

# Prestige 2602HW Series

## 802.11g Wireless ADSL VoIP IAD



### Models:

- P-2602HW over POTS
- P-2602HW over ISDN
- P-2602HW over U-R2
- P-2602HWL over POTS with PSTN Lifeline
- P-2602HWL over ISDN with PSTN Lifeline
- P-2602HWL over U-R2 with PSTN Lifeline

ZyXEL's P-2602HW series is a powerful, all-in-one ADSL VoIP IAD (Integrated Access Device) for SOHO and SMB applications. The IAD integrates high-speed ADSL access, 4-port Ethernet switch, IEEE 802.11g high-speed wireless connectivity, and 2 POTS ports for Voice over IP functionalities.

Based on industry open standard- SIP signaling and sophisticated voice compression technology, the P-2602HW series offers smooth IP-based voice communication with superb sound quality. It allows customers to take advantage of many new and existing IP Telephony features.

Not only does ZyXEL's P-2602HW series feature Firewall and VPN as an ADSL security gateway, but also provides high-speed wireless connectivity with IEEE 802.11g wireless standard compliance.

Scalable, cost-effective and easy-to-use, ZyXEL's P-2602HW is the ideal data and voice communication solution to meet the business needs of today and the future.

## Benefits

### Higher-speed Internet Access and Maximum Freedom of Mobility

ZyXEL's P-2602HW is a high performance ADSL/ADSL2/ADSL2+ gateway that allows small and medium offices to have higher-speed Internet access, offering higher data transfer rates and better bandwidth than traditional ADSL enabled gateways. Furthermore, with an IEEE 802.11g wireless AP built-in, the P-2602HW offers maximum freedom of mobility with 54Mbps transmission speeds, higher than the current IEEE 802.11b wireless standard.

### Supports Open Standard

ZyXEL's P-2602HW series supports standard SIP (RFC 3261), which is suitable for IP telephony service deployment and addresses the needs of users who are connecting to emerging SIP-based communication networks.

### Robust Firewall Security and Enhanced VPN Performance\*

Based on Stateful Packet Inspection and Denial of Service (DoS), ZyXEL's P-2602HW series provides state-of-the-art Firewall performance and robust security to defend against hackers, network intruders, and other hazardous threats. Furthermore an ASIC DES accelerator enhances VPN performance to levels higher than ever before.

\* For future release

### Multiple SIP and Voice Channels

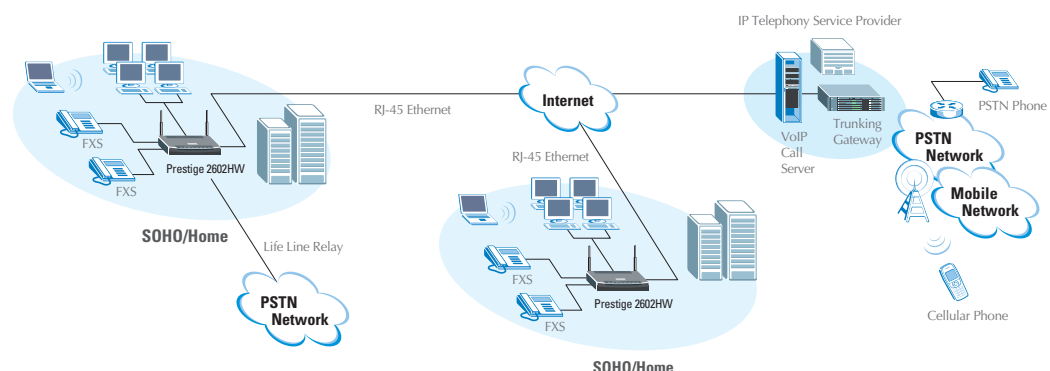
Based on ZyXEL's flexible VoIP technology platform, one or more SIP phone number may be configured with the P-2602HW. Each SIP phone number can be freely assigned to either phone port individually, or to both ports at the same time.

By using ZyXEL's P-2602HW ADSL VoIP IAD to deploy VoIP service, service providers need only provide a minimum of one SIP number to each subscriber. Billing and service deployment are simplified by allowing subscribers to use two phones with the same SIP number. If one telephone is in use, users may use a secondary telephone to place a call while using the same SIP number. Additionally, users may also receive incoming calls even when the SIP number is in use. The advantages of the P-2602HW include increased traffic and service revenue.

### Lifeline Support (Option, P-2602HWL)

ZyXEL's P-2602HWL allows users to maintain PSTN phone service and VoIP service at the same time. When ATA power down occurs or VoIP service is not available, outgoing phone calls will be relayed to PSTN automatically. When VoIP service is active, users can place calls to a PSTN phone by dialing pre-fix numbers. Emergency calls or important calls can be relayed to PSTN automatically.

