



## GS2210-8HP

### 8 Port PoE Layer 2 Industrial Switch

The Zyxel GS2210-8HP are fully featured Layer 2 Gigabit access switches designed to meet converged data, video and voice networking needs. The PoE models comply with the IEEE 802.3af PoE and 802.3at PoE Plus standards and provide a high PoE power budget. With rich traffic shaping, network isolation, and security features, the GS2210-8HP is the perfect L2 access switch solution for converged data, video and voice networking.

### Benefits

#### Agile traffic control for converged networking applications

The Zyxel GS2210-8HP has a rich Layer 2 feature set that can shape the traffic for diverse VoIP, video conference, IPTV and IP surveillance deployments. Advanced traffic control features of the GS2210-8HP such as L2 multicast, IGMP snooping, Multicast VLAN Registration (MVR) provide hotels, businesses and educational institutions greater agility and more effective traffic management for the converged applications of today.



High power budget of 180 W



L2 multicast, IGMP snooping, MVR and voice VLAN for convergence



Enhanced network protection with IP source guard, DHCP snooping, ARP inspection, CPU protection



L2, L3 and L4 filtering, MAC freeze, port isolation, guest VLAN for improved isolation and access control

## 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 Wi-Fi AP and to Gateway.

## High-powered Power over Ethernet (PoE)

The GS2210-8HP PoE switches support the 802.3at PoE Plus standard which provides up to 30 watts of power per port for advanced Powered Devices (PD) like 802.11ac wireless APs and video IP phones. The high power budget enables the GS2210-8HP PoE switches to comfortably accommodate the PDs required in a modern network edge.

## GS2210-8HP 8-port GbE L2 PoE Industrial Switch



- 8 x GbE PoE RJ-45 ports
- 2 x GbE combo (RJ-45/SFP) ports
- 1 x Console Port (DB9)
- LED Indicator (PWR, SYS, ALM, LOCATOR, LINK/ACT, PoE)

## High level network and access security

Equipped with an extensive array of security features such as IP source guard, DHCP snooping, ARP inspection and CPU protection, the Zyxel GS2210-8HP offers enhanced control and isolation for improved convergence of video, voice and data. Combining multiple L2, L3 and L4 filtering mechanisms with such education- and hospitality-friendly features as MAC freeze, port isolation and guest VLAN, the Zyxel GS2210-8HP offers a high level of security, flexibility and control for diverse access layer deployments.

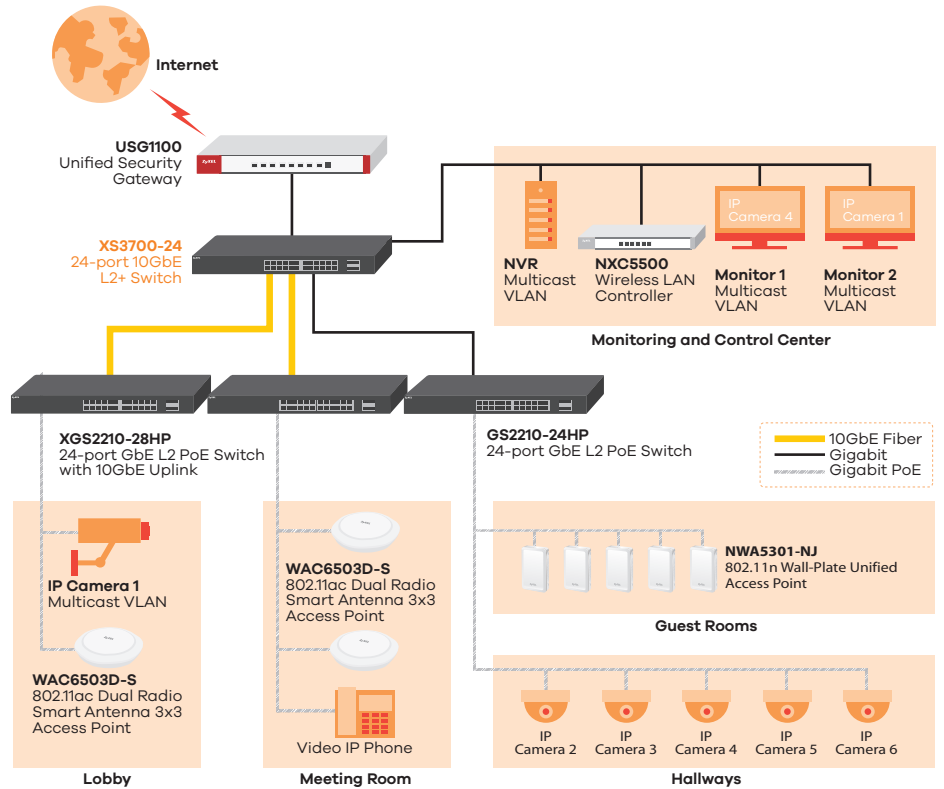
## Future-proof connectivity and scalability

