ZYXEL
NETWORKS

ZYXEL GS1900-24HP

ZYXEL GS1900-48HP

GS1900 Series
8/10/16/24/48-port GbE Smart Managed Switch

The Zyxel GS1900 Series of 8/10/16/24/48-port GbE Smart Managed Switch with Gigabit speed and essential managing functions bring your business network more flexibility and connectivity. The GS1900 Series provides power-saving functions and full IPv6 support to ensure your network to be ready for future expansions. In addition, the PoE models support the IEEE 802.3at providing a maximum of 30 watts per port. The smart fan and fanless designs of the GS1900 Series empower your networks with silent operation in your office.

Benefits

Experience whisper-silent operations

The GS1900 Series includes fanless and built-in smart fan models. The smart fan is designed to automatically adjust speeds based on the device temperature, offering near silence while the GS1900 Series is in operation. Ideal for your office environment no matter if it's on the desktop or mounted on a rack.

Versatility and flexibility for different needs

The complete Zyxel GS1900 Series has an essential portfolio of 8/10/16/24/48-port compact desktop and rackmount size with GbE connectivity. All models support multiple deployment methods to fulfill the needs for small offices and meeting room environments such as wall, under table or desktop mounting and rackmount options. It's now quick and effortless to enjoy the high-speed business network applications without a hitch. Additionally, the GS1900-10HP/24/24HPv2/48/48HPv2 is equipped with 2 extra SFP slots to provide 100M and GbE speeds for long-distance deployments.

Smart fan and fanless design offer near silent operations in both desktop and rack-mount environment

Easy browser-based switch management, with quick and easy set up wizard

Manage advanced features easily through user-friendly web interface

Intelligent IEEE 802.3at PoE+ allows to power more devices

Zyxel one network
Redefining network integration

Intelligence to power more devices (PoE models)

PoE models of GS1900 Series support IEEE 802.3at providing a maximum of 30 W per port features with default PoE consumption mode to deliver only the actual power required by your networked devices, reserves the rest and optimizes its power budget. That means a single switch can power more APs, IP cameras and VoIP phones, ensuring a better ROI for your business.

Simple, intuitive wizard set up

For small businesses that want to manage their infrastructure in advance, the Zyxel GS1900 Series comes with a friendly built-in Web-based browser for simple configuration and management. Moreover, the friendly step-by-step intuitive wizard helps avoiding multiple complicated configuration pages for quick set up with few clicks in the matter of minutes. To guide the users from start-up, VLAN, Guest VLAN to QoS setting, the Zyxel Series offers four most common steps and combines them into a quick and easy setup wizard; which does not just save deployment time and efforts, but is also helpful especially for the non-IT staff.
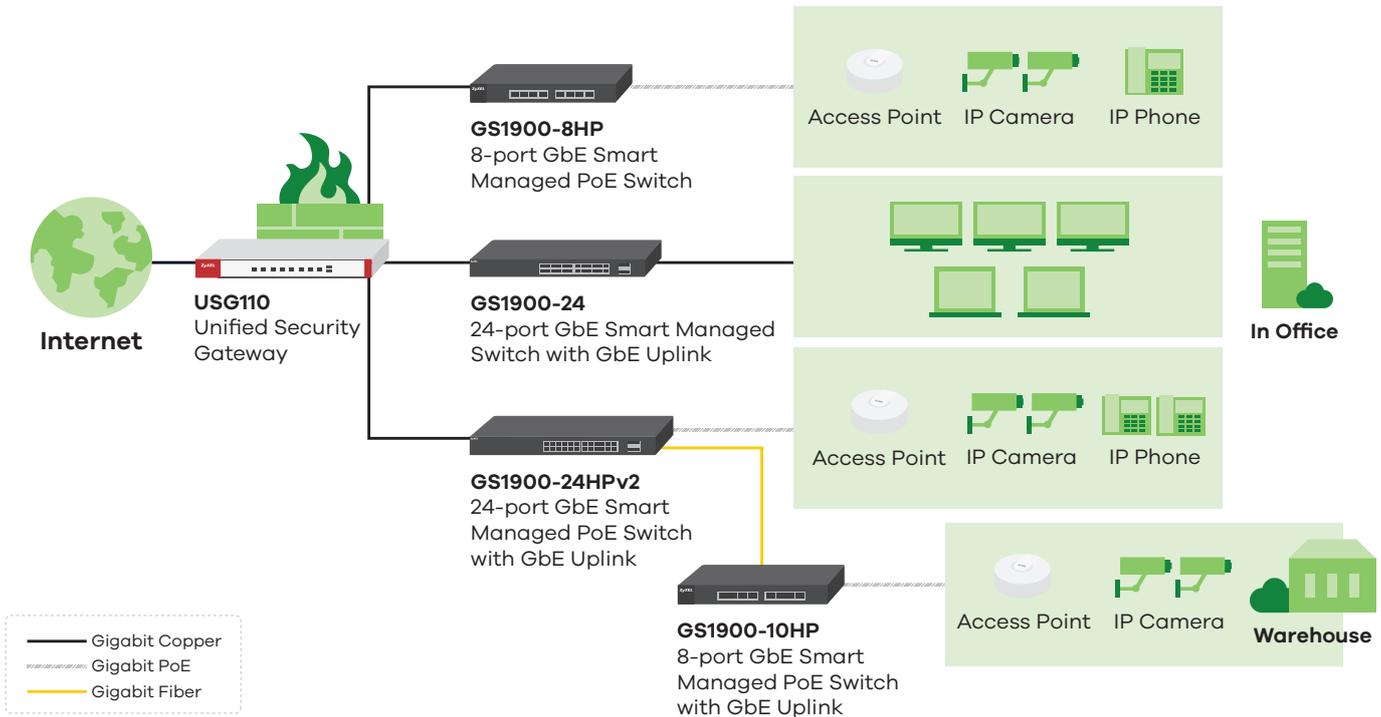
Web managed with advanced features

