ZyXEL

Non-stop Business Continuity for Mission Critical Applications

- **Full Layer 2 feature set with Layer 3 features including static routing, policy-based routing, VRRP and ECMP support**

- **Four (4) 1GbE SPF or 10GbE SFP+ uplink flexibility**

- **24 or 48 ports of Gigabit Ethernet desktop connectivity**

- **Hot-swappable power supply and fan modules**

- **Internal redundant power supply design**

- **High PoE power budget up to 1000 W**

- **Physical stacking up to 8 units and 384 Gigabit ports through 2 standard 10G SFP+ ports (XGS3700 Series only)**

The ZyXEL XGS3700/GS3700 Series are advanced Layer 2 Plus (Layer 3 Lite) Gigabit managed switches perfect for data center access, SMB core/aggregation, and mission critical PoE applications. The Series consists of eight (8) models including 24- and 48-port configurations, PoE and non-PoE models, as well as 1GbE (GS3700 Series) and 10GbE (XGS3700 Series) uplink options. The complete Series is designed with an advanced feature set with static routing, policy-based routing (PBR), VRRP and ECMP support. The high redundancy hardware architecture includes dual, internal power supplies and hot-swappable fan and power modules. The PoE models also comply with the IEEE 802.3at PoE Plus standard and provide industry-leading PoE power budget of up to 1000 watts.

Benefits

Resiliency and availability for non-stop business continuity

The ZyXEL XGS3700/GS3700 Series features a no single point of failure (NSPOF) hardware and software design to provide the resiliency needed for non-stop business continuity. Its high redundancy hardware architecture includes dual, internal power supplies—which not only ensures 100% uptime in the event of a power supply failure, but also saves rack space compared to external power supplies. Additionally, both the fan module and the power supply modules are hot-swappable to enable zero downtime troubleshooting.

In terms of software features, the ZyXEL XGS3700/GS3700 Series supports Equal Cost Multipath Routing (ECMP) and Virtual Router Redundancy Protocol (VRRP) for increased network availability and reliability. The physical stacking feature of the XGS3700 Series facilitates management for multiple switches with one single interface. The cross-stack LACP technology allows traffics to be carried over to other links when a LACP link fails to provide high redundancy. The stacking ring technology allows no interruption to data forwarding if any stack switch fails to ensure resiliency.

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.

ZyXELonenetwork
Redefining network integration

XGS3700/GS3700 Series
24/48-port GbE L2+ Switch

| ZON Utility | Power Cycle | Reset to Default | Web GUI Redirection | Neighbor Device Discovery | Energy Efficient Ethernet | |

High power capacity and high availability for mission critical PoE applications

The ZyXEL XGS3700/GS3700 Series features four (4) high power PoE models in 24- and 48-port configurations. The complete PoE portfolio provides up to 30 watts per port with IEEE 802.3at PoE Plus compliance, and is backward compatible with the IEEE 802.3af standard. All models provide an industry-leading PoE power budget of 1000 watts with dual power supply units or 460 watts with a single power supply unit. Combined with the high resiliency hardware and software features, the XGS3700/GS3700 Series PoE switches are ideal for mission critical IP surveillance, WLAN and high quality VoIP applications.
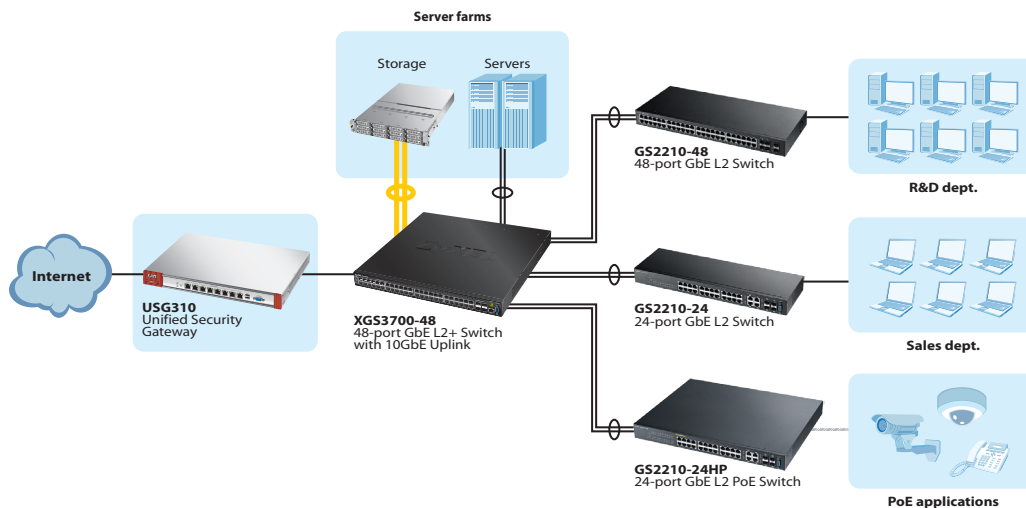
Deployment flexibility and investment protection