Full IPv6 support with features including auto-configuration, duplicate address prevention, dual-stack (IPv4 and IPv6) and neighbor discovery, the Zyxel GS2210-8HP helps businesses and organizations stay ahead and get ready for future IPv6 networks.

## Key Applications

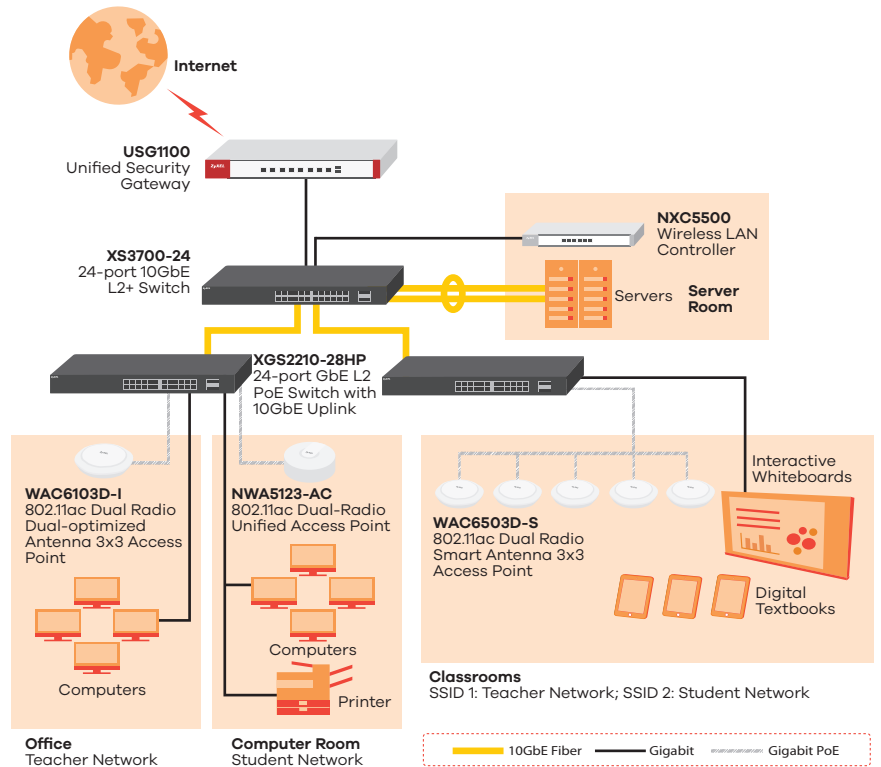
### IPTV, surveillance and guest access (hospitality)


- Each guest room can be assigned a dedicated data VLAN to provide better isolation and security to the Internet users
- The MVR function allows a single IPTV multicast VLAN to be shared with all the set-top boxes while the subscribers remain in separate data VLANs
- The total PoE power budget of up to 375 watts provides full supports to wireless APs and IP surveillance devices. (24HP/28HP/48HP/52HP)
- Enabling the IGMP snooping function allows IPTV traffic to be directed to the subscribers only, which reduces the waste of bandwidth caused by multicasting IPTV traffic to all ports
- The rich QoS feature set provides effective bandwidth prioritization and control to ensure various services quality and prevent bandwidth abuse



