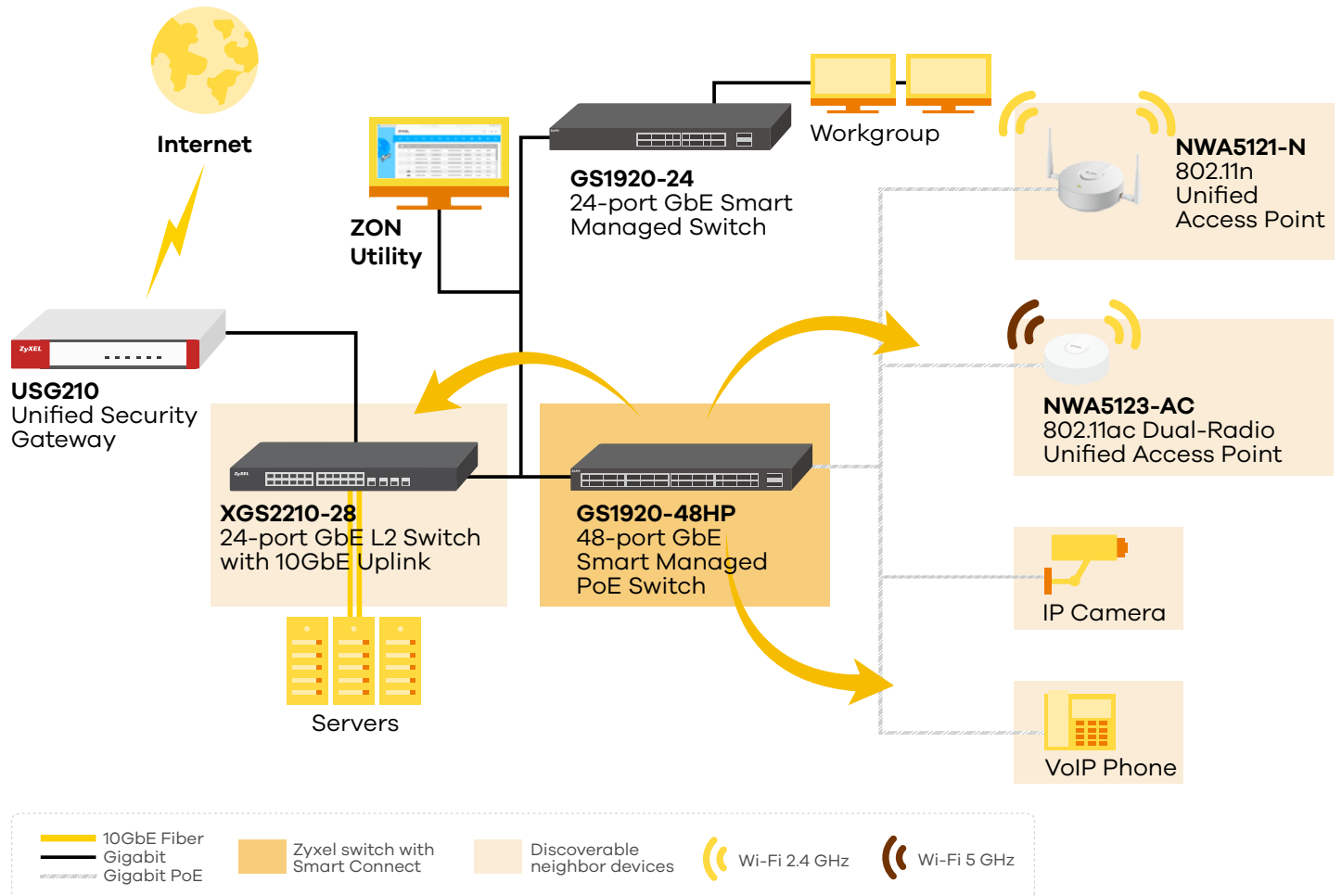## GS1920-48HP
48-port GbE Smart Managed PoE Switch

- 48 x GbE PoE RJ-45 ports
- 2 x GbE SFP ports
- 4 x GbE combo (RJ-45/SFP) ports

Key Applications

Deployment with ZON utility and Smart Connect

- Discover neighbor devices
- Access the GUIs of neighbor devices with one click
- PoE switches can power cycle neighbor PDs

