ZyXEL

- **Comprehensive L2 switching features**
- **20, 56 and 100 Gbps non-blocking switch fabric (GS2200-8/8HP, GS2200-24/24P and GS2200-48)**
- **2/4 dual-personality (RJ-45/SFP) GbE interfaces**
- **Port security and enhanced 802.1X port authentication**
- **MAC freeze and intrusion lock**
- **8 IEEE 802.1p hardware priority queues**
- **WFQ, WRR and SPQ queuing algorithms**
- **IEEE 802.3at PoE Plus support (GS2200-8HP)**
- **IEEE 802.3af PoE support (GS2200-8HP/24P)**
- **PoE power consumption mode for enhanced energy efficiency (GS2200-8HP/24P)**
- **Dual-speed (100/1000 Mbps) fiber connectivity (GS2200-8/8HP)**
- **IPv6 Ready Logo approved**

GS2200 Series
8/24/48-port GbE L2 Switch

Efficient, Productive Gigabit Solutions for Evolving Access Networks

The ZyXEL GS2200 Series is a line of Gigabit L2 switches designed to provide high-speed Gigabit connectivity, guaranteed access security, and advanced traffic prioritization and monitoring features for businesses. It consists of three Gigabit switches, providing 8/24/44 Gigabit Ethernet ports (GS2200-8/24/48), and two Gigabit PoE switches, providing 8/24 Gigabit PoE ports (GS2200-8HP/24P). The complete GS2200 Series comes with 2/4 dual-personality GbE interfaces for added deployment flexibility, while the GS2200-48 comes with two additional Gigabit open SFP slots for bandwidth-intensive applications.

Benefits

Non-blocking GbE performance for modern access networks

The ZyXEL GS2200 Series is designed with high-performance switching architecture that provides 20/56/100 Gbps non-blocking switch fabric, 14.9/41.7/74.4 Mpps forwarding rates and wire-speed performance for bandwidth-demanding applications in corporate networks. For branch offices and small to medium-sized businesses, the GS2200 Series enables the delivery of converged applications and adapts to changing business needs with flexible configurations.

Secure, enhanced management functionality

The GS2200 Series is easy to use and manage for applications needed to support business operations as well as to increase productivity. The CPU protection feature can greatly reduce the likelihood of malfunctions. ZyXEL iStacking™ clustering management technology can manage devices across different floors and routing domains to locate other iStacking-capable switches in the same management cluster. This allows administrators to manage up to 24 switches with one single IP address. ZyXEL iStacking™ greatly reduces operating costs and offers more flexible maintenance of ZyXEL Switches. IT staff can opt for the Web or command line interface to suit their needs, and even encrypt their instructions with SSHv1/v2 and SSL. With these sophisticated functionalities, the IT staff is empowered to build a highly secure and efficient corporate network with minimum effort.

Rich IPv6 and other features built-in for future-proof network expansions

ZyXEL considers IPv6 management features as future trend, and therefore added complete IPv6 management capability to the 8/24-port GS2200. The great features are not only beneficial for high-density Gigabit Ethernet deployments, but also perfectly suitable for both network cores and edges.

Besides, the GS2200 Series provides rich features including VLANs, CoS/QoS, Port Trunking, Rapid Spanning Tree, Security (Port Security and 802.1X authentication) and network management to meet evolving SME requirements. Meanwhile, the GS2200 Series delivers one of the most cost-effective Gigabit Ethernet solutions to empower Gigabit converged networking for branch offices and SME users.

Intelligent PoE for cost saving (GS2200-8HP/24P)

