

Economical solution provides Voice over the Internet using conventional telephones

Provides two FXS ports for two VoIP channels

Uses industry-standard Session Initiation Protocol (SIP)

Clear, natural-sounding voice quality

Supports remote delivery of firmware updates

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, Call Waiting, Caller Identification, Call Transfer, Call Hold, Call Forwarding, Distinctive Ring, and Voice Message Waiting Indication



Zoom Voice over IP Telephone Adapters

Model 5820 with G.711, iLBC and G.729 Codecs Model 5821 with G.711 and iLBC Codecs

Models 5820/5821 Voice over IP Telephone Adapters allow standard analog telephones to make and receive calls over a broadband Internet connection. Both models have two FXS ports to allow two VoIP channels. Simply plug one or two conventional or cordless phones into a Model 5820 or 5821 and then plug the telephone adapter into a broadband-connected router or Internet gateway. A minimum of five attached phones can be rung simultaneously on each FXS port using the built-in ring generator.

The Models 5820/5821 support industry-standard Sessions Initiation Protocol (SIPv2) and work with a wide range of service providers and SIP-based VoIP equipment.

Voice over IP Service providers can deliver a rich variety of advanced telephone services through the Models 5820/5821, including CLASS features such as, Call Waiting, Caller Identification, Call Transfer, Call Hold, Call Forwarding, Distinctive Ringing, and Voice Message Waiting Indication.

The VoIP terminal adapter 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.

The Model 5820 supports G.711, G.729 and iLBC voice codecs. The Model 5821 supports G.711 and iLBC.

The Models 5820/5821 are built and supported by Zoom Technologies, a publicly-traded company (NASDAQ:ZOOM) with over 28 years of experience in telephony and data communications.

Specifications

Analog Telephone Ports

- · Two FXS type Loop-start interface ports
- Up to 5 REN (Ringer Equivalence Number) for support of more than 5 typical telephones for each FXS port
- Programmable Ring Patterns
- 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.

Status Indicators Voice over IP (VoIP) Protocols

- Power, LAN link, VoIP ready, VoIP call in progress, voice message waiting
- SIPv2 Session Initiation Protocol (RFC 3261, 3262, 3263, 3264)
- SDP Session Description Protocol (RFC 2327)
- RTP Real Tim Protocol (RFC 1889, 1890)
- RTCP Real-Time Control Protocol (RFC 1889)
- X-NSE Tone Events for SIP/RTP (RFC 2833)
- AVT Tone Events for SIP/RTP (RFC 2833)
- Power-on Auto Registration
- Re-registration with SIP Proxy Server
- SIP over UDP
- SIP authentication (HHP Digest with MD5)

Voice over IP Telephone Adapters

Specifications (continued)

Network Protocols

- IPv4 Internet Protocol Version 4 (RFC 791)
- TCP Transmission Control Protocol (RFC 793)
- UDP User Datagram Protocol (RC 768)
- ICMP Internet Control Message Protocol. (RFC 792)
 RARP Reverse Address Resolution Protocol (RFC 903)
- ARP Address Resolution Protocol (RFC 826)
- · DNS Domain Name Server
- DHCP Client Dynamic Host Control Protocol (RFC 2131)
- NTP Network Time Protocol (RFC 1305)
- SNTP Simple Network Time Protocol (RFC 2030)
- STUN Simple Traversal of UDP over NATs (RFC 3789)
- · HTTP HyperText Transfer Protocol
- TFTP Trivial File Transfer Protocol (RFC 1350)

Voice Codecs

- G.711 Pulse Code Modulation
- G.729 (Model 5820 only)
- · iLBC (Internet Low Bitrate Codec)

Telephony

- · Q.24 DTMF generation and detection
- · Configurable tone frequency and on/off cadence generation
- Caller ID Generation and Detection (Type I and II)
- · 3-way conference calling with local mixing
- · Message waiting indicator light
- G.711 Fax Pass-through, T.38 Real-Time Fax over IP
- · CLASS feature support
- G.165, G.168 compliant line echo cancellation
- · Nonlinear echo cancellation
- · Double talk detection

Quality of Service

• Layer 2 Class-of-Service CoS) Tagging (802.1P)

Layer 2 (802.1Q VLAN)

• Layer 3 Type-of -Service (ToS) Tagging (RFC 791/1349)

• Layer 3 DIFFServ (RFC 2475)i Ofo

Security

Support

Provisioning/Configuration/Authentication

- Password-protected, Web based administration
 ARC4 Encryption for TFTP Configuration Profiles
- Authentication (Digest using MD5)

Size

• 14.6 cm X 11.2 cm X 2.8 cm (5.7 inches X 4.4 inches X 1.1inches)

Minimum Requirements

- High speed Internet connection (typically a DSL or data-over cable connection)
- · A router or gateway to share the broadband Internet connection
- · A Touchtone telephone (conventional analog phone) or a fax machine
- CD ROM drive in a personal computer which supports a Web browser (Windows, Macintosh, Linux or other) and is connected to the router

Package contents:

- · VoIP telephone adapter
- · Power adapter
- · Quick Start Guide
- CD ROM
- Ethernet cable
- Phone cord

This is pre-release catalog sheet, and is accurate as of September 15, 2005. Features and specifications are subject to change



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