### Robust network infrastructure (education)

- The high power budget makes the GS2210-8HP perfect for classroom WLAN deployments with many APs for student digital textbooks
- The GS2210-8HP switch can separate the teacher's network from the student's network and grant different bandwidth privileges with port-based and ACL-based bandwidth management
- Support for 8 hardware queues per port and QoS based on 802.1p and DSCP reduces traffic congestions for latency-sensitive interactive learning applications
- Advanced defense mechanisms like IP source guard, DHCP snooping and ARP inspection safeguards the network from intentional attacks



<b>Model</b>	<b>GS2210-8HP</b>	
<b>Product name</b>	8-port GbE L2 PoE Industrial Switch	
		
<b>Switch class</b>	Layer 2	
<b>Port Density</b>		
<b>Total port count</b>	10	
100/1000 Mbps	-	
100/1000 Mbps PoE	8	
Gigabit SFP	-	
Gigabit combo (SFP/ RJ-45)	2	
<b>Performance</b>		
<b>Switching capacity (Gbps)</b>	20	
<b>Forwarding rate (Mpps)</b>	15	
<b>Packet buffer (byte)</b>	1.5 M	
<b>MAC address table</b>	16 K	
<b>Power</b>		
<b>Input</b>	100 - 240 V AC, 50/60 Hz	
<b>Max. power consumption (watt)</b>	230	
<b>Total PoE power budget (watt)</b>	180	
<b>Physical Specifications</b>		
<b>Item</b>	<b>Dimensions (WxDxH)(mm/in.)</b>	330 x 230.5 x 44.5/12.99 x 9.07 x 1.75
	<b>Weight(kg/lb.)</b>	2.703/5.96
<b>Packing</b>	<b>Dimensions (WxDxH)(mm/in.)</b>	389 x 337 x 79/15.31 x 13.27 x 3.11
	<b>Weight (kg/lb.)</b>	3.65/8.05
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>• Power cord</li> <li>• Rack mounting kit</li> </ul>	
<b>Green Feature</b>		
<b>Fanless</b>	-	
<b>Environmental Specifications</b>		
<b>Operating</b>	<b>Temperature</b>	0°C to 55°C/32°F to 131°F
	<b>Humidity</b>	10% to 95% (non-condensing)
<b>Storage</b>	<b>Temperature</b>	-40°C to 70°C/-40°F to 158°F
	<b>Humidity</b>	10% to 90% (non-condensing)
<b>MTBF (hr)</b>	1,155,719	
<b>Heat dissipation (BTU/hr)</b>	784.30	
<b>Acoustic noise (dBA)</b>	37.7	

## 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
- Loop guard
- Root guard
- BPDU 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 IP or MAC
- GVRP
- L2PT

### Security

- 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
- RADIUS accounting
- Authorization on RADIUS
- Authorization on TACACS+
- SSH v2
- SSL
- Intrusion lock
- MAC freeze
- DHCP snooping
- ARP inspection
- Static IP-MAC-Port binding
- Policy-based security filtering
- Port isolation
- IP source guard (IPv4/IPv6)
- MAC search
- Guest VLAN
- ACL packet filtering (IPv4/IPv6)
- CPU protection
- Interface related trap enable/disable (by port)
- MAC-based authentication per VLAN

### Quality of Service (QoS)

- No. of hardware queues per port: 8
- Storm control and event log : 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, WRR, hybrid-SPQ 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
- IGMP leave proxy

### 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
- Custom default
- Syslog (IPv4/IPv6)
- 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 Console, Telnet, SNMP
- Remote firmware upgrade by FTP/Web/TFTP
- Configuration saving and retrieving
- Multiple logins supported
- Configure clone
- Multilevel CLI
- CLI (Cisco-like)
- DHCP relay per VLAN
- DHCP client
- DHCP option 82
- DHCP Auto
- Daylight saving
- NTP supports IPv4/IPv6
- Port mirroring
- RS-232 out-of-band console port
- Scheduled PoE
- PoE default consumption mode

## MIB

- Zyxel new private 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 SMIPv2 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
- Cable diagnostic MIB

## 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)

## Certifications

### Safety

- LVD
- BSMI

### EMC

- FCC Part 15 (Class A)
- CE EMC (Class A)
- BSMI EMC

### RoHS

- Level A

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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Datasheet [GS2210-8HP](#)



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