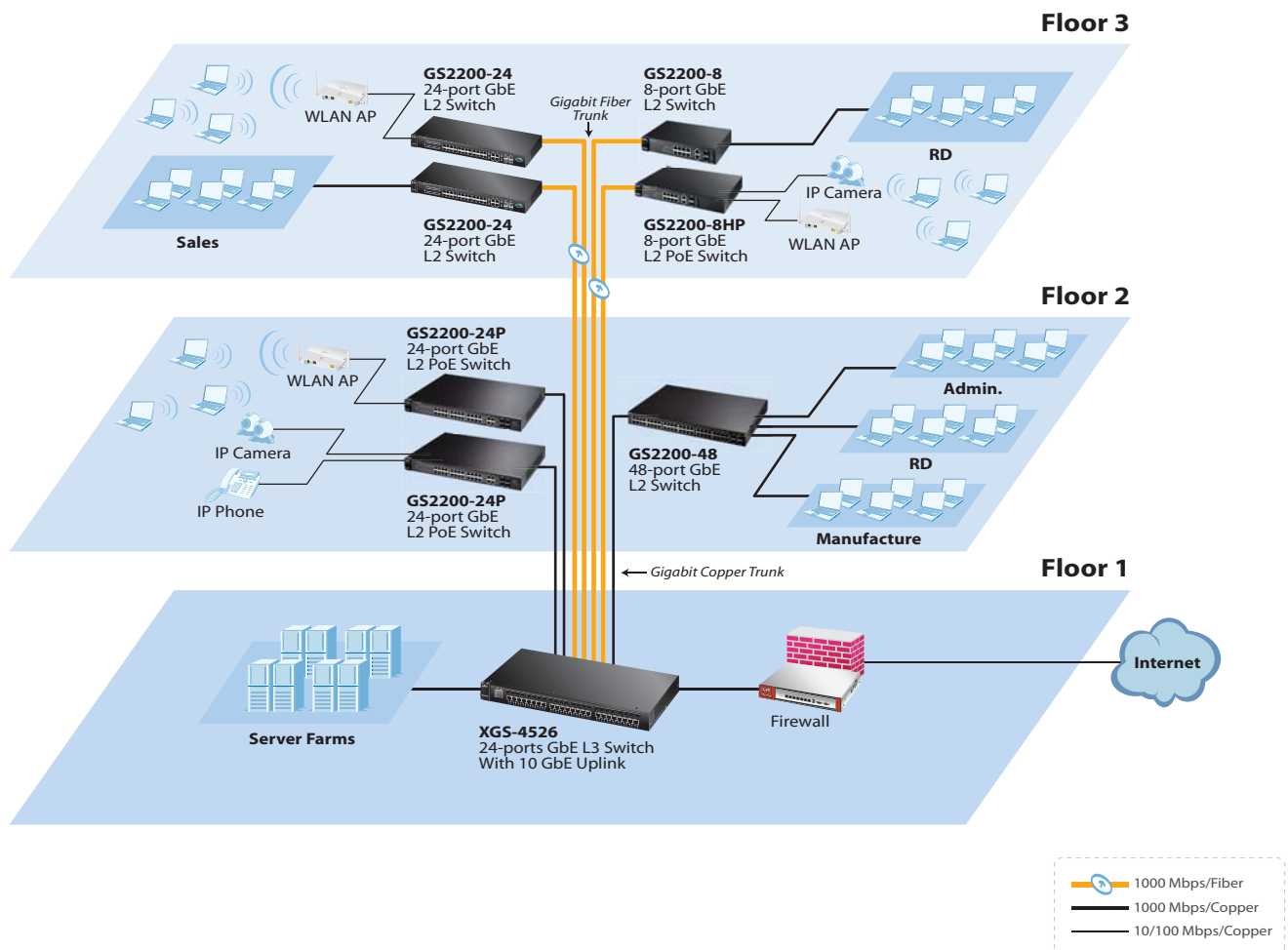ZyXEL's Intelligent PoE features provide two power supply modes:

- Classification Mode: the switch reserves the maximum power (W) to each powered device (PD) according to the priority levels.

- Consumption Mode: the switch manages the entire power supply, so each connected PD gets the actual power it needs.

In the Consumption Mode, ZyXEL's intelligent PoE, GS2200-8HP/24P, will reserve the required power automatically, and you can set power feeding priorities on different ports to get the best use of power resource. This capability can increase the number of devices connected and deliver a better ROI for the business.

The GS2200-8HP provides 180 W of total budget power to port 1-4 with 30 W each and to 5-8 with 15.4 W each; this is sufficient for full loading to support all needs. Besides, the GS2200-24P provides a total budget power up to 220 W. With the PPS250 external PoE power supply, the GS2200-24P can provide 15.4 W per port to 24 PoE ports simultaneously.