With a comprehensive portfolio of eight (8) 24-/48-port, PoE/non-PoE and 1GbE/10GbE uplink configurations, the ZyXEL XGS3700/GS3700 Series provides the flexibility to be deployed in all sorts of deployments including data center access, SMB core/aggregation, and mission critical PoE applications. The Series provides added routing flexibility with support for static routing and policy-based routing (PBR); and its full and consistent GUI, CLI and MIB ensures simplified management and consistent configurations.
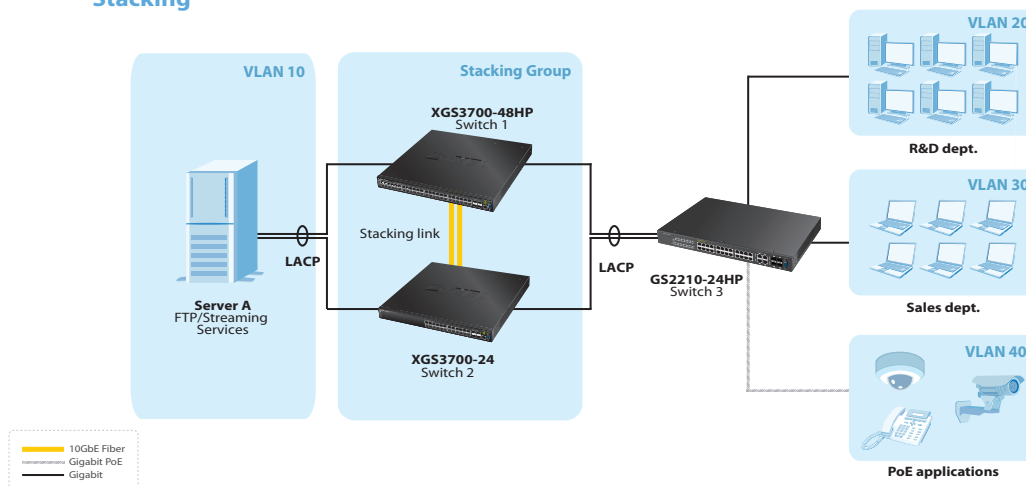
Investment protection is guaranteed with the ZyXEL XGS3700/GS3700 Series. Its high port density and high power budget design leaves room for future deployment expansion and eliminates the need to purchase additional equipment. The four (4) 10GbE ports on the XGS3700 models facilitate easy transition to 10GbE networking in data center and enterprise networks, while full IPv6 support ensures that your network is ready for the future.

