

ZyXEL



All-in-one ADSL2+ VoIP IAD for SOHO



- **ADSL2/2+ Support**
- **SIP (RFC3261) Support**
- **QoS and Bandwidth Management**
- **IEEE 802.11g Wireless**
- **Built-in ISDN NT and ISDN Supplementary Services**

Benefits

Voice over IP

The P-2602HWNLI-DxA Series complies with standard SIP (RFC 3261) protocol for Internet phone services. In addition, the two POTS ports design allows users to make two VoIP phone calls at the same time.

QoS Support

With intelligent Quality of Service (QoS) management features on the P-2602HWNLI-DxA Series, network administrators can allocate network resources effectively to ensure quality of service for time-sensitive applications (such as VoIP and video-on-demand). This also prevents other bandwidth-hungry applications (such as FTP and file-sharing) from hogging your network bandwidth.

Robust Firewall and Secure VPN Connectivity

The ICSA certified ZyNOS operating system gives state-of-the-art firewall protection based on Stateful Packet Inspection (SPI) technology and to prevent DoS attacks. Thus the P-2602HWNLI-DxA Series provides the first line defense against hackers, network intruders, and other malicious threats. In addition, IPSec VPN helps ensure secured transmission between two sites, allowing secure connection between telecommuters and branch offices without expensive lease lines.

Keep Existing ISDN Phone Service

The built-in ISDN S0 on the P-2602HWNLI-DxA Series allows users to keep their existing ISDN phone service for VoIP or ISDN phone calls.

ISDN/PSTN Line Support

ISDN subscribers can still make and receive ISDN phone calls using the same phone sets through the P-2602HWNLI-DxA Series. Now switching between ISDN and PSTN phone services is simple when Internet connection is down. In case of an unexpected power failure, you can still make regular PSTN phone calls with the user-friendly Lifeline support. This feature also kicks into work when the VoIP service becomes unavailable.

802.11g Wireless ADSL2+ VoIP IAD

P-2602HWNLI
-DXA SERIES



VOIP



Specifications

DSL Features

- 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)
- Reach Extended ADSL (RE ADSL)
- ADSL Physical Connection ATM AAL5 (ATM Adaptation Layer type 5)
- Support PPP over ATM AAL5 (RFC2364)
- PPP over Ethernet (RFC 2516)
- Support VC-based and LLC-based Multiplexing
- Support Up to 8 PVCs
- F4/F5 OAM

Router Features

- NAT (Includes Multi-to-multi NAT)/SUA, 512 NAT Sessions
- NAT Server (Port Forwarding)
- TCP/IP
- PPPoE Client
- DHCP Client/Server
- RIP I/RIP II Supported
- IP Multicasting, IGMP v1 and v2
- Dynamic DNS Support
- IP Alias

Voice and Phone Features

- SIP (RFC 3261) v2
- SDP (RFC 2327)
- RTP (RFC 1889)
- RTCP (RFC 1890)
- Echo Cancellation: G.168
- VAD (Voice Activity Detection)
- Silence Suppression
- CNG (Comfort Noise Generation)
- Support TOS & DiffServ Tagging
- VLAN Tag Support
- Codec: G.711 (PCM A-law or μ -law selectable), G.729a/b
- Option: G.726 (ADPCM), G.723*
- DTMF Detection
- Multiple SIP Number Supports
- Multiple Channel Supports
- Modem and Fax Tone Detection
- T.38 Fax Relay
- CW (Call Waiting)
- Call Waiting with Caller ID
- Call Forwarding (Unconditional/Busy/No Answer)
- Call Transferring
- Three Way Conference with local mixing

- CLIP (Calling Line Identification Presentation)
- CLIR (Calling Line Identification Restriction)
- Call Hold/Call Retrieve
- Incoming Call Policy (Call Accept/Call Forward/Call Block)
- Second Call
- Internal Call
- Early Media
- Flash Hook Timer
- Music on Hold
- MWI (Message Waiting Indicator (RFC 3842))
- IVR (Interactive Voice Response)
- Speed Dial (Phone Book)
- T.38 Real-time Fax Relay
- Quick Dialing Phone Book
- Flexible SIP Account Assign and Mapping
- Caller ID
- Country Code Selection
- Call Wait
- Call Hold
- Call Transfer
- 3-way Conference
- MW (Message Waiting)

