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# **Company Profile**

### About ZyXEL

ZyXEL offers a high-performance, carrier-grade suite of access and security solutions. Through our partner alliances, we provide businesses with complete solutions and seamless support. With expertise in diverse technologies like wireless, security, Powerline, Ethernet, xDSL and VoIP, ZyXEL offers integrated, secure network solutions to SMB,

SOHO, residential and service provider markets. In addition, ZyXEL's North American ZySTAR Channel Program offers industry-leading incentives with its full line of products. ZyXEL's North American headquarters including Tech Support are located in Anaheim, California. For more information, please visit the company's Web site at <a href="http://www.us.zyxel.com">http://www.us.zyxel.com</a>.



# **ZyXEL Green Initiatives**

It's easy being green. And it's nothing new for ZyXEL. Our corporate culture since inception is one of accountability and responsibility, including a sincere interest in generating a more positive social influence and persuade society to contribute as well. ZyXEL has created a park next to its headquarters that neutralizes a substantial amount of the building's carbon dioxide, thus improving the local work environment. Of course office materials are recycled and products designed to conserve power when not in active use.

ZyXEL's corporate headquarters building utilizes glass sunroofs to save energy otherwise spent on daytime illumination. Hallways and non-operational areas in the HQ building run at only 50% illumination during the daytime to save energy. The air conditioning in the HQ building is set to maintain the 26 -  $28^{\circ}$ C/ $79^{\circ}$ F -  $82^{\circ}$ F temperature to reduce energy consumption. And "Stair-climbing Parties" are held to promote exercise and reduce elevator usage.



# **Internet Security**

ZyXEL's ZyWALL security products provide a robust SPI and UTM Firewall to protect SMB networks while offering vital IPSec VPN functionality for secure connections between remote offices. ZyWALL UTM products protect against harmful network threats (viruses, spam, intrusion, and content filtering), increasing productivity while keeping both network quality and security high.





### **Unified Security Gateway Series**



- ICSA-certified IPSec VPN and ICSA-certified SPI firewall for secure remote access
- 24Mbps firewall throughput
- High availability with redundant IPSec VPN & dial backup
- Category based content filtering with Bluecoat service



- ICSA-certified IPSec VPN and ICSA-certified SPI firewall for secure remote access
- Mobile Internet access to both 3G and Wi-Fi networks
- 4-Port Ethernet/DMZ secures internal network from external access
- Wi-Fi 802.11a/b/g access point built-in
- Use 3G connection as primary LAN, for load balancing, or fail over



- ICSA-certified IPSec VPN and ICSA-certified SPI firewall for secure remote access
- 50Mbps firewall throughput
- 25Mbps IPSec VPN throughput, 10 concurrent tunnels
- Category based content filtering
- 1 WAN, 4 LAN/DMZ secures internal network from external access



**ZyWALL USG Family** ZWUSG100 ZWUSG1000 ZWUSG200 ZWUSG2000 ZWUSG300

- Unified Security Gateway to provide Hybrid VPN (IPSec / SSL VPN) and UTM security services
- ICSA certified VPN, firewall and antivirus for proven dependability
- Passive/Active high availabilty
- Application Patrol to manage use of IM/P2P applications
- · Object/text-based configuration and centralized management
- User based policy engine for granularity



- UTM firewall & VPN concentrator for 10-25 users
- 100Mbps firewall throughput
- 24Mbps UTM throughput (antivirus, IDP, firewall)
- Can aggregate 25 IPSec VPNs and up to 5 SSL VPNs
- 7 Gigabit ports 2 WAN, 5 LAN/DMZ



- UTM firewall & VPN concentrator for 25-50 users for optimum security
- 150Mbps firewall throughput
- 24Mbps UTM throughput (antivirus, IDP, firewall)
- Can aggregate 100 IPSec VPNs and up to 10 SSL VPNs
- 7 Gigabit ports 2 WAN, 4 LAN/DMZ, 1 WAN/LAN/DMZ for flexibility



### **Unified Security Gateway Series**



- UTM firewall & VPN concentrator for 50-75 users
- 200Mbps firewall throughput
- 48Mbps UTM throughput (antivirus, IDP, firewall)
- Can aggregate 200 IPSec VPNs and up to 25 SSL VPNs
- 7 Gigabit configurable WAN/LAN/DMZ ports for flexibility



- UTM firewall & VPN concentrator for 75-200 users
- 350Mbps firewall throughput
- 100Mbps UTM throughput (antivirus, IDP, firewall)
- Can aggregate 1,000 IPSec VPNs and up to 250 SSL VPNs
- 5 Gigabit configurable WAN/LAN/DMZ ports for flexibility





- Enterprise strength UTM firewall & VPN concentrator
- 2000Mbps firewall throughput
- 400Mbps UTM throughput (antivirus, IDP, firewall)
- Can aggregate 2,000 IPSec VPNs and up to 750 SSL VPNs
- 6 Gigabit ports + 2 dual (copper/SFP) gigabit ports for flexibility

### Security Software and Accessories





- Supports two-factor authentication for one-time secure SSL VPN login
- 128bit AES encryption and 160bit number generation (OATH algorithm)
- Interoperable with Windows 2000/XP network login
- Seamless integration with ZyWALL security products





- Windows 2000, XP and Vista support for total SMB security
- Interoperable with ZyWALL and most IPSec VPN gateways
- IPSec VPN tunneling with DES 56bit / 3DES 168bit / AES 256bit encryption
- Profile can be exported/imported to many PCs for easy deployment
- Supports NAT Traversal, DPD and Redundant Gateway





- Vantage CNM software for centralized UTM management
- Group device configuration for mass deployments
- Real-time monitoring, alerting
- · Comprehensive reporting

### Security Software and Accessories





### **Network Reporting Analyzer**

VANRPT1DEV VANRPT5DEV VANRPT25DEV

- Vantage Reporting software for comprehensive graphical reports
- Automated scheduled reports
- · Customizable report templates
- Real-time traffic analysis

### **Security Licenses**





### Gateway Anti-Virus Licenses

ICAV1YUSG100 ICAV1YUSG1000 ICAV1YUSG200 ICAV1YUSG2000 ICAV1YUSG300

- Protect against zero-day attacks and most popular viruses
- Supports 8,300 signatures (15,000 in 2.11 firmware)
- ICSA-certified by industry leading anti-virus testing facility
- 1 year stackable license





### **Content Filtering Licenses**

ICARDCF1YSI ICARDCF1YGO ICARDCF1Y2WG ICCF1YUSG100 ICCF1YUSG200 ICCF1YUSG300 ICCF1YUSG1000 ICCF1YUSG2000

- Automatically block unwanted content by subject/catagory
- 60+ URL categories (spyware, phising, malware sources, porn...)
- Powered by Blue Coat, industry leader in web filtering technologies
- 1 year stackable license





### Gateway IDP Licenses

ICID1YUSG100 ICID1YUSG1000 ICID1YUSG200 ICID1YUSG2000 ICID1YUSG3000

- Blocks trojans and backdoor applications for optimum network security
- Supports 2,500 IDP signatures
- Granular control over IM and P2P applications
- 1 year stackable license





### Total Security Licenses

ICTS1YUSG100 ICTS1YUSG200 ICTS1YUSG3000

ICTS1YUSG1000 ICTS1YUSG2000

- · All in one anti-virus, content filter and IDP license
- Total protection for your internal network
- 1 year stackable license





