ZyXEL

Superior Dual WAN IAD for Smoothing Next-generation Access Network Migration

- **Dual WAN to Enrich ISP's Feasibility on Logistics**
- **Ease of Wireless Network Installation with WPS, and Time Scheduling for Energy Saving**
- **Auto Configuration and Provisioning via TR069, and TR104**
- **Effective Bandwidth Management to Enhance Triple-play Application**
- **Robust Firewall Protection and IPSec VPN Security**

Benefits

Dual WAN to Enrich ISP's Feasibility on Logistics

When ISP migrates the service from ADSL2+ to VDSL2, PON, or WiMAX, subscribers can keep existing P-2612HW Series for terminating the IP-connection but now via the Ethernet WAN, originally DSL WAN. The end-users can still experience in most cases from the original CPE, and which is better than the case that customer have to change current CPE due to the difference of physical connection.

Ease of Wireless Network Installation with WPS, and Time Scheduling for Energy Saving

WPS provides an efficient way for users who possess even with little understanding of Wi-Fi and security configuration to automatically configure wireless LAN, add new devices, and enable security by simply pressing WPS button on the top cover.
The P-2612HW Series also supports Wi-Fi scheduling that allows customers to easily program when the Wi-Fi radio on or off for further energy saving.

Auto Configuration and Provisioning via TR069, and TR104

Auto provisioning mechanism allows provisioning P-2612HW Series at the same time of connection to the broadband access network, and the feasibility for re-provision at any subsequent time, main capabilities including auto-configuration, dynamic service provisioning, image management, status monitoring, and diagnostics.

Effective Bandwidth Management to Enhance Triple-play Application

The P-2612HW Series enables users to allocate network resources while guaranteeing Quality of Service (QoS). Network Bandwidth Management increases productivity and efficiency by tailoring a system to specific demands in today's 3-play solutions where mission critical applications (VoIP, IPTV, Video on demand, etc) are expected to work in xDSL network.

Robust Firewall Protection and IPSec VPN Security

The ICSA-certified ZyNOS operating system ensures state-of-the-art SPI firewall protection especially against DoS attacks. The P-2612HW Series provides the first line of defense against hackers, network intruders, and other malicious threats. For SOHO users, IPsec VPN helps ensure secured transmission between two sites, allowing secure connection between telecommuters and branch offices without expensive lease lines.

Dual WAN ADSL2+ VoIP IAD

P-2612HW Series

Dual WAN | ADSL 2+ | VoIP | Firewall | VPN | b/g WiFi CERTIFIED

VoIP

ZyXEL

Specifications

System Specifications

DSL Features

- ADSL compliance/ITU-T G.992.1/ITU-T G.992.2 Annex A, B (G.lite)/ITU-T G.994.1 (G.hs)
- ADSL2 compliance/ITU-T G.992.3 (G.dmt.bis)/ITU-T G.992.4 (G.lite.bis)
- ADSL2+ compliance/ITU-T G.992.5

Router Features

- NAT (includes multi-to-multi NAT)/SUA, 4096 NAT sessions
- Full cone NAT
- NAT server (port forwarding)
- NAT ALGs
- PPTP/L2TP/IPSec VPN pass through
- PPPoE
- DHCP client/server/relay
- DHCP options (option 42, 43, 60, 61, and 125)*
- DNS proxy
- Dynamic DNS support
- IGMP snooping and proxy
- IGMP fast leave
- IP multicasting, IGMP v1, v2, v3*
- IP alias
- RIP I/RIP II supported
- Support 16 IP static route
- IP policy routing
- UPnP support
- Adjustable MTU size (Max 1518 byte)

Voice Functionality

- SIP version 2 (RFP 3261)
- Codec: G.711, G.729a/b
- Wideband voice (G.722)*
- Echo cancellation: G.168, VAD, silence suppression, CNG, dynamic jitter buffer
- DTMF detection and generation
- DTMF: in-band and out-of-band (RFC 2833), (SIP INFO)
- Modem and fax tone detection and pass-through
- T.38 FAX relay
- DNS SRV

Phone Features

- Message waiting indicator (RFC 3842)
- Flexible dial plan (RFC3525 section 7.1.14)
- Caller ID
- FAX relay: transparent fax relay over G.711
- IVR (Interactive Voice Response)
- Call waiting
- Call hold
- Early media
- Flash hook timer
- Call transferring (blind and attended transfer)
- Call forwarding
- Three way conference
- Abbreviated dialing (speed dialing)

- Shuttle enquiry call (second call)
- DND (Do NOT Disturb)
- Call block
- CLIP (Calling Line Identification Presentation)
- CLIR (Calling Line Identification Restriction)
- COLP (Connected Line Identification Presentation)
- COLR (Connected Line Identification Restriction)
- Conference call w/media server
- Caller ID generation/detection w/DTMF & FSK format
- Internal call
- Speed dial (phone book)

VLAN/QoS

- Support 802.1Q port/tag based VLAN
- Support 802.1P priority bit
- TOS/DiffServ
- Support flexible traffic classification
- Support 4 priority queue
- Freely assign the classified traffic to queues, VLAN, or PVC
- Per VLAN IPR (IP routing), (Max 4)
- Per VLAN PPPoE (Max 4)
- Media Bandwidth Management (MBM) for 3-play