Key Applications

SMB core

Stacking

Specifications

Model	XGS3700-24	XGS3700-24HP	XGS3700-48	XGS3700-48HP	GS3700-24	GS3700-24HP	GS3700-48	GS3700-48HP
Product name	24-port GbE L2+ Switch with 10GbE Uplink	24-port GbE L2+ PoE Switch with 10GbE Uplink	48-port GbE L2+ Switch with 10GbE Uplink	48-port GbE L2+ PoE Switch with 10GbE Uplink	24-port GbE L2+ Switch	24-port GbE L2+ PoE Switch	48-port GbE L2+ Switch	48-port GbE L2+ PoE Switch
Switch class	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)	Layer 2 Plus (Layer 3 Lite)
Port Density								
Total port count	28	28	52	52	28	28	52	52
100/1000 Mbps	24	-	48	-	24	-	48	-
100/1000 Mbps PoE	-	24	-	48	-	24	-	48
Gigabit SFP	-	-	-	-	4	4	4	4
10-Gigabit SFP+	4	4	4	4	-	-	-	-
Stacking	Yes	Yes	Yes	Yes	-	-	-	-
Performance								
Switching capacity (Gbps)	128	128	176	176	56	56	104	104
Forwarding rate (Mpps)	95	95	131	131	42	42	77	77
Packet buffer (byte)	2 M	2 M	2 M	2 M	2 M	2 M	2 M	2 M
MAC address table	16 K	16 K	16 K	16 K	16 K	16 K	16 K	16 K
IP address table	1 K	1 K	1 K	1 K	1 K	1 K	1 K	1 K
Routing entries	64	64	64	64	64	64	64	64
Routing domains	128	128	128	128	128	128	128	128
Power								
Input	100 - 240 V AC, 50/60 Hz							
Max. power consumption (watt)	Single PSU 57.8 W Dual PSU 70.3 W	Single PSU 534.3 W Dual PSU 1,098.5 W	Single PSU 74.7 W Dual PSU 87.6 W	Single PSU 556.7 W Dual PSU 1,121.3 W	Single PSU 51 W Dual PSU 62.6 W	Single PSU 526.3 W Dual PSU 1,087.9 W	Single PSU 71.1 W Dual PSU 81.9 W	Single PSU 546.3 W Dual PSU 1,111.3 W
Total PoE power budget (watt)	-	Single PSU 460 W Dual PSU 1,000 W	-	Single PSU 460 W Dual PSU 1,000 W	-	Single PSU 460 W Dual PSU 1,000 W	-	Single PSU 460 W Dual PSU 1,000 W
Redundant power supply	Yes (optional)	Yes (optional)	Yes (optional)	Yes (optional)	Yes (optional)	Yes (optional)	Yes (optional)	Yes (optional)
Physical Specifications								
Dimensions (WxDxH)(mm/in.)	440 x 437 x 40/17.32 x 17.2 x 1.57							
Weight (kg/lb.)	7.27/16.03	7.55/16.64	7.57/16.69	8.02/17.68	7.24/15.96	7.44/16.4	7.55/16.64	8/17.64
Removable power/fan module	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Included accessories	• Power cord • Rack mounting kit							
Environmental Specifications								
Operating Temperature	0°C to 50°C/32°F to 122°F							
Operating Humidity	10% to 95% (non-condensing)							
Storage Temperature	-40°C to 70°C/-40°F to 158°F							
Storage Humidity	10% to 90% (non-condensing)							
MTBF (hr)	280,000	220,000	250,000	200,000	280,000	220,000	250,000	200,000
Heat dissipation (BTU/hr)	Single PSU 197.1 Dual PSU 239.7	Single PSU 1,821 Dual PSU 3,745.9	Single PSU 254.7 Dual PSU 298.7	Single PSU 1,898.3 Dual PSU 3,823.6	Single PSU 173.9 Dual PSU 214.5	Single PSU 1,794.7 Dual PSU 3,707.7	Single PSU 242.5 Dual PSU 279.3	Single PSU 1,862.9 Dual PSU 3,789.5
Acoustic noise	53.3 dBA	53.3 dBA	53.6 dBA	53.6 dBA	53.3 dBA	53.3 dBA	53.6 dBA	53.6 dBA

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 802.3aq 10GBASE-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 802.3ah OAM
- IEEE 802.1ag CFM
- 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
- Virtual Router Redundancy Protocol (VRRP)
- Loop guard
- ErrDisable recovery
- MRSTP (ZyXEL Proprietary)
- Dual configuration files
- Dual flash images
- Dual redundant power supply support
- Hot-swappable fan module
- Physical stacking (XGS3700-24/24HP/48/48HP)

Traffic Control
- 802.1Q static VLANs/dynamic VLANs: 1 K/4 K
- Port-based VLAN
- Protocol-based VLAN
- Private VLAN
- IP subnet-based VLAN
- VLAN trunking
- VLAN translation
- VLAN ingress filtering
- 802.1ad VLAN stacking (Q-in-Q)
- LACP algorithm of source/destination IP
- GVRP
- Selected Q-in-Q
- L2PT

