

Integrated ADSL modem and router plus Voice over IP for telephone calls over the Internet

Zoom's TelePort™ feature allows one or more normal phones to place and receive calls worldwide over the Internet, and also to connect to any phone on the Public Switched Telephone Network.

Includes FREE VoIP to VoIP calling service with FREE voice mail, caller I.D. and call conferencing

Clear natural-sounding voice quality with Quality of Service (QoS) support

Integrated design with built-in firewall simplifies setup and improves security

Built-in router provides shared Internet access for up to 253 concurrent users. Up to 5 computers can plug directly into the X5v

Built-in 10/100 four-port Ethernet Switch for computers, hubs, wireless access points

Advanced Firewall includes Stateful Packet Inspection, protection from Denial of Service Attacks, NAT, and more

Works with any operating system that supports an Internet browser including Windows, Macintosh and Linux

Proven compatability with SIP-standard servers, including Asterisk™ PBX

Two year warranty



ZoomTel ADSL X5v

ADSL Modem/Router/Gateway/Firewall/4-port Switch plus VoIP for voice calls over the Internet

Model 5565 for Annex A (ADSL over analog lines)

Model 5566 for Annex B (ADSL over ISDN lines)

The ADSL X5v integrates a full-rate ADSL modem, router, firewall, four-port 10/100 Ethernet switch, USB port, and VoIP phone port into a single cost-effective product.

The TelePort™ feature provides a phone port that lets you use your standard single-line phone for conventional phone calls or free and very low-cost Voice Over IP (VoIP) calls. Because the X5v integrates Internet telephony with a full-featured ADSL gateway, setup is easy and system security is ensured. Integration of the voice processing with the firewall in the router ensures reliability of VoIP calls, reduces service provider support requirements, and provides a high Quality of Service (QoS) for voice calls.

The Model 5565 and 5566 also come with the Global Village[™] VoIP phone service that sets up in minutes and lets you simply dial phone numbers and make free calls to devices like the X5v anywhere in the world. And because the X5v uses SIP, the most popular protocol for voice communications over the Internet, you can tap into a rapidly-growing world of other free and very low-cost phone services.

The X5v's built-in four-port Ethernet switch eliminates the need for a separate Ethernet hub for most home networks and many small offices. The USB port allows direct connection of a fifth computer to the ADSL X5v. By adding external hubs or a wireless access point, the X5v can provide simultaneous Internet access for up to 253 computers.

The Local Phone port of the Model 5565 and 5566 includes the TelePort, an intelligent relay that allows a single phone to place and receive both VoIP calls and calls over the Public Switched Telephone Network (PSTN). PSTN Fail-Over allows the X5v to automatically route calls over the dial-up phone network when power is lost. PSTN support also allows emergency dialing using services like 911 or 112 calling.

Setup is easy using any authorized local or remote computer's Web browser and the graphical user interface built into the X5v. After setup, the X5v voice features work even without an attached computer. Flash memory allows easy firmware updates.

Making Phone Calls Over the Internet

The X5v allows you to minimize or eliminate long distance charges while maintaining the flexibility and security of your normal phone service. A special Local Phone port lets you plug in a conventional telephone. This phone can make and receive calls just like your regular phones, but it can also do much more!

The Model 5565 and 5566 come with Global Village phone service that sets up in minutes from your PC and lets you simply dial phone numbers to make free calls to another X5v user or to most other VoIP users anywhere in the world. You'll get a special phone number for people calling you over the Internet. When that call comes in, your phone will ring normally.

What if you want to call someone whose phone isn't able to make or receive calls over the Internet? You have two ways to call that person. In the first way, the X5v lets you dial the call normally, and your call goes out through your local phone line to the traditional "public switched telephone network" or PSTN. (When you want the call to go out over the Internet, you dial a # before dialing the person's phone number.) In the second way, you sign up for enhanced Global Village service or another VoIP service provider that lets your calls travel through the Internet to a special gateway and on to the PSTN.

Unlike competing products, the 5565 and 5566 can be used with either the bundled Global Village service, or your own VoIP server, or be used with a number of other Internet phone services that use the industry-standard SIP protocol.