### Numbers of SSL VPN Tunnels

SSL10ICARD SSL2T05USG100 SSL2T010USG200 SSL2T010USG300 SSL2T025USG300 SSL10T025USG300 SSL5T0250USG1000 SSL25T0250USG1000 SSL50T0250USG1000 SSL5T050USG2000

 SSL2T025USG300
 SSL5T0250USG2000

 SSL10T025USG300
 SSL5T0750USG2000

 SSL5T025USG2000
 SSL50T0250USG2000

SSL5T050USG1000 SSL50T0750USG2000 SSL25T050USG1000 SSL2505T0750USG2000

- Extend SSLVPN tunnel numbers
- SSL10 10/25, USG100 2/5, USG200 2/10
- USG300 2/10/25, USG1000 5/25/50/250
- USG2000 5/50/250/750

# **Ethernet Switch Solutions**

ZyXEL's broad selection of Ethernet switches provides complete network connectivity over copper or fiber. From compact 5-port desktop switches to rack mountable 48port managed Ethernet switches, every ZyXEL solution delivers comprehensive security and QoS features to accelerate your VoIP, video and data applications in the SMB environment.



### Desktop Switches





5-port/8-port Unmanaged Gigabit Switch

ES105A ES108A

- 5-port/8-port autosensing 10/100 Mbps full duplex
- 2 priority ports/3 priority ports designed for media-rich applications
- Auto MDI/MDI-X support for simplified cabling
- Non-blocking full wire-speed forwarding for top performance
- Data flow control for better transmission reliability





8-port/16-port/24-port Unmanaged Fast Ethernet Switch

ES108P

ES116P ES124P

- 8-port/16-port/24-port autosensing 10/100 Mbps full duplex
- Internal switching power available
- · Auto MDI/MDI-X support for simplified cabling
- Non-blocking full wire-speed forwarding for top performance
- Suitable for desktop and rackmount installation (ES-116P/ES-124P)





**5-port/8-port Unmanaged Gigabit Switch** GS105B GS108B

- 5-port 1000Base-T (GS-105B)
- 8-port 1000Base-T (GS-108B)
- 16/10 Gbps non-blocking switching fabric for optimum performance
- 11.9/6.6 Mpps forwarding rate
- 1 K MAC address table to easily change addresses

### **Enterprise LAN Switches**





Rack-mount Unmanaged Fast Ethernet Switch ES1016B

ES1016B ES1024B

- 16/24-port 10/100Base-TX
- 4.8/3.2 Gbps non-blocking switching fabric for exceptional performance
- 3.6/2.4 Mpps forwarding rate
- 8 K MAC address table to easily change addresses





Rack-mount Unmanaged Fast Ethernet Switch w/GbE SFP ES1124

- 24-port 10/100 Mbps + 2 dual personality GbE (RJ-45/SFP)
- 8.8 Gbps non-blocking switching fabric for great performance
- 6.6 Mpps forwarding rate
- 8 K MAC address table to easily change addresses





24-port/48-port Web Managed Layer 2 Fast Ethernet Switch

ES1528 ES1552

- 24-port/48-port 10/100 Mbps + 2 1000Base-T + 2 1000Base-X SFP Slot
- 12.8/17.6 Gbps non-blocking switching capability for best performance
- Streamlined web-based management interface
- Auto DoS attack prevention & Auto VoIP optimization (SIP/MGCP/SCCP)

### **Enterprise LAN Switches**





24-port/48-port Managed Layer 2 Fast Ethernet Switch ES2024A/ES2024PWR ES2048

- 24/48-port 10/100 Mbps + 2 dual personality GbE (RJ-45/SFP open slot)
- 8.8/13.6 Gbps non-blocking switching capacity for great performance
- 802.3af PoE support, 185W total power budget (ES2024PWR)
- Intrusion lock, MAC freeze & MAC filtering/forwarding enhances network security
- iStacking allows management of up to 24 devices from a single IP address





8-port Managed Layer 2 Fast Ethernet Switch ES2108G/ES2108PWR

- 8-port 10/100 Mbps (ES2108) + 1 dual personality GbE (ES2108G/PWR)
- 5.6 Gbps non-blocking switching fabric; 1.2/2.7 Mbps forwarding rate
- 802.3af PoE Support, full power 15.4W on 8 ports (ES2108PWR)
- 8K MAC address table; 4 802.1p priority queues per port
- Intrusion lock, MAC freeze and MAC filtering/forwarding





24-port/48-port Managed Layer 2+ Fast **Ethernet Switch** 

ES3124/ES3124PWR ES3148

- 24/48-port 10/100 Mbps + 2-port GbE + 2 dual personality GbE (RJ-45/SFP)
- 12.8/17 Gbps non-blocking switching fabric; 9.6/13.1 Mpps forwarding rate
- 802.3af PoE support, full power 15.4W on 24 ports (ES3124PWR)
- 16K MAC address table: 8 802.1p priority queues per port; L2~L4 ACLs
- VLAN stacking (Q-in-Q) support; backup power system support



問命 24-port Managed Layer 3+ Fast **Ethernet Switch** FS4124

- 24-port 10/100 Mbps + 2-port GbE + 2 dual personality GbE (RJ-45/SFP)
- 12.8 Gbps non-blocking switching fabric; 9.6 Mpps forwarding rate
- 16K MAC address table; 4K IP address table; 8K routing entries
- OSPFv2, RIPv1/v2, static routing and DVMRP
- Fault-free, high availability with VRRP and RSTP/MSTP





24-port Rack-mount Unmanaged Layer 2 Gigabit Ethernet Switch GS1124B

- 24-port 1000Base-T ports
- 48 Gbps non-blocking switching fabric for great performance
- 36 Mbps forwarding rate
- 8K MAC address table to forward packets quickly





24-port/28-port/48-port Web Managed Layer 2 Gigabit Ethernet Switch GS1524

GS1528PWR GS1548

- 20/24/44-port GbE + 4 dual personality GbE ports (RJ-45/SFP)
- 48/56/96 Gbps non-blocking switching capability
- 802.3af PoE support, 185W total power budget (GS1528PWR)
- Streamlined web-based management interface
- Auto DoS attack prevention & auto VoIP optimization (SIP/MGCP/SCCP)

### Enterprise LAN Switches





24-port Managed Layer 2 Gigabit **Ethernet Switch** GS2228/GS2228PWR

- 24-port GbE + 4 dual personality GbE ports (RJ-45/SFP)
- 56 Gbps non-blocking switching fabric; 42 Mbps forwarding rate
- 185W total PoE power budget; full power with optional PSU (GS2228PWR)
- 16K MAC address table to forward packets quickly



問命

24-port Managed Layer 3+ Gigabit **Ethernet Switch** GS4024

- 20-port 1000Base-T + 4 dual-personality GbE ports (RJ-45/SFP)
- 48Gbps non-blocking switching capability
- 16K MAC address table; 8K IP address table; 8K routing entries
- OSPFv2, RIPv1/v2, static routing and DVMRP
- Fault-free, high availability with VRRP and RSTP/MSTP





