Zoom ADSL X7n

ADSL 2/2+ Modem

+ Wireless n/g/b Access Point

+ Router

+ Advanced Firewall

+ 4-port Switch

Model 5790

- **ADSL2/2+ compliant modem for faster ADSL speeds**

- **Wireless-N Access Point/Router**

- **Works with all popular ADSL services.**

- **Support for IPv6 and IPv4 addressing**

- **Quality of Service (QoS) guarantees upstream bandwidth for high priority devices like gaming systems, VoIP adapters, or video**

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

- **Built-in 10/100 four-port Ethernet switch**

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

- **On-board software meets WiFi Protected Access™, WPA™, WPA2™, and WEP standards**

- **Virtual Private Networking Endpoint**

- **Advanced security from hacker attacks with Stateful Packet Inspection, Packet Filtering, Denial of Service Attack and Port Scan detection and prevention**

- **Universal Plug and Play (UPnP)**

- **Broadcom chipset CPU/DSP**

- **One year warranty**

This versatile product provides a shared ADSL Internet connection for up to 253 computers, game stations, WiFi - enabled phones, and other devices connected wirelessly, via this product's 4 Ethernet LAN ports, or through a switching hub or other network device. Plug the X7n's phone cord into a phone line with ADSL service. Then use the X7n's built-in wireless capability and/or its 4 Ethernet ports to connect computers, Ethernet switches, HomePlug® adapters, or other devices. Setup is easy using any Web browser. The X7n supports all popular ADSL protocols, and delivers download speeds up to 27 Mbps. Best of all, the X7n is produced and supported by Zoom Telephonics, a communication products leader since 1977.

Optional Use As A Router

If you choose to use the X7n's router features, you'll enjoy its flexibility, friendly user interface, and extensive features. The router features are useful for all the computers and other devices plugged directly into the X7n, connected to the X7n wirelessly, or linked to the X7n through a switching hub, HomePlug, or other network connection. Extensive X7n router features include WPA2/WPA/WEP wireless security, support for up to 4 SSIDs, WDS, an SPI/NAT firewall, Denial of Service attack protection, IP filtering, Virtual Server, DMZ, LAN and WAN access control, online gaming support, extensive debugging and diagnostic tools, and much more. The friendly X7n graphical user interface makes it easy for you to use your favorite browser to set any router feature you like, even from remote locations.

Specifications

ADSL Compliance	• Compliant with ADSL standards:
	  - Full-rate ANSI T1.413 Issue 2, ITU G.dmt (G.992.1)
	  - ITU G.992.2 (G.lite) standards
	  Compliant with ADSL 2 standards:
	  - G.dmt.bis (ITU G.992.3)
	  Compliant with ADSL 2+ standards:
	  - G.992.5
	  - ADSL2 Annex L (Reach extended ADSL)
	  - Annex M
	• DMT modulation and demodulation
	• Full-rate adaptive modem
	  - Maximum downstream rate of 8 Mbps (ADSL), or 27 Mbps (ADSL 2+)
	  - Maximum upstream rate of 1024 Kbps (ADSL), or 1200 Kbps (ADSL 2+) or 2600 Kbps (Annex M)
	• Interoperable with all major DSLAM manufacturers

ATM Protocols	• WAN mode support: PPP over ATM (RFC 2364), PPP over Ethernet (RFC 2516), classical IP and ARP over ATM (RFC 1577) • LAN mode support: Bridged/Routed IP over ATM (RFC 1483) • ATM Forum UNI 3.1/4.0 PVC • Up to 8 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 • RFC2684/1483 bridged PDU encapsulation

ADSL X7n

ADSL 2/2+ Modem
+ Wireless n/g/b Access Point
+ Router
+ Advanced Firewall
+ 4-port Switch

Model 5790

X7n Back Panel

Specifications (continued)