- PoE switches can do factory reset for neighbor devices* remotely

* Reset to factory default only for Zyxel products

Internet

ZON Utility

GS1920-24
24-port GbE Smart Managed Switch

Workgroup

NWA5121-N
802.11n Unified Access Point

NWA5123-AC
802.11ac Dual-Radio Unified Access Point

USG210
Unified Security Gateway

XGS2210-28
24-port GbE L2 Switch with 10GbE Uplink

GS1920-48HP
48-port GbE Smart Managed PoE Switch

Servers

IP Camera

VoIP Phone

Legend:
- 10GbE Fiber
- Gigabit
- Gigabit PoE
- Zyxel switch with Smart Connect
- Discoverable neighbor devices
- Wi-Fi 2.4 GHz
- Wi-Fi 5 GHz

Specifications

Model	GS1920-24	GS1920-24HP	GS1920-48	GS1920-48HP
Product name	24-port GbE Smart Managed Switch	24-port GbE Smart Managed PoE Switch	48-port GbE Smart Managed Switch	48-port GbE Smart Managed PoE Switch
Switch class	Smart Managed	Smart Managed	Smart Managed	Smart Managed
Port Density				
Total port count	28	28	50	50
100/1000 Mbps	24	-	44	-
100/1000 Mbps PoE	-	24	-	48
Gigabit SFP	-	-	2	2
Gigabit combo (SFP/ RJ-45)	4	4	4	4
Performance				
Switching capacity (Gbps)	56	56	100	100
Forwarding rate (Mpps)	41.67	41.67	74.40	74.40
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
Power				
Input	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz	100 - 240 V AC, 50/60 Hz
Max. power consumption (watt)	25.9	454	37.8	482
Total PoE power budget (watt)	-	375	-	375
Physical Specifications				
Item — **Dimensions (WxDxH) (mm/in.)**	441 x 131 x 44/ 17.36 x 5.16 x 1.73	440 x 330 x 44.5/ 17.32 x 12.99 x 1.75	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 x 1.75
Weight (kg/lb.)	2.17/4.78	4.79/10.56	3.04/6.7	5.13/11.3
Packing — **Dimensions (WxDxH) (mm/in.)**	561 x 220 x 82/ 22.09 x 8.66 x 3.23	583 x 451 x 98/ 22.95 x 17.76 x 3.86	512 x 293 x 92/ 20.16 x 11.54 x 3.62	586 x 452 x 97/ 23.07 x 17.8 x 3.82
Weight (kg/lb.)	3.263/7.19	5.747/12.67	4.1/9.04	6.25/13.78
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 — **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 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (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)	616,247	949,326	631,452	337,690
Heat dissipation (BTU/hr)	88.32	1,548.14	128.90	1,643.62
Acoustic noise (dBA)	0	59.6	40.9	43.6

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 (Max # Trunks/ Links per Trunk): 8/8
- Loop guard
- ErrDisable recovery
- MRSTP (Zyxel proprietary)
- Dual configuration files
- Dual images

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 MAC/IP
- GVRP
- L2PT

Security

- 802.1X
- 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
- Authorization on RADIUS
- Authorization on TACACS+
- SSL
- MAC freeze
- DHCP snooping
- ARP inspection
- Static IP-MAC-Port binding
- Policy-based security filtering
- Port isolation
- IP source guard
- MAC search
- Guest VLAN
- ACL packet filtering (IPv4/IPv6)
- CPU protection
- Interface related trap enable/ disable (by port)
- IPv6 Duplicated Address Detection (DAD)

Quality of Service (QoS)

- No. of hardware queues per port: 8
- 802.1p queuing methods: SPQ, WRR, WFQ
- Storm control: 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, SPQ/WFQ 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

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 4291)
- 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 SNMP
- Remote firmware upgrade by Web
- Configuration saving and retrieving
- Configure clone
- DHCP relay per VLAN
- DHCP client
- Daylight saving
- **New for V4.50** NTP supports IPv4/ IPv6
- Port mirroring
- Scheduled PoE
- **New for V4.50** PoE default consumption mode

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

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
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)	-

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

Datasheet GS1920 Series