Managed Layer 3 Gigabit Switch with 10G XGS4526 XGS4528F

- 20-port 1000Base-T + 4 dual personality GbE (RJ-45/SFP) (XGS4526)
- 24 dual personality GbE (RJ-45/SFP) + 2 12G stack ports (XGS4528F)
- Optional 2-port 10G module (XFP/CX4) (XGS4526/4528F)
- 88/144 Gbps switching capability; 65/100 Mbps forwarding rate
- 8K MAC address table; 2K IP address table; 512 routing entries
- OSPFv2, RIPv1/v2, static routing and DVMRP
- Fault-free, high availability with VRRP and RSTP/MSTP





192-port Managed Layer 3+ Modular Gigabit Ethernet Switch MS7206

- Max. 384 Gbps non-blocking switching fabric; 286 Mpps forwarding rate
- 6 Slots (two for management and four for I/O modules), 10U height
- Hot-swappable I/O modules, power supply and fan trays for easy maintenance
- High-density with up to 192 100/1000BASE-T ports
- Advanced L3 routing and L2 switching features at no additional cost

### **Carrier Switches**





24-port Managed Layer 2 Fast **Ethernet Switch** ES3124/ES3124-4F ES3124F

- 24-port 10/100 Mbps / 24-port 100 Mbps SFP (ES3124F)
- 2-port GbE + 2 dual personality GbE (RJ-45/SFP) (ES3124)
- 2-port GbE SFP + 2 dual personality GbE (RJ-45/SFP) (ES3124F/3124-4F)
- VLAN stacking (Q-in-Q); backup power support; L2~L4 ACLs
- MEF 9 and 14 certified for EPL services; 802.3ah OAM





12-port Managed Layer 2+ Gigabit Switch GS3012 GS3012F

- 8-port GbE / 8 GbE SFP + 4 dual-personality GbE (RJ-45/SFP)
- 24Gbps non-blocking switching capability
- Intelligent QoS optimization (WFQ, 8 hardware gueues and (L2~L4) ACL
- 1K static VLAN and 4 K dynamic VLAN support (full range 4K PVID)
- 802.3ah OAM (Discovery, Remote Loopback)



### **Carrier Switches**





24-port/12-port Managed Layer 3+ **Gigabit Switch** 

GS4012F GS4024

- 8/20-port GbE + 4 dual personality GbE (RJ-45/SFP)
- 48Gbps non-blocking switching capability
- 16K MAC address table; 8K IP address table; 8K routing entries
- OSPFv2, RIPv1/v2, static routing and DVMRP
- Fault-free, high availability with VRRP and RSTP/MSTP
- 1K/4K static/dynamic VLAN; VLAN stacking (Q-in-Q); L2~L4 ACLs
- 802.3ah OAM (Discovery, Remote Loopback)





24-port Managed Layer 2+ Fast Metro **Ethernet Switch** MFS3528

- 24-port 10/100 Mbps + 2 GbE SFP + 4 dual personality GbE (RJ-45/SFP)
- 12.8 Gbps non-blocking switching fabric
- "Front Access" design; external alarm input/output block
- Fanless design conserves power, reduces noise





24-port Managed Layer 2+ Fast Metro Ethernet Switch w/ Temp Hardening MES3728

- 24-port 10/100 Mbps + 2 GbE SFP + 2 dual personality GbE (RJ-45/SFP)
- 12.8 Gbps non-blocking switching fabric; 9.6 Mpps forwarding rate
- 16K MAC address table; 8 802.1p priority queues per port; L2~L4 ACLs
- Operating temperature: 32° F ~ 149° F, overheat detection; variable fan speed
- "Front Access" design with AC or DC power; external alarm input/output block
- 802.1ag CFM and 802.3ah OAM (Discovery, Remote Loopback)
- MEF 9 and 14 certified for EPL, EVPL and E-LAN services





12-port Managed Layer 2+ Gigabit Metro Ethernet Switch w/ Temp Hardening MGS3712 MGS3712F

- 8-port 1000 Mbps / 8 GbE SFP + 4 dual personality GbE (RJ-45/SFP)
- 24 Gbps non-blocking switching fabric; 17.8 Mpps forwarding rate
- 16K MAC address table; 8 802.1p priority gueues per port; L2~L4 ACLs
- Operating temperature: 32° F ~ 149° F, overheat detection; variable fan speed
- "Front Access" design with AC or DC power; external alarm input/output block
- 802.1ag CFM and 802.3ah OAM (Discovery, Remote Loopback)
- MEF 9 and 14 certified for EPL, EVPL and E-LAN services





24-port Managed Layer 3+ Gigabit Ethernet Switch with 10G XGS4728F

- 24 dual-personality GbE (RJ-45/SFP) + 2 12G stacking ports
- Optional two port 10G module (XFP/CX4)
- 144 Gbps switching capability
- 16K MAC address table: 8K IP address table: 12K routing entries
- · Fault-free, high availability with VRRP and RSTP
- 1K/4K static/dynamic VLAN; VLAN Stacking (Q-in-Q); L2~L4 ACLs
- 802.3ah OAM (Discovery, Remote Loopback)

### Media Converter Series





Media Converter (100FX to 100Base-TX) MC100FXSC2A MC100FXSC30A

- One 100Base-TX port and one 100Base-FX fiber transceiver with SC connector
- Maximum transmission distance 2 km/30 km
- Auto-negotiating Ethernet port (speed, half/full duplex)
- Auto-crossover Ethernet port (supports auto MDI/MDI-X)
- · Link Fault Signaling (LFS) notifying down link to peer

### Media Converter Series



- One 1000BASE-T port and one 1000BASE-X SFP open slot
- Fiber protection mechanism; wall-mount design
- Auto-negotiating Ethernet port (speed, half/full duplex)
- Auto-crossover Ethernet port (supports auto MDI/MDI-X)
- Link Fault Signaling (LFS) notifying down link to peer

### **Transceivers**



- · 100 Mbps transmission speed and flexibility
- SFP MSA (Multi-Source Agreement) compliance
- Hot-pluggable with maximum flexibility
- Compact size for high port density
- Bi-directional SFP maximizes existing fiber plant (SFP100BX Series)



Gigabit Ethernet SFP Transceivers SFP1000T SFPZX80 SFPSX SFPBX1310 SFPLX SFPBX1490

SFPLHX1310

- 1000 Mbps transmission speed and flexibility
- SFP MSA (Multi-Source Agreement) compliance
- Hot-pluggable with maximum flexibility
- Compact size for high port density
- Bi-directional SFP maximizes existing fiber plant (SFPBX Series)



- Hot-pluggable XFP footprint
- Supports 9.95Gb/s to 10.5Gb/s bit rates
- Temperature range 32° F to 158° F
- Uncooled 1310nm DFB laser 1000ft, 50 um MMF (XFP-10G-SR)
- Uncooled 850nm VCSEL laser 6miles, 9 um SMF (XFP-10G-LR)
- Temperature-stabilized EML transmitter 25miles, 9um SMF (XFP-10G-ER)

### **LAN Accessories**



- Compact design: 1U, rack-mountable
- Six output ports for ZyXEL Ethernet switches
- Supports most ZyXEL 3000 and 4000 series switches
- Fast power switchover ensures uninterrupted switching and routing





- Extended 10GbE CX4 module for short distance deployment
- Supports XGS series switches and MS7206 Modular switch
- · Compatible with any CX4 10G rated cable