Router Mode	• IPv6 and IPv4 addressing • Static routing • DNS Server DHCP (Dynamic Host Configuration Protocol) Server, and Client • Quality of Service (QoS) guarantees upstream bandwidth for high priority devices like gaming systems, VoIP adapters, or video • NAT (Network Address Translation) • Dynamic DNS • Second IP address on LAN Interface • Interface group supports multiple ports to PVC and bridging groups • RIP V1 and V2 • PPPoE Pass-through • Virtual Server/DMZ Support • IGMP and IGMP proxy
Wireless 802.11	• Supports 4 SSIDs • Compliant with IEEE 802.11n, 802.11g and 802.11b standards • Wireless Distribution System (WDS) • Wireless Multimedia Extension (WME) • 2.4 GHz - 2.484 GHz frequency range • Up to 300* Mbps wireless data rate, 2x2 MIMO (Multiple Input Multiple Output) • Outdoor range typically exceeds 1000 feet (304 meters) • Indoor range varies depending on walls and other obstructions • 64/128 bit Wired Equivalency Protection (WEP) • Wi-Fi Protected Access (WPA2, WPA) with Pass Phrase • 802.1X Authentication
Security	• Stateful Packet Inspection (SPI) • Built-in IPsec VPN • User authentication for PPP • VPN passthrough: PPTP, L2TP, IPsec tunnel • PAP (Password Authentication Protocol) • Advanced Firewall Ports Filtering • CHAP (Challenge Authentication Protocol) • Attack Protection • Password protected system management • Denial of Service Protection • Wireless MAC address filtering
Ethernet Interface	• IEEE 802.3 compliant • Four 10/100 Mbps auto-sensing RJ-45 ports
Antennas	• Two fixed external omni-directional antennas, 5dBi
Management	• TR-069 compatible • Password protected access • Auto configuration • Universal Plug and Play (UPnP) • SNMP Version 1 and 2 • Remote and local command line or HTTP interface configuration • Software upgradeable firmware and device configuration through HTTP interface • Loads setup from a file for easy input of a configuration by a service provider • ATM traffic management functions support UBR, CBR, rt-VBR, nrt-VBR in accordance with ATM forum TM 4.1
Status Indicators	• 9 front panel indicators: Ethernet ports (1, 2, 3 and 4 status), DSL active, wireless LAN active, Router available, Power, WPS
HTML Graphic User Interface	• Password protected access • 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	• 1 year
Size	• 6.75” x 4.3” x 1.3” (171.5mm x 109.6mm x 33.6mm) exclusive of 5.87” (147.1 mm) long external antenna
Regulatory Approval	• CE, FCC Part 15B and 15C, FCC Part 68, North American Safety approvals, CS-03; RoHS compliant

RoHS 2002 / 95 / EC

*300 Mbps is the maximum speed derived from IEEE standard 802.11 specifications. Actual speeds will vary.

System Requirements

- Your phone line must be enabled for one or more of the standard ADSL services. (Standard services include ADSL 2+ G.992.5, ADSL2 G.992.3, ADSL G.992.1 (G.DMT), G.992.2 (G.lite), ANSI T1.413 issue 2, Annex L Reach Extended ADSL2, Annex M.)

- Directly connected devices, such as computers, switches, and HomePlug adapters, must have an Ethernet port. Devices connected wirelessly must have wireless-N, wireless-G, or wireless-B capability.

Package Contents

- ADSL modem/router with Broadcom CPU/DSP chipset
- Ethernet cable
- Phone cable

- CD ROM
- Quick Start and Flyer
- Energy-saving switching power cube, 100 to 240 vac, 50 to 60 Hz

- 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.

International Headquarters
Zoom Telephonics, Inc
207 South Street
Boston, MA, 02111
USA
Tel: 617-423-1072
Fax: 617-423-3923

European Sales/Support
Zoom Telephonics, Inc.
Centaur House
Ancells Business Park
Fleet, Hants
GU51 2UJ UK
Tel: +44 (0) 1235 768732

Ventas América Latina
Zoom Telephonics Inc.
10237 Clubhouse Turn Road
Wellington, FL 33449, USA
Tel: 1-561-357-9339
Fax: 1-561-357-9660

Email: sales@zoomtel.com

Website: www.zoomtel.com

OTCBB: ZMTP