ADSL X5v

ADSL Modem + Router + Gateway + Firewall + 4-port Switch plus VoIP for voice calls over the Internet

Model 5565 - Annex A Model 5566 - Annex B

· DHCP (Dynamic Host Configuration Protocol) server

• NAPT (Network Address and Port Translation)

• Simultaneous USB and Ethernet operation

• Four 10/100 Mbps auto-sensing RJ-45 ports

and one filtered jack for local phones

• Two RJ-11 jacks, one for the ADSL/PSTN connection

• Nine indicators - power, link, data, USB, four LAN port

· Compliant with USB Specification, Revision 1.1

• Configuration of static routes and routing table

• 19 x 14.6 x 3.2 cm; 7.50 x 5.75 x 1.25 inches

CE, UL, C-UL, FCC Part 15B, FCC Part 68, CS-03

· Specification of PPP user ID and password

• NAT (Network Address Translation)

· Static routing

• RIP V2, RIP V1

Port Forwarding

• IEEE 802.3 compliant

• Full-speed USB (12 Mbps)

connection indicators & VoIP

· Menu-selected firmware upgrade · WAN and LAN side connection statistics

· Selection of bridge or router mode

· Configuration of virtual circuits

· 2 years

· Password protected access

· Configuration of NAT/NAPT

DNS Proxy

and client

ADSL Gateway Specifications

ADSL Compliance

- · Compliant with ADSL standards:
 - Full-rate ANSI T1.413 Issue 2, G.hs (G.994.1) and ITU G.dmt (G.992.1) standards
 - Splitterless G.lite (G.992.2) specification
 - Annex A Model 5565 - Annex B - Model 5566
- · DMT modulation and demodulation
- · Full-rate adaptive modem
 - Maximum downstream rate of 8 Mbps
 - Maximum upstream rate of 896 Kbps
- · Supports splitterless ADSL implementation
- · Interoperable with all major DSLAM manufacturers

ATM Protocols

- WAN mode support: PPP over ATM (RFC 2364) and PPP over Ethernet (RFC 2516)
- LAN mode support: bridged/routed Ethernet over ATM (RFC 1483) & Classical IP over ATM (RFC 1577)
- ATM Forum UNI 3.1/4.0 PVC
- · Up to eight virtual circuits
- · ATM segmentation and re-assembly
- ATM AAL5 (adaption layer type 5)
- OAM F4/F5

Bridge Mode

- · Ethernet to ADSL self learning Transparent Bridging (IEEE 802.1D)
- · Supports up to 128 MAC learning addresses
- · Bridge MAC Address Filtering

Security

- SPI (Stateful Packet Inspection) Firewall
- · Protection from DOS (Denial of Service) Attacks
- · User authentication for PPP
- PAP (Password Authentication Protocol)
- · CHAP (Challenge Authentication Protocol)
- · Password protected system management

Voice over IP Analog Telephone Adapter Specifications

Voice Compression

Regulatory Approval

Router Mode

Ethernet Interface

Phone Ports

USB Interface

Interface

Warranty

Size

Status Indicators

HTML Graphic User

Codecs

Line-echo Cancellation • G.165, G.168 compliant

· 8 to 128 msec configurable echo length

G.729A, G.711 A-Law, G.711 U-Law

· Nonlinear echo suppression

Voice Features

- · Voice activity detection (VAD) · Comfort noise generation (CNG)
- · Dynamic jitter buffer (adaptive)
- · Packet Loss Concealment
- · Bell 202 and V.23 Caller ID
- · Quality of Service (QOS) provides priority for RTP (voice audio) traffic sent through the router
- · STUN support for voice traffic

Analog Voice Port

- Type: Loop-start FXS interface
- DTMF tone detection/generation

Off-hook Detection

- V.21/V.25 Modem/fax tone detection
- · Ring occurs for incoming VoIP and POTS calls
- Ring generation with 5 Ringer Equivalents supports more than 5 typical telephones

Call Control VolP

System Requirements

Protocol

- SIP (RFC 3261)
- · Digest Authentication using MD5
- · Record-Route Headers
- Distinct SIP Proxy separate from SIP Domain/Realm

Any Windows, Macintosh, or Linux computer with an Ethernet port. OR Windows 98SE, ME, 2000 computers with a USB port and a 200 MHz or faster processor. OR Windows XP computers with a USB port and a 400 MHz or faster processor.

Package contents:

 X5v ADSL Gateway · Ethernet cable

· USB cable · Phone cable

• CD ROM

User manual

· Power adapter

· Filters and phone adapters:

Filters and/or phone adapters may be included in some markets. Please check the package for specifics or ask your dealer. An ADSL filter allows a telephone, facsimile machine, or other telephone instrument to be used on a phone line even when you are

online with your ADSL modem.



International Headquarters

Zoom Technologies, Inc., 207 South Street, Boston, MA 02111 USA Tel: 617 423-1072 Fax: 617 423-3923 email: sales@zoom.com

Nasdag: ZOOM

European Sales

Zoom Technologies, Inc., Central House, 2 Kings Road Fleet, Hants GU51 3AD UK

Tel: +44 (0) 1252 582000 Fax +44 (0) 1252 617920

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