Security
- 802.1X
- Port security
- MAC authentication
- Layer 2 MAC filtering
- Layer 3 IP filtering
- Layer 4 TCP/UDP socket filtering
- BPDU transparency
- 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+
- Authorization on console
- SSH v1/v2
- SSL
- Intrusion lock
- MAC freeze
- DHCP snooping
- ARP inspection
- ARP freeze
- Static ARP
- Static IP/MAC binding
- Policy-based security filtering
- Port isolation
- IP source guard
- Limit number of MAC per VLAN
- MAC search
- Guest VLAN
- ACL packet filtering (IPv4/IPv6)
- PPPoE relay agent
- PPPoE option 82
- PPPoE IA
- CPU protection
- MAC pinning
- Interface related trap enable/disable (by port)

Quality of Service (QoS)
- No. of hardware queues per port: 8
- 802.1p queuing method: SPQ/WRR/WFQ
- Storm control: Broadcast, multicast, unknown unicast (DLF)
- Port-based rate limiting (ingress/egress): */64 Kbps
- Rate limiting per IP/TCP/UDP per port
- Policy-based rate limiting
- Policy-based bandwidth control granularity
- Ingress CIR for bandwidth control

- 802.3x flow control
- Port-based egress traffic shaping CIR/PIR support
- Policy-based prioritization
- Two Rate Three Color Marking (TRTCM)
- 802.1p Class of Service (SPQ, WFQ, SPQ/WFQ combination capable)
- DiffServ (DSCP)

Layer 2 Multicast
- L2 multicast (Group)
- 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
- IPv6 MLD snooping proxy

Routing
- Static route
- Policy-based route
- IP port moving
- Multiple default route

Manageability
- SNMP v1, v2c, v3
- SNMP trap group
- RMON (1, 2, 3, 9)
- ICMP echo/echo reply
- Syslog
- IEEE 802.3ah OAM (Link discovery, loopback)
- IEEE 802.1ag CFM
- 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 (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

Device Management
- iStacking
- Web interface
- Management through Console, Telnet, SNMP
- Firmware upgrade by FTP
- Remote firmware upgrade by FTP/Web
- Configuration saving and retrieving
- Multiple logins supported
- Configure clone
- Multilevel CLI
- CLI (Cisco-like)
- DHCP servers
- DHCP relay per VLAN
- DHCP client
- DHCP option 82
- DHCP option 82 profile
- Daylight saving
- NTP
- Port mirroring
- Port mirroring per IP/TCP/UDP
- Policy-based port mirroring
- RJ-45 out-of-band management port
- RS-232 out-of-band console port
- sFlow
- Remote port monitoring

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 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 ENC

RoHS
- Level A (USG 50/100/100-PLUS/200)
- Per host session limit
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization

ZyXEL ONE Network

ZON Utility
- Discovery of ZyXEL switches, APs and gateways
- Centralized and batch configurations
  - IP configuration
  - IP renew
  - Device reboot
  - Device locating
  - Web GUI access
  - Firmware upgrade
  - 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)

Accessories

Fan and Power Modules

Item	Description
RPS300	Non-PoE power supply unit for GS3700-24, GS3700-48, XGS3700-24, XGS3700-48
RPS600-HP	PoE power supply unit for GS3700-24HP, GS3700-48HP, XGS3700-24HP, XGS3700-48HP
FAN500	Fan module

Transceivers (Optional)

Model	Speed	Connector	Wavelength	Max. Distance	DDMI
SFP10G-SR	10-Gigabit SFP+	Duplex LC	850 nm	300 m (984 ft)	Yes
SFP10G-LR	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
SFP-1000T	Gigabit SFP	RJ-45	-	100 m (328 ft)	-
SFP-SX-D	Gigabit SFP	LC	850 nm	550 m (1804 ft)	Yes
SFP-LX-10-D	Gigabit SFP	LC	1310 nm	10 km (10936 yd)	Yes
SFP-BX1310-10-D	Gigabit SFP	LC	1310 nm (TX)	10 km (10936 yd)	Yes
SFP-LHX1310-40-D	Gigabit SFP	LC	1490 nm (RX)	40 km (43744 yd)	Yes
SFP-ZX-80-D	Gigabit SFP	LC	1310 nm	80 km (87488 yd)	Yes

Direct Attach Cables (Optional)

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