



**Fast, easy and inexpensive way to add VoIP capabilities to office phone systems**

**Provides four FXS ports for four channels of VoIP and two FXO ports for connection to the PSTN**

**Uses industry-standard Session Initiation Protocol (SIP)**

**Clear, natural-sounding voice quality**

**Supports remote delivery of firmware updates**

**Zoom's TelePort™ feature allows phones to place and receive calls over the Internet and also over the Public Switched Telephone Network**

**Supports automatic provisioning by service providers**

**Supports Quality of Service (QoS)**

**Supports STUN (Simple Traversal of UDP over NATs)**

**Supports advanced telephone services including CLASS features such as Call Waiting, Caller Identification, Call Transfer, Call Hold, Call Forwarding, Distinctive Ring, and Voice Message Waiting Indication**



## Zoom Multi-port Voice over IP Telephone Adapter

**Model 5840 with Global Village service**

**Model 5844 without Global Village service**

The Models 5840/5844 makes it easy and inexpensive to add Voice over the Internet (VoIP) calling to office phone systems. The Models 5840 and 5844 can also create a remotely-managed phone system with multiple lines of both VoIP and conventional phone service interconnection. Four channels of VoIP are provided for either inbound or outbound calls and two channels of conventional phone service interconnection are provided for power fail-over, emergency calling, bridging of calls between VoIP and the PSTN, and calls using the conventional phone network.

Bridging allows remote users to call into the Models 5840/5844 using a cell phone or conventional land line phone and then call out using money-saving VoIP services. Bridging also allows international or domestic offices to receive economical VoIP calls and then route those calls out to the local phone network for termination.

The Models 5840/5844 support industry-standard Session-Initiation Protocol (SIPv2) and work with a wide range of service providers and SIP-based VoIP equipment.

The Model 5840 comes with Global Village VoIP phone service. Global Village sets up in minutes and lets you simply dial phone numbers and make free calls to SIP-based VoIP devices like the 5840 or 5844 anywhere in the world.

The Models 5840/5844 can deliver a rich variety of advanced telephone services, including CLASS features such as Call Waiting, Caller Identification, Call Transfer, Call Hold, Call Forwarding, Distinctive Ringing, and Voice Message Waiting Indication.

The Models 5840/5844 can be configured remotely using a TFTP or HTTP download from the service provider and updates to the firmware can be automatically delivered. Local configuration is done with a browser-based graphical user interface.

Both units are built and supported by Zoom Technologies, a publicly-traded company (NASDAQ:ZOOM) with over one quarter of a century's experience in telephony and data communications.

### Specifications

- |                                |  |
|--------------------------------|--|
| Analog Telephone Ports         | <ul style="list-style-type: none"><li>• Two FXO type Loop-start interface ports with RJ-11</li><li>• Four FXS analog interface ports with RJ-11</li><li>• Programmable Ring Patterns</li><li>• Call progress tones supported: Initial dial tone, Secondary dial tone, Stuttered dial tone, Message waiting dial tone, Call forward dial tone, Pre-ringback dial tone, Ring back tone, Call waiting tone, Call holding tone, Call disconnect tone, Call conference tone, Busy tone, Reorder tone (network busy/fast busy), Off hook warning.</li><li>• Power Fail Over</li><li>• Auto switch to PSTN for emergency calling using 911 and other programmed three digit codes</li><li>• FXS to FXO and FXO to FXS call bridging</li></ul> |
| Status Indicators              | <ul style="list-style-type: none"><li>• Power, LAN link, VoIP ready, 4 VoIP call in progress indicators, 2 PSTN port ready indicators, Alarm (system problem)</li></ul>  |
| Voice over IP (VoIP) Protocols | <ul style="list-style-type: none"><li>• SIPv2 - Session Initiation Protocol (RFC 3261, 3262, 3263, 3264)</li><li>• SDP - Session Description Protocol (RFC 2327)</li><li>• RTP - Real Time Protocol (RFC 1889, 1890)</li><li>• RTCP - Real-Time Control Protocol (RFC 1889)</li><li>• X-NSE - Tone Events for SIP/RTP (RFC 2833)</li><li>• AVT - Tone Events for SIP/RTP (RFC 2833)</li><li>• Power-on Auto Registration</li><li>• Re-registration with SIP Proxy Server</li><li>• SIP over UDP</li><li>• SIP authentication (HHP Digest with MD5)</li></ul>   |

# Multiport Voice over IP Telephone Adapter

Models 5840/5844

## Specifications (continued)

Network Protocols	<ul style="list-style-type: none"><li>• IPv4 - Internet Protocol Version 4 (RFC 791)</li><li>• TCP - Transmission Control Protocol (RFC 793)</li><li>• UDP - User Datagram Protocol (RFC 768)</li><li>• ICMP - Internet Control Message Protocol. (RFC 792)</li><li>• RARP - Reverse Address Resolution Protocol (RFC 903)</li><li>• ARP - Address Resolution Protocol (RFC 826)</li><li>• DNS - Domain Name Server</li><li>• DHCP Client - Dynamic Host Control Protocol (RFC 2131)</li><li>• NTP - Network Time Protocol (RFC 1305)</li><li>• SNTP - Simple Network Time Protocol (RFC 2030)</li><li>• STUN - Simple Traversal of UDP over NATs (RFC 3789)</li><li>• HTTP - HyperText Transfer Protocol</li><li>• TFTP - Trivial File Transfer Protocol (RFC 1350)</li></ul>
Voice Codecs	<ul style="list-style-type: none"><li>• G.711 - Pulse Code Modulation</li><li>• iLBC (Internet Low Bitrate Codec)</li><li>• G.729</li></ul>
Telephony	<ul style="list-style-type: none"><li>• Q.24 DTMF generation and detection</li><li>• Configurable tone frequency and on/off cadence generation</li><li>• Caller ID Generation and Detection (Type I and II)</li><li>• 3-way conference calling with local mixing</li><li>• Message waiting indicator light</li><li>• G.711 Fax Pass-through, T.38 - Real-Time Fax over IP</li><li>• CLASS feature support</li><li>• G.165, G.168 compliant line echo cancellation</li><li>• Nonlinear echo cancellation</li><li>• Double talk detection</li></ul>
Quality of Service Support	<ul style="list-style-type: none"><li>• Layer 2 Class-of-Service (CoS) Tagging (802.1P)</li><li>• Layer 2 (802.1Q VLAN)</li><li>• Layer 3 Type-of-Service (ToS) Tagging (RFC 791/1349)</li><li>• Layer 3 DIFFServ (RFC 2475)j Ofo</li></ul>
Security	<ul style="list-style-type: none"><li>• Provisioning/Configuration/Authentication</li><li>• Password-protected, Web based administration</li><li>• ARC4 Encryption for TFTP Configuration Profiles</li><li>• Authentication (Digest using MD5)</li></ul>
Size	<ul style="list-style-type: none"><li>• 14.6 cm X 11.2 cm X 2.8 cm (5.7 inches X 4.4 inches X 1.1 inches)</li></ul>
Minimum Requirements	<ul style="list-style-type: none"><li>• High speed Internet connection (typically a DSL or data-over cable connection)</li><li>• A router or gateway to share the broadband Internet connection</li><li>• A Touchtone telephone (conventional analog phone), fax machine, office phone system with RJ-11 phone network interface</li><li>• CD ROM drive in a personal computer which supports a Web browser (Windows, Macintosh, Linux or other) and is connected to the router</li></ul>



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## Package contents:

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