2-slot XFP 10GbE Module
EM422

- Extended 10GbE XFP module for long distance deployment
- Supports XGS series switches and MS7206 Modular switch
- Compatible with XFP10GSR, XFP10GLR and XFP10GER





- One RJ-45, 10/100 Mbps PoE-enabled port
- Flexible deployment of devices where power is not available
- Ideal for access point, IP camera and IP phone installations
- Deployment of up to 328 feet (100 m) via CAT-5 Ethernet cabling
- IEEE 802.3af Power over Ethernet (PoE) standard compliant



Gigabit Ethernet PCI Network Adapter GN680T

- 10/100/1000 Mbps autosensing over Cat-5
- 32-bit PCI bus support
- Windows Vista 32/64bit driver support
- Wake-on-LAN support; WHQL support; ACPI support



Fast Ethernet PCI Network Adapter FN312

- Half/full duplex at 10/BaseT/100Base-TX
- IEEE 802.3/IEEE 802.3u and PCI v2.1/2.2 compliant

\*\*\*

- Wake-on-LAN support
- Windows Vista 32/64bit driver support
- Wake-on-LAN support; ACPI support

Home Users	Business Users	Carrier Services
Notes:		



# Wireless Solutions

ZyXEL offers a complete array of 802.11 wireless products incorporating the latest technology for both high speed and extended range. From Wi-Fi finders, to client cards, to home routers as well as high-end business solutions boasting unparalleled security as well as ease of use and installation, ZyXEL has it all.





### Access Points



- Dual operation radio bands (2.4GHz or 5GHz) for greater flexibility
- 802.11a/b/g compliant, wireless link speed up to 54 Mbps
- Four operation modes: AP, repeater, bridge and wireless client
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support



802.11g Wireless AP/Bridge G570Sv2

- Optimal wireless range and performance of up to 108Mbps data rate with Super G technology
- Four operating modes: AP, repeater, bridge and wireless client
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support



Wireless N Access Point NWA570N

- 802.11n compliant, wireless link speed up to 300 Mbps\*
- 3 detachable antennas for wide-range coverage and faster speed
- Four operating modes: AP, repeater, bridge and wireless client
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support
- WPS button for quick and easy wireless security setup

### **WLAN Adapters**



- Detects 802.11a/b/g/draft 11n wireless networks; no need to turn on laptop
- Backlit display for easier reading in low light
- Displays all necessary information on convenient LED display
- Also serve as 802.11 a/b/g USB client adapter
- Software access point feature makes it a perfect mobile travel companian
- Multiple OS support including Microsoft Vista and Mac (Made4Mac)



802.11g Wireless USB Adapter G202

- Advanced wireless security transmission with WEP encryption and WPA/WPA2 support
- Wi-Fi Multimedia (WMM) support for quality video and voice streaming
- Window XP 64-Bit Edition support
- Software AP support with Windows XP
- PSP X-Link support
- Multiple OS support including Microsoft Vista and Mac (Made4Mac)



- 802.11g PCI wireless adapter with WHQL certification
- Up to 54 Mbps data transfer rate in 802.11g mode of operation
- Advanced wireless security transmission with WEP encryption and WPA/WPA2 support
- · Detachable antenna

<sup>\*</sup> The wireless data rate is based on draft IEEE 802.11n specifications. Actual data throughput will vary depends on product configuration and environmental factors. It is not guaranteed to be forward compatible with future versions of the IEEE 802.11h specifications.

### **WLAN Adapters**



- Dual operation radio bands (2.4GHz or 5GHz)
- 802.11n compliant, wireless link speed up to 300 Mbps
- Soft AP mode support extends functionality
- Supports multimedia applications with WMM QoS
- WPS button for quick and easy wireless security setup



- Compliant with 802.11 b/g/n
- · Supports multimedia applications with WMM QoS
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support
- WPS button with download speed up to 300Mbps\* for quick and easy wireless security setup
- Up to 150 Mbps\* wireless connection speed



- 802.11n compliant with download speed up to 300 Mbps\*
- · Supports multimedia applications with WMM QoS
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support
- WPS button for quick and easy wireless security setup



- 802.11n compliant, wireless link speed up to 300 Mbps\*
- Supports multimedia applications with WMM QoS
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support
- WPS button for quick and easy wireless security setup
- Supports Linux drivers

### Consumer Routers



SuperG Wireless HomePlug AV Router NBG318S

- HomePlug AV compliant, with up to 200 Mbps \*\* channel data rate
- HomePlug instant encrypt button to secure your Powerline network
- Super G technology supports wireless link speed up to 108 Mbps
- Advanced Media Bandwidth Management (MBM2<sup>™</sup>) for active multimedia bandwidth allocation
- Multi-colored LED to identify network performance over Powerline



802.11g Wireless Firewall Router NBG334W

- 802.11g compliant, wireless link speed up to 54 Mbps
- Advanced Media Bandwidth Management (MBM v2<sup>™</sup>) for effective multimedia bandwidth allocation
- Advanced wireless security with WEP and WPA/WPA2 support
- Stateful Packet Inspection (SPI) firewall and Denial of Service (DoS)
- Supports multimedia applications with WMM QoS
- Supports ROM-D feature
- Supports Management Access Restriction feature
- Guest SSID allows guests connect to Internet without access to local network

<sup>\*</sup>The wireless data rate is based on draft IEEE 802.11n specifications. Actual data throughput will vary depends on product configuration and environmental factors. It is not guaranteed to be forward compatible with future versions of the IEEE 802.11N specifications.

<sup>\*\*</sup> The theoretical maximum channel data rate is 200 Mbps on physical layer. The actual channel data rate will be lower depends on noise on electrical wires and quality of electrical installation.

### Consumer Routers



- 802.11n compliant, wireless link speed up to 150 Mbps
- Eco-friendly wireless scheduling saves energy
- WPS button for quick and easy wireless security setup.
- Supports multimedia applications with WMM QoS
- Neighbor-friendly wireless output power control



- 802.11n compliant, wireless link speed up to 300 Mbps\*
- 2 IPSec VPN tunnels for secure data transfer between remote sites and central server
- Advanced Media Bandwidth Management (MBM v2™) for effective MBMv2 QoS engine automatically prioritizes traffics
- Eco-friendly wireless scheduling saves energy
- WPS button for quick and easy wireless security setup.



- Protect your network from Internat attacks with NAT firewall and Stateful Packet Inspection (SPI)
- Enjoy wireless speeds up to 54Mbps using 802.11g technology
- Top of the line wireless security with WPA/WPA2 support
- Detacheable antenna for flexible deployment options
- Extra usability features enhance your experience including Network Magic and Xbox Live support
- Software bridging mode perfect for connecting multiple LAN devices using one WLAN bridge



- Built-in USB for printer sharing with other networked users
- Firewall with Stateful Packet Inspection (SPI) and Denial of Service (DoS) prevention
- Advanced Media Bandwidth Management (MBM2™) for effective multimedia bandwidth allocation



Extreme Wireless Performance and Dead Spot-Free Coverage X550N

- Latest wireless N technology provides up to 300 Mbps data rate\*
- State of the art MBM QoS engine for superior online gaming, VoIP experience
- Built-in gigabit Ethernet ports provides incredible wired performance
- MIMO antenna technology provide ultimate solution for speed and coverage
- Energy saving wireless scheduling feature turns radio off when not needed
- 2 IPSec VPN tunnels for secure data transfer between remote sites and central sever
- One button wireless encryption setup with WPS





- Three 6 dBi high gain antennas provide extended wireless coverage
- Blazing fast wireless connection with the latest wireless N technology
- State-of-the-art MBM QoS engine for superior online gaming, VoIP experience
- Built-in gigabit Ethernet ports provides incredible wired performance
- Energy saving wireless scheduling feature turns radio off when not needed
- 2 IPSec VPN tunnels for secure data transfer between remote sites and central server
- One button wireless encryption setup with WPS

\* The wireless data rate is based on draft IEEE 802.11n specifications. Actual data throughput will vary depends on product configuration and environmental factors. It is not guaranteed to be forward compatible with future versions of the IEEE 802.11N specifications.