Key Applications

Deploying Gigabit to the desktop to boost performance of networks and bandwidth-intensive applications

Specifications

Model	GS2200-8	GS2200-8HP	GS2200-24	GS2200-24P	GS2200-48
Product Description	8-port GbE L2 Switch	8-port GbE L2 PoE Switch	24-port GbE L2 Switch	24-port GbE L2 PoE Switch	48-port GbE L2 Switch
Port Density					
10/100/1000BASE-T	8	-	24	-	44
10/100/1000BASE-T PoE	-	8	-	24	-
Open SFP (GbE)	-	-	-	-	2
Dual Personality GbE Ports	2	2	4	4	4
Performance					
Switching Capacity (Gbps)	20	20	56	56	100
Switching Forwarding Rate (Mpps)	14.9	14.9	41.7	41.7	74.4
Packet Buffer (Bytes)	448K	448K	448K	448K	512K
MAC Address	16K	16K	16K	16K	8K
Power Requirement					
Input Voltage of AC	100 - 240 V AC, 50/60 Hz				
Maximum Power Consumption (Watt)	12.3	230	28	260	92.8
Physical Specifications					
Dimensions (WxDxH)(mm)(in.)	250 x 150 x 44/ 9.84 x 5.9 x 1.73	330 x 230.5 x 44/ 12.99 x 9.07 x 1.73	440 x 172 x 45/ 17.32 x 6.77 x 1.77	440 x 330 x 45/ 17.32 x 12.99 x 1.77	438 x 300 x 44.5/ 17.24 x 11.81 x 1.75
Weight (kg/lb.)	1.34/2.95	2.66/5.86	2.44/5.38	4.86/10.71	4.5/9.92
Environmental Specifications					
Operating Temperature	0°C to 50°C/32°F to 122°F				0°C to 45°C/ 32°F to 113°F
Storage Temperature	-40°C to 70°C/-40°F to 158°F				-25°C to 70°C/ -13°F to 158°F
Operating Humidity	10% to 95% (Non-condensing)				10% to 90% (Non-condensing)

Features

Standard Compliance
- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Ethernet
- IEEE 802.ab 1000BASE-T Ethernet
- IEEE 802.3z 1000BASE-X Ethernet
- IEEE 802.3x flow control
- IEEE 802.1D spanning tree protocol
- IEEE 802.1w rapid spanning tree protocol
- IEEE 802.1s multiple spanning tree protocol
- IEEE 802.1p class of service, priority protocols
- IEEE 802.1X port authentication
- IEEE 802.3ad LACP aggregation
- IEEE 802.3af PoE (GS2200-8HP/24P)
- IEEE 802.3at PoE Plus (GS2200-8HP)
- IEEE 802.3az EEE (Energy Efficient Ethernet) support (GS2200-8/8HP)

Traffic Management and QoS
- Rate limiting: Rule-based/port-based bandwidth control, 64 kbps granularity
- Dual-Rate-Three-Color (GS2200-48)
- Port-based egress traffic shaping
- Broadcast storm control
- IEEE 802.1p with 8 priority queues per port for different traffic types
- Weighted Round Robin (WRR)/SPQ/WFQ scheduling algorithm

- Supports DSCP
- Supports DSCP to 802.1p priority mapping
- Supports IGMP/IGMP snooping v1, v2, v3
- Congestion control on all ports

Link Aggregation
- IEEE 802.3ad LACP link aggregation compliant
- Support static manually port trunking
- Up to 8 aggregation groups, 8 ports/per group randomly selected (GS2200-48 remains 6/8)

Resilient Network
- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- Backup Power System (BPS) power supply redundancy (GS2200-48)
- PoE Power Supply (PPS) support to be a full power budget PoE device (GS2200-24P)

User Security and Authentication
- MAC filtering per port secures access to each port
- IEEE 802.1Q tag-based and port-based VLAN
- Guest VLAN (Port based/MAC based)