Network Functionality

- Friendly Web-based Configuration Tool
- Remote FTP/TFTP Firmware Upgrade and Configuration Backup/restore
- TFTP and HTTP Auto-provisioning
- IVR for IP Address and FW Upgrade
- Simple Traversal of UDP over NAT (STUN, RFC3489)
- Outbound proxy
- Manual configured SIP and RTP (Fake address)

Lifeline Support

- 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

Management

- SNMP v1 & v2c with MIB II
- Embedded FTP/TFTP Server for f/w upgrade and Romfile Backup and Restore
- Telnet for Remote Management
- Remote Management Control: Telnet, FTP, Web
- UPnP Support
- TR-069/TR-104

Firewall Security and Virtual Private Network

- ICSA certified firewall with Stateful Packet Inspection
- Prevent DoS Attack
- Access Control of Service
- Content Filtering: URL blocking such as ActiveX, Java, Cookies and Web
- IP & Generic Packet Filtering
- Real-time Attack Alert and Log
- 5 IPsec VPN Tunnels (2 concurrent VPN tunnels)
- IKE and Manual Key Management
- AH and ESP Protocol
- DES/3DES and AES Encryption (S/W)
- SHA-1 and MD5 Authentication
- Tunnel and Transport Mode Encapsulation
- IPsec NAT Traversal
- NETBIOS pass-through for IPsec

Hardware

- RJ11 DSL port for ADSL Annex A and RJ45 DSL port for ADSL Annex B and U-R2
- 4-port auto MDI/MDI-X 10/100M Ethernet Ports
- Embedded 802.11g Wireless LAN
- One External Dipole Antenna, Non-detachable
- Restore Factory Defaults Button
- 2 FXS POTS Interface
- 1 FXO PSTN POTS

Physical Specifications

- Dimensions: 165 (W) x 65 (D) x 242 (H) mm
- Weight: 600g

Environmental Specifications

- Operating Temperature: 0°C ~ 40°C
- Storage Temperature: -30°C ~ 60°C
- Operating Humidity: 20% ~ 95% RH
- Storage Humidity: 20% ~ 95% RH

* Firmware upgradeable for future enhancement

Product Description

P-2602HWNL1-D1A

802.11g Wireless ADSL2+ VoIP IAD over POTS

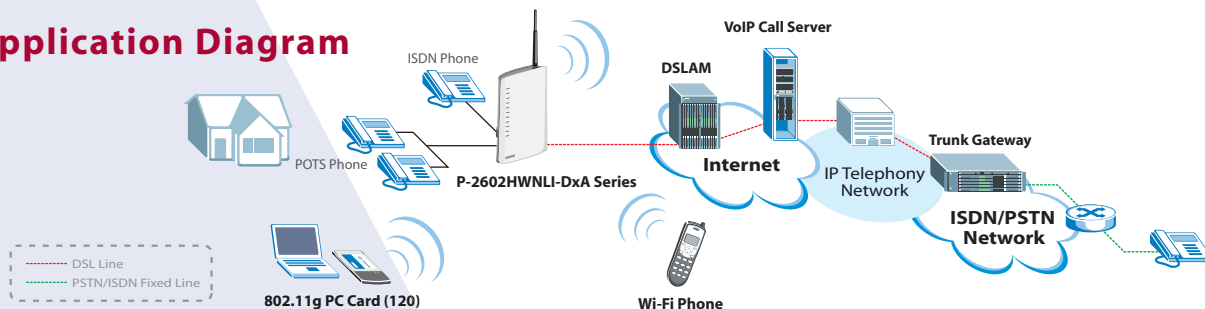
P-2602HWNL1-D3A

802.11g Wireless ADSL2+ VoIP IAD over ISDN

P-2602HWNL1-D7A

802.11g Wireless ADSL2+ VoIP IAD over U-R2

Application Diagram



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

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