Designed to support advanced features like VLAN (for segregation of your public and private networks), enhanced Quality of Service (for better bandwidth management), IGMP Snooping, Link Aggregation (LAG), IPv6 and DoS prevention, this switch helps you segregate and prioritize traffic streams and keep up with your network as it grows.

Plug into the power of the Zyxel One Network

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. It is a unified installation tool to discover and configure Zyxel Switches, WLAN and Gateways in the network. Users can easily maintain the network in a single platform.

Key Applications

Model List

GS1900-48HPv2
48-port GbE Smart Managed PoE Switch with GbE Uplink

- 24 x GbE PoE RJ-45 ports
- 24 x GbE RJ-45 ports
- 2 x GbE SFP slots
- PoE power budget: 170 W

GS1900-48
48-port GbE Smart Managed Switch with GbE Uplink

- 48 x GbE RJ-45 ports
- 2 x GbE SFP slots

GS1900-24HPv2
24-port GbE Smart Managed PoE Switch with GbE Uplink

- 24 x GbE PoE RJ-45 ports
- 2 x GbE SFP slots
- PoE power budget: 170 W

GS1900-24
24-port GbE Smart Managed Switch with GbE Uplink

- 24 x GbE RJ-45 ports
- 2 x GbE SFP slots

GS1900-24EP
24-port GbE Smart Managed PoE Switch

- 12 x GbE PoE RJ-45 ports
- 12 x GbE RJ-45 ports
- PoE power budget: 130 W

GS1900-24E
24-port GbE Smart Managed Switch

- 24 x GbE RJ-45 ports

GS1900-10HP
8-port GbE Smart Managed PoE Switch with GbE Uplink

- 8 x GbE PoE RJ-45 ports
- 2 x GbE SFP slots
- PoE power budget: 77 W

GS1900-16
16-port GbE Smart Managed Switch

- 8 x GbE PoE RJ-45 ports

GS1900-8HP
8-port GbE Smart Managed PoE Switch

- 8 x GbE PoE RJ-45 ports
- PoE power budget: 70 W

GS1900-8
8-port GbE Smart Managed Switch

- 8 x GbE PoE RJ-45 ports

Specifications

Model	GS1900-8	GS1900-8HP	GS1900-10HP	GS1900-16	GS1900-24E
Product name	8-port GbE Smart Managed Switch	8-port GbE Smart Managed PoE Switch	8-port GbE Smart Managed PoE Switch with GbE Uplink	16-port GbE Smart Managed Switch	24-port GbE Smart Managed Switch
Switch class	Smart Managed	Smart Managed	Smart Managed	Smart Managed	Smart Managed
Port Density					
Total port count	8	8	10	16	24
100/1000 Mbps	8	8	8	16	24
SFP 100/1000 Mbps	-	-	2	-	-
PoE					
802.3at PoE ports	-	8	8	-	-
Total PoE budget (Watts)	-	70	77	-	-
Performance					
Switching capacity (Gbps)	16	16	20	32	48
Forwarding rate (Mpps)	11.9	11.9	14.88	23.8	35.7
Packet buffer (byte)	525 K	525 K	525 K	525 K	525 K
MAC address table	8 K	8 K	8 K	8 K	8 K
Jumbo frame (byte)	9 K	9 K	9 K	9 K	9 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	100 - 240 V AC, 50/60 Hz
Max. power consumption (watt)	6.2	84.3	96.2	10.5	15.1
Physical Specifications					
Item — Dimensions (WxDxH) (mm/in.)	250 x 104 x 27/ 9.84 x 4.10 x 1.06	250 x 104 x 27/ 9.84 x 4.10 x 1.06	250 x 104 x 27/ 9.84 x 4.10 x 1.06	216 x 133 x 42/ 8.50 x 5.23 x 1.65	267 x 162 x 42/ 10.51 x 6.37 x 1.65
Item — Weight (kg/lb.)	0.65/1.43	0.71/1.57	0.72/1.59	0.97/2.13	1.56/3.44
Packing — Dimensions (WxDxH) (mm/in.)	302 x 227 x 64/ 11.89 x 8.94 x 2.52	302 x 227 x 64/ 11.89 x 8.94 x 2.52	302 x 227 x 64/ 11.89 x 8.94 x 2.52	325 x 223 x 71/ 12.8 x 8.78 x 2.80	325 x 223 x 71/ 12.8 x 8.78 x 2.80
