

# ZyXEL



## All-in-one ADSL 2+ VoIP IAD for SOHO



- ADSL, ADSL2/2+ support
- SIP (RFC3261) support with 2 phone ports for VoIP
- Advanced security features: SPI Firewall, IPsec VPN
- Support QoS to prioritize voice and data traffics
- Auto Provisioning for easy deployment

### Benefits

#### All-in-one ADSL VoIP IAD

ZyXEL P-2602H/HW/HWL Gateway Series is an integrated Internet access device supporting high-speed ADSL, ADSL2 and ADSL2+ standard over existing copper lines.

Combining convenient Wireless AP (optional), Ethernet switch, Firewall and VoIP gateway features, it is indispensable for homes and small offices with limited space and technical expertise.

#### Flexible Phone Features

With two built-in phone ports and flexible calling features, ZyXEL P-2602H/HW/HWL not only empowers ITSP to enjoy better profitability from flexible phone number assignment, but also offers unprecedented flexibility for users to talk unlimitedly through high-speed broadband connection.

#### Advanced Security Features

Based on Stateful Packet Inspection and Denial of Service (DoS) technologies, the P-2602H/HW/HWL provides state-of-the-art firewall performance and robust protection against hackers, network intruders and other malign threats. Furthermore, the standard-based IPsec VPN ensures secured data transmission for site-to-site and remote access deployment. Since data sent by P-2602H/HW/HWL over the Internet can be encrypted, users is free to use the ADSL2/2+ line to replace private leased lines or frame relay networks, allowing global interconnectivity at minimal expense.

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

"PSTN Lifeline" feature allows users to switch to the standard phone line in case of power or Internet outage. Thanks to the friendly design of P-2602HWL, VoIP service subscribers can place calls just like using a PSTN phone.

ADSL 2+ VoIP IAD

P-2602H  
/HW/HWL



VOIP



ADSL 2+ VoIP IAD

P-2602H  
/HW/HWL

## Specifications

### Voice Codec

- G.711
- G.729

### Voice Feature

- 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)
- 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\*
- CLID
- Call Waiting\*
- Call Forward\*
- Three way conference\*
- MWI\*
- Flash Hook Timer\*
- Multiple SIP Accounts Freely assignable to Each Phone Port

### QoS

- Diffserv
- Voice priority always guaranteed.
- Media Bandwidth Management (MBM)\*
- E to E QoS mechanism (depends on service providers' network)

### ADSL Compliant

- Support Multi Mode Standard (ANSI T1.413 Issue 2, G.dmt, G.lite)
- ADSL2 G.dmt.bis (G.992.3)\*
- ADSL2 G.lite.bis (G.992.4)\*
- ADSL2+ (G.992.5)\*
- Reach Extended ADSL (RE ADSL)\*

### ATM Support

- 8 PVCs 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
- ATM Forum UNI 3.1/ 4.0 PVC
- I.610 OAM F4/F5 loop-back, AIS, and RDI OAM cells
- TR-048

### Routing Support

- IEEE 802.1d Transparent Bridging
- IP Routing: TCP, UDP, ICMP, ARP
- RIP1v1 and RIPv2
- IP Multicast IGMP v1/v2

### IP Management

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

### Wireless LAN (P-2602HW/HWL)

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

### Firewall Security

- Stateful Packet Inspection
- Prevent DoS Attack
- Access Control of Service
- Content Filtering
- IP & Generic Packet Filtering
- Real-time Attack Alert and Logs

### Virtual Private Network

- 20 IPSec 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

### Network Management

- Web based Configuration
- Command-line Interpreter (CLI)
- Telnet Remote Management
- SNMP Support
- FTP/TFTP firmware upgrade and configuration backup/restore
- Built-in diagnostic tool

### PSTN Lifeline Support (Optional)

- 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

### Hardware Specifications

- ADSL:
  - RJ-11 for P2602HW over POTS
  - RJ-45 for P2602HW over ISDN/UR2
  - RJ-45 for P-2602HWL over POT/ISDN/UR2
- LAN:
  - Four Ports 10M/100M Auto MDI/MDIX Ethernet Switch
- Phone: Two RJ-11 Ports for Analog Service Connection
- Reset Button
- Status LEDs Indicator
- Power: 18V DC 1A Switching Power Supply

### Physical Specifications

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

### Environmental Specifications

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

## Product Description

<b>P-2602H-61C</b>	ADSL 2+ VoIP IAD over POTS
<b>P-2602H-63C</b>	ADSL 2+ VoIP IAD over ISDN
<b>P-2602H-67C</b>	ADSL 2+ VoIP IAD over U-R2
<b>P-2602HW-61C</b>	802.11g Wireless ADSL 2+VoIP IAD over POTS
<b>P-2602HW-63C</b>	802.11g Wireless ADSL 2+ VoIP IAD over ISDN

<b>P-2602HW-67C</b>	802.11g Wireless ADSL 2+ VoIP IAD over U-R2
<b>P-2602HWL-61C</b>	802.11g Wireless ADSL 2+ VoIP IAD over POTS with Lifeline Support
<b>P-2602HWL-63C</b>	802.11g Wireless ADSL 2+ VoIP IAD over ISDN with Lifeline Support
<b>P-2602HWL-67C</b>	802.11g Wireless ADSL 2+ VoIP IAD over U-R2 with Lifeline Support

\* Firmware upgradeable for future enhancement

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

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