



ADSL 2/2+ compliant for faster ADSL speeds and extended distances over which high-speed data can be delivered

Built-in router provides shared Internet access for up to 253 concurrent users

Easy setup with Zoom's Installation Wizard and auto configuration of ADSL settings

Built-in 10/100 four-port Ethernet switch

Allows concurrent use of USB and Ethernet ports for Internet sharing

Advanced security from hacker attacks with Stateful Packet Inspection (SPI) and Network Address Translation (NAT) firewalls

Works with all popular ADSL services

SNMP support (Simple Network Management Protocol)

Documentation provided in English, Spanish, French, German, Greek, Portuguese, Turkish.

Works great with wireless access points or gateways

Supports Universal Plug and Play (UPnP)

Works with most computer operating systems, including Windows®, Macintosh®, and Linux

Two year warranty



Zoom ADSL X5

**ADSL 2/2+ Modem/Router/Gateway/Firewall/
4-port Switch with Ethernet and USB Interfaces**

Model 5654

The ADSL X5 integrates a full-rate ADSL 2/2+ modem, router, firewall, four-port 10/100 Ethernet switch and a USB port into a single cost-effective product. Concurrent Ethernet and USB connections are supported for flexibility in operating with a range of devices. Up to five computers can be plugged into the X5 directly and each can enjoy simultaneous independent Internet access.

The Model 5654 is compatible with older ADSL protocols as well as the new ADSL 2/2+ standards for download speeds of up to 24 Mbps and extended distances over which high data rates can be delivered.*

The built-in four-port Ethernet switch eliminates the need for a separate Ethernet hub for most home networks and many small offices. The Ethernet ports on the X5 provide connection to computers running most operating systems, including Windows as well as Linux, Unix, and Mac Operating systems. The USB port supports connection to a Windows computer. The X5 can also be plugged into a hub or wireless access point to provide concurrent Internet access for up to 253 networked computers.

Security features include Network Address Translation (NAT), Stateful Packet Inspection (SPI), and an extensive list of other security controls

An Installation Wizard makes setup a snap, and an auto configuration option automatically establishes the protocol and encapsulation used by the ADSL service. Simple Network Management Protocol (SNMP) is supported for remote maintenance by network administrators. Universal Plug and Play (UPnP) provides easy Local Area Networking configuration and operation.

Zoom ADSL gateways are backed by a two year warranty and over 30 years of experience in the design and support of communications products.

Specifications

ADSL Compliance

- Compliant with ADSL standards:
 - Full-rate ANSI T1.413 Issue 2, ITU G.dmt (G.992.1) standards
 - ITU G.lite (G.992.2) specification
- Compliant with ADSL 2 standards:
 - ITU G.992.3
 - ADSL Annex L (reach extended DSL)
- Compliant with ADSL 2+ standards:
 - G.992.5
- DMT modulation and demodulation
- Full-rate adaptive modem
 - Maximum downstream rate of 24 Mbps
 - Maximum upstream rate of 1024 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 IP over ATM (RFC 1483) and 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

ADSL X5

ADSL 2/2+ Modem/Router/Gateway/Firewall/
4-port Switch with Ethernet and USB Interfaces

Model 5654

Specifications (continued)

| | |
|---|--|
| Router Mode | <ul style="list-style-type: none">• Static routing• DNS Proxy• IP filtering• DHCP (Dynamic Host Configuration Protocol) server and client and Relay• NAT (Network Address Translation)• NAT (Network Address and Port Translation)• RIP V1 and V2• PPP Half Bridge• Dynamic DNS• Virtual Server/DMZ Support |
| Security | <ul style="list-style-type: none">• Simultaneous USB and Ethernet operation• Stateful Packet Inspection (SPI)• User authentication for PPP• PAP (Password Authentication Protocol)• CHAP (Challenge Authentication Protocol)• Password protected system management• VPN passthrough: PPTP, L2TP, IPsec tunneling• Bridge filtering• Blocked Protocols• Black Lists• Attack Protection• Denial of Service Protection• Port Scan Detection and Prevention• Parental Control |
| Ethernet Interface | <ul style="list-style-type: none">• IEEE 802.3 compliant• Four 10/100 Mbps auto-sensing RJ-45 ports |
| USB Interface | <ul style="list-style-type: none">• Compliant with USB Specification, Revision 1.1• Full-speed USB (12 Mbps) |
| Management | <ul style="list-style-type: none">• Password protected access• Auto configuration of ADSL networking settings• Universal Plug and Play (UPnP)• SNMP Version 1 and 2• Remote and local command line or HTTP interface configuration• Software upgradeable firmware through HTTP interface• ATM traffic management functions support UBR, CBR, rt-VBR, nrt-VBR in accordance with ATM forum TM 4.1• SNTP (Simple Network Time Protocol)• Loads setup from a file for easy configuration input by service providers |
| Status Indicators HTML graphic user Interface | <ul style="list-style-type: none">• Seven indicators - power, DSL, four Ethernet port connection indicators, USB connection• Firmware upgrades• WAN and LAN side connection statistics• Configuration of static routes and routing table• Selection of bridge or router mode• PPP user ID and password• Configuration of virtual circuits |
| Warranty Size | <ul style="list-style-type: none">• 2 years |
| Regulatory Approvals | <ul style="list-style-type: none">• 5.77 x 4.42 x 1.12 inches (14.6 x 11.2 x 2.8 cm)• CE, UL, C-UL, FCC Part 15B, FCC Part 68, Industry Canada, RoHS compliant |



International Headquarters

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

European Sales/Support

Zoom Technologies, Inc.
Central House
2 Kings Road
Fleet, Hants
GU51 3AD UK
Tel: +44 (0) 1252 625323
Fax +44 (0) 1252 617920

Ventas América Latina

Zoom Technologies Inc.
10237 Clubhouse Turn Rd.
Wellington, FL, 33449, USA
Tel. 1-561-357-9339
Fax 1-561-357-9660

email: sales@zoom.com

Website: www.zoom.com

NASDAQ: ZOOM

Made in U.S.A.

©2008 Zoom Technologies, Inc.,
207 South Street, Boston, MA 02111
Zoom is a registered trademark of
Zoom Technologies, Inc. Windows XP,
Windows 98, Windows 2000, Windows
Me, and NetMeeting are registered
trademarks of Microsoft Corporation.
All other registered trademarks and
trademarks used herein are the
property of their respective holders.

System Requirements

- A computer with an Ethernet port and any operating system that supports TCP/IP (Windows, Mac, Linux or other)
- OR**
- A computer with a USB port and running Windows

Package contents:

- Ethernet/USB modem
- 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 even when you are online with your ADSL modem.

* ADSL 2/2+ requires support from your Internet Service Provider