Packing — Weight (kg/lb.)	1.04/2.30	1.51/3.33	1.53/3.37	1.80/3.97	2.05/4.52
Included accessories	• Power cord • Power adapter • Wall mount kit	• Power cord • Power adapter • Wall mount kit	• Power cord • Power adapter • Wall mount kit	• Power cord • Power adapter • Wall mount kit	• Power cord • Wall mount kit • Rack mounting kit
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	0°C to 50°C/ 32°F to 122°F
Operating — Humidity	10% to 95% (non-condensing)	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	-40°C to 70°C/ -40°F to 158°F
Storage — Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)
MTBF (hr)	862,561	926,199	801,113	843,668	804,714
Heat dissipation (BTU/hr)	21.14	48.763	65.472	35.81	51.49
Acoustic noise (min/max, dBA)	0	0	0	0	0

Model	GS1900-24	GS1900-24EP	GS1900-24HPv2	GS1900-48	GS1900-48HPv2
Product name	24-port GbE Smart Managed Switch with GbE Uplink	24-port GbE Smart Managed PoE Switch	24-port GbE Smart Managed PoE Switch with GbE Uplink	48-port GbE Smart Managed Switch with GbE Uplink	48-port GbE Smart Managed PoE Switch with GbE Uplink
Switch class	Smart Managed	Smart Managed	Smart Managed	Smart Managed	Smart Managed
Port Density					
Total port count	26	24	26	50	50
100/1000 Mbps	24	24	24	48	48
SFP 100/1000 Mbps	2	-	2	2	2
PoE					
802.3at PoE ports	-	12	24	-	24
Total PoE budget (Watts)	-	130	170	-	170
Performance					
Switching capacity (Gbps)	52	48	52	100	100
Forwarding rate (Mpps)	39	35.7	39	74	74
Packet buffer (byte)	525 K	525 K	525 K	525 K	525 K
MAC address table	8 K	8 K	8 K	8 K	8 K
Jumbo frame (byte)	9 K	9 K	9 K	9 K	9 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	100 - 240 V AC, 50/60 Hz
Max. power consumption (watt)	16	166.5	206.5	31.9	220.5
Physical Specifications					
Item — Dimensions (WxDxH) (mm/in.)	440 x 131 x 44/ 17.32 x 5.16 x 1.73	330 x 230 x 44/ 12.99 x 9.06 x 1.73	441 x 270 x 44/ 17.36 x 10.63 x 1.7	440 x 200 x 44/ 17.32 x 7.87 x 1.73	441 x 270 x 44/ 17.36 x 10.63 x 1.7
Item — Weight (kg/lb.)	2.09/4.60	2.48/5.47	3.55/7.83	2.9/6.39	3.55/7.83
Packing — Dimensions (WxDxH) (mm/in.)	561 x 217 x 82/ 22.09 x 8.54 x 3.23	389 x 337 x 79/ 15.31 x 13.27 x 3.11	622 x 358 x 108/ 24.49 x 14.09 x 4.25	509 x 292 x 93/ 20.04 x 11.5 x 3.66	622 x 358 x 108/ 24.49 x 14.09 x 4.25
Packing — Weight (kg/lb.)	2.85/6.28	3.87/8.53	5.04/11.11	4.3/9.48	5.04/11.11
Included accessories	• Power cord • Power adapter • Wall mount kit	• Power cord • Rack mounting kit	• Power cord • Wall mount kit • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit
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	0°C to 50°C/ 32°F to 122°F
Operating — Humidity	10% to 95% (non-condensing)	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	-40°C to 70°C/ -40°F to 158°F
Storage — Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)	10% to 95% (non-condensing)
MTBF (hr)	432,673	910,015	879,243	229,313	612,215
Heat dissipation (BTU/hr)	55	585	712.93	108.77	747.9
Acoustic noise (min/max, dBA)	0	19/26	22.1/34.1	-/38.2	27.8/36.9