9 MAC per port (Exclusive with protocol-based & IP subnet-based VLAN, for 8/24 port devices)
- Support GVRP, automatic VLAN member registration
- 256 static VLAN, up to 4K dynamic VLAN (GS2200-48)
- 1K static VLAN, up to 4K dynamic VLAN (GS2200-8/8HP/24/24P)
- Full range 4K PVID support
- Port-base VLAN & VLAN isolation
- Intrusion lock
- MAC freeze
- Specific MAC forwarding per port: only specified MAC addresses can access the network (Port security)
- Limited MAC number per port
- IP source guard
- Loop guard
- RADIUS MAC login
- IP filtering
- TCP/UDP socket filtering
- BPDU transparency
- 802.1X port-based authentication, compensated assignment over VLAN and bandwidth for valid access
- TACACS+
- Password encryption (GS2200-8/8HP/24/24P)

Network Administration Security

- User name/password required for Web/Telnet/local console administrators
- Two-level security by specific SNMP read/write community
- Multiple login session
- Multiple access permission management
- SSH v1/v2
- SSL

IPv6 Support

- IPv6 over Ethernet
- IPv6 Addressing
- IPv6 Path MTU
- ICMPv6
- DualStack
- Neighbordiscovery
- DHCPv6 client
- DHCPv6 relay

Network Management

- Supports ZyXEL iStacking™, up to 24 switches can be managed by one IP address
- Web-based management
- Telnet CLI
- SNMP v1, v2c, v3
- RS-232c local console
- IP management: Static IP or DHCP client
- RMON four RMON groups 1, 2, 3, 9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
- Port mirroring: supports source/destination/ both port mirroring

Intelligent ACL
(L2/L3/L4 Access List Control)

- Based on MAC address
- Based on VLAN
- Based on IP address
- Based on protocol type
- Based on TCP/UDP type
- Based on DSCP

MIB Information

- RFC 1066 TCP/IP-based MIB
- RFC 1213, 1157 SNMP v2c/v3 MIB
- RFC 2011, 2012, 2013 SNMP v2 MIB
- RFC 1493 bridge MIB
- RFC 2674 bridge MIB extension
- RFC 1643 Ethernet MIB
- RFC 2358 Ethernet-like MIB
- RFC 1757 RMON group 1, 2, 3, 9
- RFC 2819, 2925 Remote Management MIB
- RFC 3621—Power Ethernet MIB (GS2200-8HP/24P)
- ZyXEL private MIB

Certification

- UL (GS2200-8/8HP)
- CSA (GS2200-48)
- CE-LVD
- FCC, CE
- BSMI
- EU RoHS compliant

Accessories

Backup Power System (Optional)(GS2200-48)

Model	Features
BPS-120	• Up to 6 switches can be connected to one BPS-120 • Provides power to one switch without adding traffic, user interruption or switch reboot in case of any internal power supply failure on the switch • Temperature, power and fan speed monitoring • Dimensions (WxDxH): 438 x 270 x 44.5 mm (17.32" x 10.63" x 1.77") • Weight: 4.0 kg (8.82 lb.)

PoE Power Supply (Optional)(GS2200-24P)

Model	Features
PPS250	• Power module for ZyXEL Ethernet PoE Switch • Provides extra power budget to GS2200-24P of up to 400 W for PoE support • Temperature and fan monitoring • Dimensions (WxDxH): 280 x 206 x 44 mm (11.02" x 8.11" x 1.73") • Weight: 2 kg (4.41 lb.)

SFP Transceivers (Optional)

Transceiver Class	Gigabit SFP							Fast Ethernet SFP				
	SFP-1000T	SFP-SX-D	SFP-LX-10-D	SFP-BX1310-10-D	SFP-BX1490-10-D	SFP-LHX1310-40-D	SFP-ZX-80-D	SFP-100FX-2	SFP-100TX	SFP-100LX-20	SFP-100BX1310-20-D	SFP-100BX1550-20-D
Connector	RJ-45	LC	LC	LC	LC	LC	LC	LC	RJ-45	LC	LC	LC
Wavelength	-	850 nm	1310 nm	1310 nm (TX) 1490 nm (RX)	1490 nm (TX) 1310 nm (RX)	1310 nm	1550 nm	1550 nm	-	1310 nm	1310 nm (TX) 1550 nm (RX)	1550 nm (TX) 1310 nm (RX)
Max Transmission Distance	100 m	550 m	10 km	10 km	10 km	40 km	80 km	2 km	-	20 km	20 km	20 km
Support DDMI Features	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes

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