## Application Diagram



**ZyXEL**  
Unleash Networking Power

### Features

#### Voice Functionality

- SIP (RFC 3261) version 2
- SDP (RFC 2327)
- RTP/RTCP (RFC1889, 1890)
- Echo Cancellation: G.168
- VAD (Voice Activity Detection)
- Silence Suppression
- CNG (Comfort Noise Generation)
- Dynamic Jitter Buffer (Adaptive)
- QoS Supports TOS / DiffServ
- VLAN Tagging
- DTMF Detection and Generation
- DTMF: In-Band and Out-of-Band (RFC2833), (SIP INFO)
- Fax Tone Detection and Pass-through
- Modem Tone Detection and Pass-through\*
- T.38 FAX Relay\*
- Telephony Features: Caller ID, Call Waiting, Message Waiting, Three Way Conference (Depends on IP Telephony Service Provider)\*
- Flash Hook Timer\*
- Multiple SIP Accounts / Phone Numbers Freely assignable to Each Phone Port
- Multiple Channel Technology

#### Voice Codecs

- G.711
- G.729
- GSM (Option)\*
- G.726 (Option)\*
- G.723 (Option)\*

#### ADSL Compliance

- Support Multi-Mode standard (ANSI T1.413, Issue 2 ; G.dmt (G.992.1); G.lite (G992.2)).
- ADSL2 G.dmt.bis (G.992.3)\*
- ADSL2 G.lite.bis (G.992.4)\*

- ADSL2+ (G.992.5)\*
- Extended-Reach ADSL (ER ADSL)\*
- SRA (Seamless Rate Adaptation)\*
- Auto-negotiating rate adaptation

#### ATM Support

- 8PVCs Support
- RFC 1483/2684 Multiple Protocol over AAL5
- RFC 2364 PPP over AAL5
- RFC 2516 PPP over Ethernet
- VC and LLC Multiplexing
- Traffic Shaping UBR, CBR, VBR-rt, VBR-nrt
- ATM Forum UNI3.1/4.0 PV ITU-T I.610 OAM F4/F5 Loop-back, AIS, and RDI OAM CellsTR-37, TR-62 DSL Auto Configuration\*

#### Routing Support

- IP Routing: TCP, UDP, ICMP, ARP
- RIP1v1 and RIPv2
- IP Multicast IGMP v1/v2

#### Firewall Security\*

- Stateful Packet Inspection to prevent DoS attack
- Access Control of Service
- Content Filtering
- IP & Generic Packet Filtering
- Real-time Attack Alert and Logs
- DMZ Interface for Public Server

#### Virtual Private Network\*

- 20 IPsec VPN Tunnels
- IKE and Manual Key Management
- AH and ESP Protocol
- DES and 3DES Encryption (Hardware DES Engine for P260HW only)
- SHA-1 and MD5 Authentication
- Tunnel and Transport Mode Encapsulation

#### IP Management

- SUA/Multi-NAT Internet Access Sharing
- Multimedia Applications Pass-through NAT
- DHCP Server/Relay/Client
- DNS Proxy
- Dynamic DNS
- UPnP Support

#### Wireless LAN

- IEEE 802.11g/11b Compliance
- Data Rates up to 54Mbps, Auto Fallback
- 64/128/256 bits WEP Encryption
- MAC Address Filtering
- IEEE 802.1x Port-based Authentication
- RADIUS Support for 802.1x
- Two External Antenna

#### Network Management

- Friendly Web-based Configuration Tool
- Menu-driven and Command-Line Interpreter (CLI)
- Telnet/Console Management
- FTP/TFTP Firmware Upgrade and Configuration Backup/restore
- Built-in Diagnostic Tool
- SNMP Support
- ZyXEL Vantage CNM Support\*

#### PSTN Lifeline Support (Option, P-2602HWL)

- Send Emergency Call to PSTN
- Make a PSTN Call by Dialing Pre-fix Number
- PSTN Relay when Device Power Down
- PSTN Relay when VoIP Service is Not Available
- Receive Incoming PSTN Phone Call

\* For future release

### Specifications

#### Hardware Specification

- ADSL:
  - P-2602HW
    - One RJ-11 Port (Annex A)
    - One RJ-45 Port (AnnexB/U-R2)
  - P-2602HWL
    - One RJ-45 Port (Annex A/B/U-R2)

- LAN: Four Ports 10M/100M Auto MDI/MDIX Ethernet Switch
- Phone: Two RJ-11 Ports for Analog Service Connection
- Console: One PS/2 console for Management
- Reset Button
- Status LEDs Indicator

#### Power Requirement

- Power: 18V DC 1A Switching Power Supply

#### Physical Specification

- Dimensions: 248(L) x 168(D) x 37(H) mm
- Weight: 642 g

#### Operating Environment

- Temperature: 0 ~ 40°C
- Humidity: 20 ~ 85% (Non-condensing)



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