### Wireless LAN Controllers & Access Points



- · Channel Blanket architecture enables zero loss roaming
- Centralized configuration and administration of up to 8 APs
- No site survey or channel planning needed which saves costs
- PoE support and Dual Radio for simultaneous 802.11a + g operation
- Plenum rated enclosure meets rigorous fire safety standards

### **Business Wireless LAN Access Points**



802.11b/g Entry Level Business WLAN Access Point NWA1100

- High power design to maximize Wi-Fi coverage (26dBm EIRP)
- AP/Bridge/AP+Bridge modes for flexible deployment
- Wi-Fi WMM for wireless OoS and WPA2 certified
- IEEE 802.3af PoE for power through data cable



Dual Band 802.11a/g Enterprise WLAN Hybrid Access Point NWA3160

- WLAN controller mode to securely provision and manage up to 24 APs
- AP/Bridge/AP+Bridge modes for flexible deployment
- Wi-Fi WMM + Auto Traffic Classifier for powerful QoS; WPA2 certified
- Up to 8 SSIDs with pre-defined VoIP and Guest SSID
- PoE support; Plenum rated enclosure meets rigorous fire safety standards



High-powered 802.11b/g Enterprise WLAN Hybrid Access Point NWA3163

- High power design to maximize Wi-Fi coverage (26dBm EIRP)
- WLAN controller mode to securely provision and manage up to 24 APs
- AP/Bridge/AP+Bridge modes for flexible deployment
- Wi-Fi WMM + Auto Traffic Classifier for powerful QoS; WPA2 certified
- Up to 8 SSIDs with pre-defined VoIP and Guest SSID
- PoE support: Plenum rated enclosure meets rigorous fire safety standards



Dual band 802.11n Draft 2.0 Enterprise WLAN Hybrid Access Point NWA3166

- High speed 802.11n wireless for multimedia applications
- WLAN controller mode to securely provision and manage up to 24 APs
- Wi-Fi WMM + Auto Traffic Classifier for powerful QoS; WPA2 certified
- Up to 8 SSIDs with pre-defined VoIP and Guest SSID
- PoE support; Plenum rated enclosure meets rigorous fire safety standards



Outdoor 802.11a/g Enterprise **WLAN Hybrid Access Point** NWA3550

- Configurable dual radios with a variety of external antenna options
- WDS for wireless bridge/backhaul applications
- WLAN controller mode to securely provision and manage up to 24 APs
- Up to 8 SSIDs with pre-defined VoIP and Guest SSID
- IP-66 compliant casing + heater for cold environments -40°C ~ 60°C

### Hospitality Service Gateways



- Ideal for café or small hotel properties 100 rooms or less
- IP plug-and-play for zero configuration
- Web-based user authentication, accounting & billing profile
- RADIUS client, walled garden, advertisement URL links, & portal page redirection



- Ideal for hospitality/MxU properties 300 rooms or less
- Supports RADIUS authentication and robust billing options
- Supports Airpath, Boingo, Ipass, GRIS, and other roaming services
- Additional revenue generation with walled garden and homepage redirect

Home Users	Business Users	Carrier Services
Notes:		

# Network Storage

# Storage Solutions

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ZyXEL has brought its experience in building carrier class networking devices to the storage market. With solutions designed for home users as well as powerful solutions aimed at the business environment, ZyXEL has you covered. Advanced features such as built-in BitTorrent downloading, uploads to social networking sites, domain integration, and RAID 10, provide the latest in technology at an affordable price.





### Home Network Storage



ZVXEL

# Central Digital Media Library NSA220Plus

- 2-bay Network Attached Storage with capacity of up to 3TB
- DLNA 1.5 certified multimedia server
- Auto upload photo/video to Flickr/YouTube
- System automatically resumes after power failure when power is restored
- One-touch button for easy copy/sync with external storage devices

### **Business Network Storage**



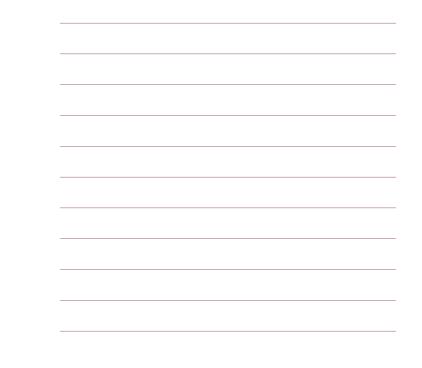


- 4-bay network storage with capacity of up to 6 TB
- Dual Gigabit LAN ports support failover/load balancing/link aggregation
- Disk configurations: JBOD, RAID1, RAID5 and RAID10

NSA2401

- Supports encrypted remote replication, local backup and self volume to volume backup
- Hot spare and hot swappable

Home Users	Business Users	Carrier Services
Notes:		





# **WIMAX CPE**





### **WIMAX CPE**





IEEE 802.16e WiMAX MIMO VolP Router MAX206M2

- World's 1st WiMAX Forum Wave2 certified 2.5GHz CPE
- Built-in firewall/router with 2-port VoIP ATA functions
- 33dBm high EIRP with embedded omni-directional antennas
- OMA-DM for over-the-air provisioning and firmware upgrade





- WiMAX Forum Wave 2 compliant with MIMO Matrix A/B
- RF isolation between 2.5GHz WiMAX and 2.4GHz Wi-Fi
- Built-in SOHO router/firewall with 2-port VolP ATA
- Auto-provisioning / management with TR-069 or OMA-DM





IEEE 802.16e WiMAX MIMO Simple CPE MAX216M1R

- 3.5 GHz IEEE802.16e Mobile WiMAX Indoor CPE
- Up to 33dBm EIRP for highest performance
- Gateway featuring 1 Ethernet and 1 VoIP port
- Easy management with TR-069 and SNMP support





IEEE802.16e WiMAX MIMO Outdoor CPE MAX306HW2

- All-weather design outdoor WiMAX CPE for fixed wireless
- 27dBm high output power with 12dBi high-gain MIMO antenna
- Built-in 2-port SIP based VoIP and 802.11g Wi-Fi router
- Auto-provisioning and management with TR-069 and SNMP v2





IEEE 802.16e WiMAX MIMO ExpressCard MAX706

- IEEE802.16e-2005 standard compliant 2.5GHz express card
- Up to 23dBm Tx Power and 2dBi Omni-directional Antennas
- AES encryption and EAP-TLS/TTLS authentication support
- · User-friendly connection manager on Windows XP/Vista OS



