Prestige 2002 Series
VoIP Analog Telephone Adapter

Models:

P-2002, VoIP ATA

P-2002L, VoIP ATA with PSTN Lifeline

ZyXEL's P-2002 is an Analog Telephone Adapter (ATA) that provides customers with an easy-to-use solution for Voice over IP service deployment. Connecting a traditional phone set to the POTS phone port of the P-2002 series instantly establishes an IP phone device, allowing users to place VoIP calls without the use of a PC. Based on industry standard SIP (Session Initiation protocol, RFC 3261) call control protocol and sophisticated voice compression technology, the P-2002 series offers smooth IP-based voice communication with superb sound quality.

ZyXEL's P-2002 series Analog Telephone Adapter is an ideal solution for IP Telephony service deployment as well as SOHO and Home VoIP applications.

Benefits

Supports Open Standard
ZyXEL's P-2002 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.

Easy to Deploy
ZyXEL's P-2002 series supports multiple methods of configuration including Web-based configuration, Telnet management, and TFTP Auto-Provisioning. It eliminates the time and effort associated with complicated installation procedures.

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-2002 ATA. Each SIP phone number can be freely assigned to either phone port individually, or to both ports at the same time.

By using the P-2002 ATA 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- 2002 ATA include increased traffic and service revenue.
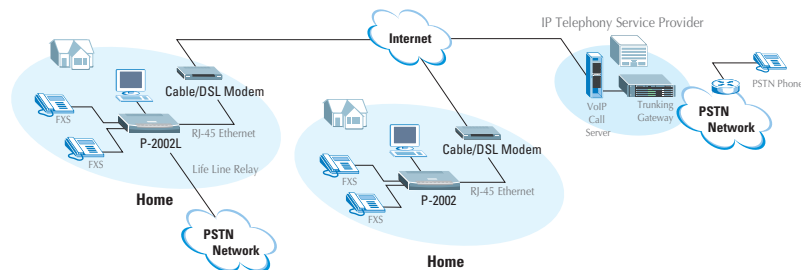
Cost Effective
ZyXEL's P-2002 series turns a traditional phone into an IP phone device at a very low cost. Not only does the Prestige 2002 series deliver VoIP service at a low per-port cost but the built-in two-port Ethernet switch also allows user to connect their PC to the reserve Ethernet port without adding an extra Ethernet switch or hub.

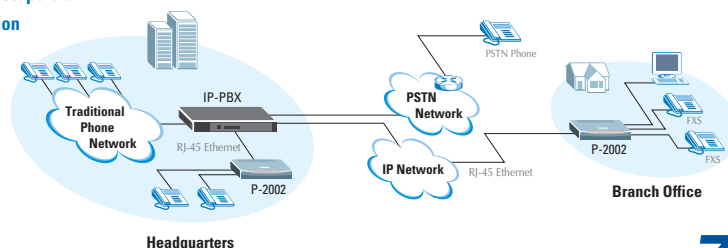### Lifeline Support (Option, P-2002L)
ZyXEL's P-2002L allows users to maintain PSTN phone service and VoIP service at the same time. When ATA power down occurs or VoIP service is not available, outgoing phone calls will be relayed to PSTN automatically. When VoIP service is active, users can place calls to a PSTN phone by dialing pre-fix numbers. Emergency calls or important calls can be relayed to PSTN automatically.

Application Diagram

IP Telephony Service Provider Application

IP-PBX based Corporate VoIP Application

ZyXEL
Unleash Networking Power

Features

Voice Functionality

- SIP (RFC 3261) version 2
- SDP (RFC 2327)
- RTP (RFC1889)
- RTCP (RFC1890)
- Echo Cancellation: G.168
- VAD (Voice Activity Detection)
- Silence Suppression
- CNG (Comfort Noise Generation)
- Dynamic Jitter Buffer (Adaptive)
- QoS Supports TOS, DiffServ
- VLAN Tagging
- 3 REN per RJ-11 FXS ports
- DTMF Detection and Generation
- DTMF: In-Band and Out-of-Band (RFC 2833), (SIP INFO)
- SIP NAT Traversal Support STUN (RFC 3489)

- Fax Tone Detection and Pass-through
- Modem Tone Detection and Pass-through*
- T.38 FAX Relay*
- Speed Dial Phonebook
- 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)*

PSTN Lifeline Support

(Option, P-2002L with PSTN Line Port)

- 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

Network Functionality

- PPPoE
- DHCP Client
- Friendly Web-based Configuration Tool
- Telnet Management
- FTP/TFTP Firmware Upgrade and Configuration Backup/restore
- Support TFTP Auto-Provisioning

Specifications

Hardware Specification

- LAN: Two 10M/100M Auto MDI/MDIX Ethernet Ports
- Phone: Two RJ-11 ports for Analog Telephone sevice
- Lifeline Port: One RJ-11 Port for PSTN Lifeline (P-2002L)

- Reset Button
- Status LEDs Indicator: PWR/VoIP, LAN, PC, Phone1, Phone2
- Power: 12V AC input

Physical Specification

- Dimensions: 180(L) x 128(D) x 36.5(H) mm
- Weight: 312g

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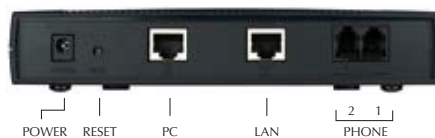
- Temperature: 0°C ~ 40°C
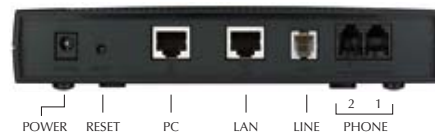- Humidity: 20% ~ 85% (Non-condensing)

For future release
Success of FAX transmissions depends on network conditions and your FAX machine tolerance to those conditions. Your network environment should have reasonably low delay, jitter, and packet loss rate.

Real Panel

P-2002

POWER   RESET   PC   LAN   2 1 PHONE

P-2002L

POWER   RESET   PC   LAN   LINE   2 1 PHONE

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