Features

Standard Compliance
- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Ethernet
- IEEE 802.3ab (1000BASE-T) Ethernet
- IEEE 802.3x flow control
- IEEE 802.3az EEE support
- IEEE 802.1p CoS support
- IEEE 802.3af PoE
  (GS1900-8HP/10HP/24HP/48HP)
- IEEE 802.3at PoE plus
  (GS1900-8HP/10HP/24HP/48HP)
- IEEE 802.1D Spanning Tree Protocol
  (STP)
- IEEE 802.1w Rapid Spanning Tree
  Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree
  Protocol (MSTP)
- Full-duplex and half duplex
  operation with IEEE 802.3x flow
  control and backpressure
- Store and forward
- Auto MDI/MID-X

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
- Dual configuration files
- Dual images

Traffic Management and QoS
- IEEE 802.1Q VLAN tagging
- IEEE 802.3ad LACP
- Guest VLAN
- Voice VLAN
- Storm control
- IEEE 802.1p priority queues per port
- IEEE 802.1p Queuing method
  (SPQ/WRR)
- Input priority mapping
- Rate limiting per port
  (ingress/egress)
- IEEE 802.3x flow control

Class of Service (CoS)
- IEEE 802.1p class of service
  (SPQ, WRR)
- Port-based CoS
- IP TOS precedence

Security
- IEEE 802.1x
- Port security
- Layer 2 MAC filtering
- Static MAC forwarding
- RADIUS
- TACACS+
- SSL
- Management VLAN
- CPU defense engine
- DoS prevention

Layer 2 Multicast
- IGMP snooping (v1, v2, v3)

IPv6 Management
- IPv6 over Ethernet (RFC 2464)
- Dual-stack (RFC 4213)
- ICMPv6 (RFC 4884)
- Neighbor discovery (RFC 4861)
- Auto configuration
- Static IPv6 address and prefix length
- Static IPv6 default gateway
- IPv6 duplicate address detection

Manageability
- SNMP v1, v2, v3
- RMON (1, 2, 3, 9)
- ICMP echo/echo reply
- Syslog
- IEEE 802.1AB LLDP
- IEEE 802.1AB LLDP-MED
- **New for V2.60** LLDP-Power via MDI

Device Management
- Web interface
- Remote firmware upgrade by Web
- Configuration saving and retrieving
- Firmware upgrade via SNMP
- DHCP client
- Daylight saving
- NTP
- Port mirroring
- Scheduled PoE
- PoE default consumption mode
- Time range group for scheduled PoE

MIB
- RFC 1213 MIB II
- RFC 2819 RMON (group 1, 2, 3, 9)
- RFC 1215 generic traps
- RFC 1493 bridge
- Zyxel private common MIB

Certifications
- EMC
  - CE, FCC, C-Tick, Class A
    (GS1900-24/24HP/48/48HP)
  - CE, FCC, C-Tick, Class B
    (GS1900-8/8HP/10HP/16/24E)
  - BSMI CNS13438
- Safety
  - LVD EN60950-1
  - BSMI CNS14336-1
  - CB IEC60950-1
    (GS1900-8HP/10HP/16/24E/24)
- RoHS compliant

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
  - Firmware upgrade
  - Password configuration
  - One-click quick association with
    Zyxel AP Configurator (ZAC)

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)	-

01/06/20