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IEEE 802.16e WiMAX MIMO USB Adapter
MAX506

- 2 x 2 dBi antenna, 23 dBm maximum Tx power
- HO, QoS, power control, power saving supported
- EAP authentications, X.509, AES, self-installable

# **Powerline**





### HomePlug AV



- HomePlug AV compliant, data transmission rate up to 200 Mbps\*
- Stylish desktop design with universal power cord
- QoS for fast video and audio streaming
- HomePlug instant encryption button
- Multi-colored LED to identify network performance over Powerline



- HomePlug AV compliant, channel data rate up to 200 Mbps\*
- Simple wall-plug design
- · QoS for fast video and audio streaming
- HomePlug instant encryption button
- Multi-colored LED to identify network performance over Powerline



- HomePlug AV compliant, with up to 200 Mbps\* channel data rate
- Transforms existing coaxial cable to computer network
- QoS for fast video and audio streaming
- HomePlug instant encryption button
- Multi-colored LED to identify network performance over Powerline

\*The theoretical maximum channel data rate is 200 Mbps on physical layer. The actual channel data rate will be lower depends on noise on electrical wires and quality of electrical installation.



- HomePlug AV compliant, with up to 200 Mbps\* channel data rate
- 802.11g compliant, wireless link speed up to 108 Mbps
- HomePlug instant encryption button
- Multi-colored LED to identify network performance over Powerline
- Advanced wireless security with WEP, WPA/WPA2 and 802.1x support



- HomePlug AV compliant, with up to 200 Mbps\* channel data rate
- 4-port 10/100 Mbps switch to expand home networking
- HomePlug instant encryption button
- Multi-colored LED to identify network performance over Powerline



- HomePlug AV compliant, with up to 200 Mbps\* channel data rate
- Power strip design with 4 power outlets
- 4-port 10/100 Mbps Ethernet for multiple Powerline connections
- On/off switches for power and Powerline
- HomePlug instant encryption button
- Built-in surge protector for home appliances

### **HomePlug Product Matrix**

ProductPLA400PLA401PLA450PLA470NBG318SPLA491	PLA400	PLA401	PLA450	PLA470	NBG318S	PLA491
lmage	nes.		meta.	2,000,000,000,000,000,000,000,000,000,0	2,000	man (m. 1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Description	Powerline Ethernet Adapter	Powerline Ethernet Adapter	Powerline Wireless AP	Powerline Ethernet 4 Port Switch	Powerline Wireless Router	Powerline Power strip w/ 4 port swich
Powerline Standard			HomePlug AV	lug AV		
Max. Channel Data Rate			200 Mbps*	*sdq		
Wireless Network	N/A	N/A	802.11b/g/ Super G	N/A	802.11b/g/ Super G	N/A
Ethernet Port Number	1	1	1	4	4	4
Remote Management	N/A	N/A	Yes	N/A	Yes	N/A
QoS			Yes			
Security Encryption			128 bits AES	s AES		

## HomePlug Filter



- Supresses noise down to 1/1000
- Compliant with all Powerline products.





# **Digital Home**

Imagine being able to easily move all your music, videos, and photos right from your PC to your home entertainment seconds, so everyone in your home can share media. That's true networked digital entertainment. And it's available today, from ZyXEL.





### Multimedia Solution



- High-definition audio and video streaming support
- DLNA 1.0 certified, works perfectly with other DLNA products
- Listen to MP3 and digital music collection through the stereo system
- Browse digital pictures in JPEG, GIF, TIF, BMP and PNG formats on TV
- HomePlug AV built-in



- Bring media from your computer to your home entertainment center, full HD 1080p support for finest resolution
- DLNA 1.5 compliant, compatible with all other DLNA products
- Extensive digital content format support (H.264, DviX/XviD, WMV9. etc)
- HDMI 1.1 support for enhanced video
- Internet Radio Web TV support



- Supports H.264 & MPEG2 (Standard-Definition)
- Supports CA/DRM to access secure digital content
- Supports VOD and Live TV for best maximum enjoyment
- Supports USB 2.0 for simple connectivity



- Enables multiple speakers to wirelessly run presentations
- 802.11b/g and Ethernet compliant
- Comprehensive and user-friendly GUI for device installation
- Web-based management and conference control

Home Users	Business Users	Carrier Services
Notes:		

# **xDSL CPE**

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ZyXEL's wide range of xDSL solutions includes VDSL2, ADSL2+, Bonded ADSL2+ and G.SHDSL.bis technologies, providing the level of high performance and reliability that





### DSL CPE - ADSL2+



- ADSL2+ high-speed Internet access
- Zero Configuration support eases installations
- Universal Plug & Play support (R, RU models)
- Optional dual mode USB/Ethernet network interface (RU)



802.11g Wireless ADSL2+ 4-port Gateway P660H/HW Series

- ADSL2+ high-speed Internet access
- 802.11g wireless AP function built in (HW model)
- Robust, state-of-the-art firewall protection
- Media Bandwidth Management QoS support
- TR069 remote management for easy deployment



Draft 802.11n Wireless ADSL2+ 4-port Gateway P660HN

- 802.11n Draft 2.0 compliant with 802.11b/g compatibility
- Standards based WPS for easy and secure WLAN establishment
- Robust SPI firewall protection
- Media bandwidth management (MBM) QoS support
- Wireless scheduler for eco-friendly energy saving
- TR069 remote management for easy deployment





- HomePlug AV compliant
- Throughput of up to 200 Mbps over power lines
- Extended LAN solution through power lines
- 802.11g wireless AP function and 4-port Ethernet switch
- Media Bandwidth Management QoS support



802.11g Wireless ADSL2+ 4-port Security Gateway P662H/HW Series

- Network-based anti-virus protection
- Robust, state-of-the-art firewall protection
- Up to 20 VPN connections for remote sites
- Auto failover and fallback WAN backup solution
- ZyXEL Centralized Network Management (CNM) support
- 802.11g wireless AP function built in (HW model)



ADSL2+ Pair Bonded 4-port Gateway P663H/HN Series

- ADSL2+ pair bonded technology supports up to 48 Mbps
- 802.11n wireless AP function built in (HN model)
- Robust, state-of-the-art firewall protection

### **DSL CPE - G.SHDSL**



- High-speed symmetric data transmission (G.SHDSL.bis support)
- Universal Plug and Play support
- Auto failover and fallback WAN backup solution



- High-speed symmetric data transmission (G.SHDSL.bis support)
- 4-wire bundle for higher bandwidth and longer distance
- Robust firewall security (SPI & DoS) and IPSec VPN
- Media Bandwidth Management QoS support
- Auto failover and fallback WAN backup solution

### **DSL CPE — VDSL2**



- 3/4/5/6 band support for DS/US: 100/100Mbps over existing copper wire
- VDSL2 compliant with profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a and 30a
- QoS support for Triple Play services





- 3/4/5 band support for DS/US: 100/45Mbps over existing copper wire
- ITU G.993.2 VDSL2 standard compliant with ADSL2+ fallback
- 802.11g wireless AP function and 4-port Ethernet switch
- IP QoS support for Triple Play services
- IGMP snooping/multicasting functions for IPTV applications
- TR069 remote management for easy deployment



- Excellent for plug and play LAN extension
- Selectable CO or CPE mode via hardware switch
- 3/4 band support for DS/US: 80/40Mbps over existing copper wire