Wireless LAN

- IEEE 802.11g compliance
- Button/PIN mode WPS (Wi-Fi Protected Setup)
- Wi-Fi Protected Access support (WPA, WPA PSK, WPA2 (IEEE 802.11i), WPA2-PSK, WPA EAP)
- 802.11e (WMM)
- WLAN bridge to LAN
- MAC address filter
- Support IEEE 802.1x
- Multiple SSID (up to 4)
- Random WPA key
- Time scheduling for wireless on/off
- SSID VLAN-tagging (guest access)*

Firewall Security

- Firewall with SPI (Stateful Packet Inspection)
- Protection of DoS attacking
- Content filtering: URL keyword blocking
- IP & generic packet filtering
- Real-time attack alert and logs
- SIP ALG

Virtual Private Network

- 2 concurrent VPN tunnels
- IKE and manual key management
- AH and ESP protocol
- DES/3DES and AES encryption
- SHA-1 and MD5 authentication
- Tunnel and transport mode encapsulation
- IPSec NAT traversal
- NETBIOS pass-through for IPSec

Network Management

- Web GUI
- CLI (Command Line Interpreter)
- Remote management for Telnet/FTP/Web/SNMP/ICMP/DNS
- Remote firmware upgrade via Web/FTP/TFTP
- SNMP v1 & v2c with MIB II
- TR-069/TR-098/TR-104
- TR-064
- TR111

Hardware Specifications

- RJ-11 DSL port for ADSL Annex A and RJ-45 DSL port for ADSL Annex B and U-R2
- 4-port auto MDI/MDI-X 10/100M Ethernet LAN ports
- 1-port auto MDI/MDI-X 10/100M Ethernet WAN port
- Wi-Fi IEEE 802.11b/g
- One external dipole antenna, non-detachable
- Restore factory defaults button
- 2 FXS POTS interface
- A hardware switch for DSL/Ethernet WAN
- WLAN button on top side for WLAN On/Off and WPS
- Restore factory reset button
- Power consumption: 18 W

Physical Specifications

- Item weight: 460 g (1.02 lb)
- Item dimensions: 218 (W) x 144 (D) x 40 (H) mm (5.67 (W) x 8.58 (D) x 1.57 (H) inch)
- Packing weight: 665 g (1.47 lb)
- Packing dimensions: 277 (W) x 263 (D) x 77 (H) mm (10.35 (W) x 10.9 (D) x 3.03 (H) inch)

Environmental Specifications

- Operating temperature: 0°C ~ 40°C
- Storage temperature: -20°C ~ 60°C
- Operating humidity: 20% ~ 85% RH
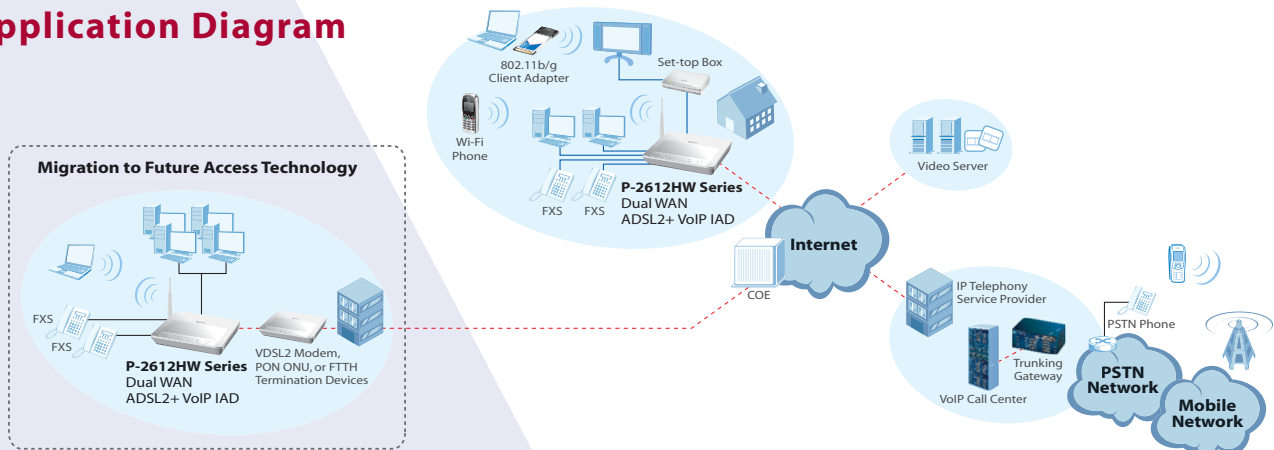- Storage humidity: 20% ~ 90% RH

Certification

- CE

Feature Released in Future/F/W upgradeable.

Product Description

- P-2612HW-F1
  802.11g Wireless ADSL2+ VoIP IAD over POTS
- P-2612HW-F3
  802.11g Wireless ADSL2+ VoIP IAD over ISDN

Application Diagram

Migration to Future Access Technology

FXS
FXS
P-2612HW Series Dual WAN ADSL2+ VoIP IAD

VDSL2 Modem, PON ONU, or FTTH Termination Devices

802.11b/g Client Adapter

Set-top Box

Wi-Fi Phone

FXS FXS

P-2612HW Series Dual WAN ADSL2+ VoIP IAD

Internet

COE

Video Server

IP Telephony Service Provider

Trunking Gateway

VoIP Call Center

PSTN Phone

PSTN Network

Mobile Network

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

65-100-261202B   07/09