### **DSL CPE - xDSL IAD**



- ADSL/ADSL2/ADSL2+ high-speed Internet access
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Auto-provisioning and TR069/TR104 for ease of deployment
- Triple Play QoS support and optional PSTN lifeline

### **DSL CPE - xDSL IAD**





802.11g Wireless ADSL2+ VolP IAD

P2602HW/HWL Series

- ADSL/ADSL2/ADSL2+ high-speed Internet access
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- Advanced security: SPI firewall and IPSec VPN
- Auto-provisioning and TR069/TR104 for ease of deployment
- Triple Play QoS support and optional PSTN lifeline





802.11g Wireless ADSL2+ Combo WAN IAD P2612HW

- Simple hardware switch to select ADSL2+ or Ethernet WAN
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- Advanced security: SPI Firewall and IPSec VPN
- TR069/TR104 for easy deployment
- Triple-play QoS Support



802.11g Wireless ADSL2+ VolP IAD P2608HW/HWL Series

- SIP (RFC 3261) support with 8 phone ports for VoIP
- ADSL/ADSL2/ADSL2+ high-speed Internet access
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- · Advanced security: SPI firewall and IPSec VPN
- Auto-provisioning and TR069/TR104 for ease of deployment



**計問**同 802.11g Wireless VDSL2 VolP IAD P2802HWL

- VDSL2 support (IP-based)
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Built-in 802.11g Wireless AP and 4-port Ethernet Switch
- Advanced security: SPI firewall and IPSec VPN
- Auto-provisioning and TR069/TR104 for ease of deployment
- Triple Play QoS support and PSTN lifeline

Home Users	Business Users	Carrier Services
Notes:		



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(MSAN) and "pizza-box" IP DSLAM products for central office, remote location and FTTx deployments. Featuring efficiently deploy flexible and reliable rich media services





### **MSAN**





**6.5U Multi-Service Access Node (MSAN)** IFS5000

- Two management and switching cards and two power modules for redundancy
- Up to eight slots for 72-port ADSL2+, 48-port ADSL2+/SHDSL/VoIP or 24-port VDSL2 line cards, hot swappable (Max. ADSL2+ ports per chassis are 384)
- CO splitter cards in separate splitter chassis
- Four Gigabit interfaces for uplink and subtending
- 802.1p QoS, priority queuing, 802.1q VLAN tagging, and multicasting support





4 U Remote Hardened Mult-service Access Node (MSAN) IES5005

- One management and switching card and two power modules for redundancy
- Four slots for 48-port ADSL2+/SHDSL/VoIP or 24-port VDSL2 line cards, hot swappable (Max. ADSL2+ ports per chassis are 192)
- CO splitter cards in separate splitter chassis
- Four Gigabit Ethernet interfaces for uplink and subtending
- 802.1p QoS, priority queuing, 802.1q VLAN tagging, and multicasting support





12.5U Mult-Service Access Node (MSAN)

- Two management and switching cards and two power modules for redundancy
- Up to sixteen slots for 72-port ADSL2+,48-port ADSL2+/SHDSL/VoIP or 24-port VDSL2 line cards, hot swappable (Max. ADSL2+ ports per chassis are 1152)
- CO splitter cards in separate splitter chassis
- Eight Gigabit interfaces for uplink and subtending, supports 10G interface
- 802.1p QoS, priority queuing, 802.1q VLAN tagging, and multicasting support

### IP DSLAM & VDSL2 Switches





**8 port G.SHDSL.bis Mini IP DSLAM** IES708-22

- Up to 8-port G.SHDSL.bis connection bonding
- ATM-based Multi-Pair Bonding (G.998.1) support
- Two Fast Ethernet interfaces for uplink
- 802.1p QoS, priority queuing, 802.1q VLAN tagging and multicasting support
- 802.1x authentication, MAC/Packet filtering, and ACL filtering support





1U IP DSLAM with AC/DC power IES1000

- Two Hot swappable modules supporting ADSL/2/2+ and /or G.SHDSL.BIS
- 12- port ADSL/2/2+ with POTS splitter built-in
- 16 -port G.SHDSL.BIS supported
- 802.1p QoS, priority gueuing, 802.1g VLAN tagging, and multicasting support





1.5U ADSL2+ IP DSLAM with AC/DC Power
IES1248-51

- Remote IP DSLAM, 1.5U, AC or DC powered
- Highly compact and temperature-hardened design
- In-band management and one mini RJ11 for local console
- 48-port ADSL/2/2+ with POTS splitter built-in
- Hot swappable fan module increases flexibility

#### **VDSL2 Switches**



- 48-port remote ADSL2+/VoIP combo IP DSLAM, DC powered
- Highly compact and temperature-hardened design
- In-band management and one mini RJ11 for local console
- 48-port ADSL/ADSL2/ADSL2+ module with splitter built-in
- Hot swappable fan module increases flexibility
- 48-port POTS VoIP supporting SIP and H.248





**8/16-port VDSL2 Hardened Switch** VES1608FA-34 VES1608FE-54 VES1616FE-54

- VDSL2 downstream/upstream: 100/50 Mbps
- · Gigabit Ethernet interfaces for uplink and subtending
- Outdoor enclosure design option for 8-port/16-port
- IP QoS support: VLAN, multicasting, and priority queue
- Advanced security: VLAN, IGMP snooping, and MVR (Multicast VLAN Registration)





**16-port VDSL2 Switch** VES1616F-34

- VDSL2 downstream/upstream: 100/50
- Gigabit Ethernet Interfaces for uplink and subtending
- IP QoS support: VLAN, multicasting, and priority queue
- Advanced security: VLAN, IGMP snooping, and MVR (Multicast VLAN Registration)





**24-port VDSL2 switch with ADSL fallback** VES1624FA-54 VES1624FT-54

- VDSL2 downstream/upstream: 100/50 Mbps
- Gigabit Ethernet interfaces for uplink and subtending
- IP QoS support: VLAN, multicast, priority queue
- ADSL fall back capability
- Other key features: 802.3ad LACP, Q in Q, multicast VLAN registration



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**24-port VDSL2 and VolP Combo Switch** VES1624FTV-54

- VDSL2 downstream/upstream 100/50Mbps
- 24-port VDSL2 and POTS/VoIP combo design
- Gigabit Ethernet interfaces
- IP QoS support: VLAN, multicast, priority queue. 802.1x service authentication
- Other key features: 802.3ad LACP, Q in Q, multicast VLAN registration

# **Network Management Software**



IP DSLAM Element
Management System (EMS)
NetAtlas Access Windows Version

- Complete FCAPS embedded
- Two-layer network management architecture (Master EMS & Slave EMS)
- View-based network management
- XML/SOAP-based northbound interface
- · Quick global alarm update, display and information retrieval



# Cable CPE

As the CPE marketplace shifts to products that can support multimedia and home networking functions, ZyXEL remains in the vanguard, offering CableLab-certified cable modem routers and EMTA products supporting MSO's SMB and residential deployments.





### Cable CPE



- Front-panel LED indicators for status monitoring
- User-friendly diagnostic features
- Ease-of-deployment in the residential market for MSO
- Trouble-free device management with SNMP and Web GUI



- Perfect solution for static IP business class service
- Text based configuration file makes deployment simple
- RIP v1 & v2 with MD5 for authentication with the CMTS
- 802.11g wireless with detachable antenna (HW model)



- DOCSIS 2.0 and PacketCable 1.5 CableLab certified
- L2TPv3 VPN enabled
- RIP v1 & v2 with MD5 for authentication with the CMTS
- Supports Static IP
- Cable router and 4-port VoIP service in one box
- Battery backup



- DOCSIS 3.0 compliant design
- Supports downstream/upstream 4-channel bonding
- Gigabit Ethernet interface
- Supports both IPv4 and IPv6 addressing modes
- Remote management via SNMP and Web GUI



- DOCSIS 3.0 and PacketCable 1.5 compliant design
- 802.11n high performance wireless with detachable antenna
- 4-port Gigabit Ethernet switch
- Two VoIP phone lines
- Battery backup
- Remote management via SNMP, Telnet, CLI, Web GUI





# GPON/GEPON

FTTX is the ultimate broadband technology for the next generation of high-speed Internet access, ideal for VoIP and IPTV applications. ZyXEL provides end-to-end GEPON and GPON solutions, from scalable OLT to highly integrated ONT. ZyXEL GEPON/GPON solutions are field proven in many FTTX deployments worldwide featuring strong integration capabilities with VDSL.







## **GPON/GEPON**



- 8 GEPON ports compliant with IEEE 802.3ah
- 4 GE uplink ports (1000Base-T/1000BaseSX/LX)
- Wavelength: 1.31 um for upstream & 1.49 um for downstream
- IP QoS support: VLAN, multicasting, and priority queue
- Advanced security: 802.1x port authentication, IGMP V1/V2 snooping & filtering, AES algorithm with 128-bit encryption



- 8 GEPON ports compliant with IEEE 802.3ah
- 8 Auto MDI/MDI-X 1000Mbps uplink ports
- Wavelength: 1.31 um for upstream & 1.49 um for downstream
- IP QoS support: VLAN, multicasting, and priority queue
- Advanced security: 802.1x port authentication, IGMP V1/V2 snooping & filtering, AES algorithm with 128-bit encryption



- 16 GEPON ports and 16 Uplink (1000Base-T/1000BaseSX/LX) ports
- Wavelength: 1.31 um for upstream & 1.49 um for downstream
- IP QoS support: VLAN, multicasting, and priority queue
- Advanced security: 802.1x port authentication, IGMP v1/v2 snooping & filtering, AES algorithm with 128-bit encryption



- 1 x Gigabit optical interface (IEEE 802.3ah)
- 1 x 10/100/1000Base-Tx (IEEE 802.3, IEEE 802.3u, IEEE 802.3ab)
- Supports remote control from OAM channel and data loop back test
- IP QoS support: VLAN, multicasting, priority gueue and 802.1x



- 1 x Gigabit optical interface (IEEE 802.3ah)
- 4 x 10/100/1000Base-Tx (IEEE 802.3, IEEE 802.3u, IEEE 802.3ab)
- Integrated fiber tray for easy installation
- Supports remote control from OAM channel and data loop back test
- IP QoS support: VLAN, multicasting, priority queue and 802.1x



- ITU-T GPON standard compliance: G.984.1, G.984.2, G.984.3, G.984.4
- 1 Gigabit single mode PON interface (Class B+)
- Supports DS/US transmission rate to 2.488 Gbps/1.244 Gbps
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- Advanced QoS for triple-play services
- Standard VoIP SIP compliance (RFC3261)
- TR-069/104 remote management agent built in

# **VoIP Solutions**

Spanning IP Phones and Analog Telephone Adapters to VoIP Gateways and fully Integrated Access Devices, ZyXEL's VolP inclusive communications packages for telephony provide complete, cost effective solutions scaling from residential environments to SOHOs and SMB.





### **xDSL IAD**



802.11g Wireless ADSL2+ VolP IAD P2602HW/HWL Series

- ADSL/ADSL2/ADSL2+ high-speed Internet access
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- · Advanced security: SPI firewall and IPSec VPN
- Auto-provisioning and TR069/TR104 for ease of deployment
- Triple Play QoS support and optional PSTN lifeline



ADSL2+ VolP IAD P2602R/RL Series

- ADSL/ADSL2/ADSL2+ high-speed Internet access
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Auto-provisioning and TR069/TR104 for ease of deployment
- Triple Play QoS support and optional PSTN lifeline



802.11g Wireless ADSL2+ VolP IAD P2608HW/HWL

- SIP (RFC 3261) support with 8 phone ports for VoIP
- ADSL/ADSL2/ADSL2+ high-speed Internet access
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- · Advanced security: SPI firewall and IPSec VPN
- Auto-provisioning and TR069/TR104 for ease of deployment





- Simple hardware switch to select ADSL2+ or Ethernet WAN
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- · Advanced security: SPI firewall and IPSec VPN
- TR069/TR104 for easy deployment
- Triple-play QoS support



802.11g Wireless VDSL2 VolP IAD P2802HWL

- VDSL2 support
- SIP (RFC 3261) support with 2 phone ports for VoIP
- Built-in 802.11g wireless AP and 4-port Ethernet switch
- · Advanced security: SPI firewall and IPSec VPN
- Auto-provisioning and TR069/TR104 for ease of deployment
- Triple Play QoS support and PSTN lifeline

# **VoIP Gateway**



802.11g Wireless VolP Station Gateway P2302HWL

- SIP (RFC 3261) support with 2 phone ports for VoIP
- Full FXO functionality to route calls through PSTN and VoIP
- Built-in with 802.11g wireless AP and 4-port Ethernet switch
- Auto-provisioning and optional TR069/TR104 for ease of deployment
- SPI firewall for advanced security
- IP QoS support to prioritize voice traffic and PSTN lifeline

## **VoIP Gateways**



- SIP (RFC 3261) support with 2 phone ports for VoIP
- Flexible SIP account assignment to both FXS ports
- Auto-provisioning and optional TR069/TR104 for ease of deployment
- NAT routing support for Internet sharing or bridge mode
- IP QoS Support to prioritize voice traffic
- PSTN lifeline



- SIP (RFC 3261) support with 2 phone ports for VoIP
- Flexible SIP account assignment to both FXS ports
- Auto-provisioning and optional TR069/TR104 for ease of deployment
- NAT routing support for Internet sharing or bridge mode
- IP QoS Support to prioritize voice traffic

### **VolP Phones**



- 2 line LCD text display
- Supports 3-way conferencing with crystal-clear voice quality
- ZyXEL auto-provisioning for ease of deployment
- Uses industry leading TI Voice DSP
- Optional PoE support



- Up to 4 SIP multilines
- 4.2" LCD high-resolution screen
- Supports 3-way conferencing with crystal-clear voice quality
- Up to 6 LED indicators
- ZyXEL auto-provisioning for ease of deployment
- Optional DECT station support
- Optional PoE support

Home Users	Business Users	Carrier Services
Notes:		

Index		G		ICTS1YUSG200ICTS1YUSG2000		NWA850039
Λ		G202G302v3		ICTS1YUSG3000		NWD211AN 35
A	0.4	G4100v2		IES1000		NWD270N35
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D		GS108B		IES6000		0
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ZWUSG200	10
ZWUSG2000	1
ZWUSG300	1
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