

MultiVOIP™

Voice/Fax over IP Gateway



Benefits

- Toll bypass voice/fax communications
- PSTN voice quality
- Connects directly to phones, fax or PBX
- Turnkey solution

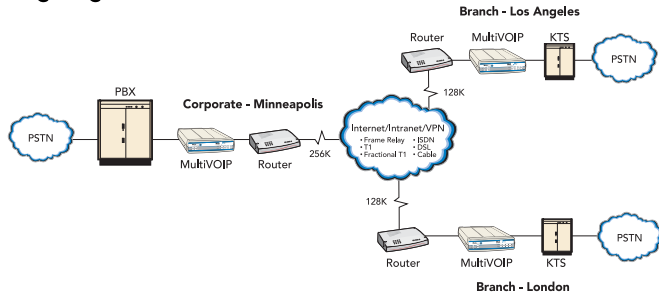
The Multi-Tech MultiVOIP provides toll-free voice and fax communications over the Internet or Intranet. By integrating voice and fax into your existing data network, you can realize substantial savings on inter-office long distance toll charges. The MultiVOIP family is available in one, two, four, eight and 24/30 port models. All MultiVOIP products connect directly to phones, fax machines, key systems, or a PBX to provide real-time, toll-quality voice connections to any office on your VOIP network.

Features

- 1-, 2-, 4-, 8-, 24/30 voice/fax ports for communication over existing IP network or the Internet
- Ethernet connectivity and full IP compatibility with existing routers and WAN infrastructure
- Voice compression to 5.3K bps per call with support for multiple algorithms, including ITU G.723 and G.729
- Support for standard fax devices
- No integration with a server or desktop PC required
- Supports voice prioritization using the industry-standard Differentiated Services (DiffServ) protocol
- Supports H.323 for sending voice over the Internet/Intranet/VPN networks
- FXS, FXO, and E&M connectors on each channel for direct analog connection to phones, key telephones, PBX extensions or PBX trunks (2-, 4- and 8-port models only)
- Dial, busy, fast busy and ringback tones
- Remote configuration and management over the Internet using telnet, tftp, bundled management software or any web browser (web management not supported on MVP2400 and MVP3010)
- Bundled SNMP management software for central site configuration, logging and monitoring
- Live reporting, usage tracking, call history, voice quality statistics and other management tools
- Two-year warranty

*Toll-free Voice/Fax
Communication over
the Internet or
Intranet*

Highlights



MultiVOIP Applications. MultiVOIP is specifically targeted at businesses looking to reduce toll charges between frequently called sites. MultiVOIP is a point-to-point IP gateway that integrates seamlessly into your data network and operates alongside existing PBXs, or other phone equipment to simply extend voice capabilities to remote locations. It is designed to help you maximize investments you've already made in your data and voice network infrastructure.

Office-to-office Communication. A MultiVOIP network can be as small as two offices or as large as hundreds of offices. Each office installs and configures a MultiVOIP on their network and connects it to their existing phone equipment to begin placing calls or sending faxes to the other offices on the VOIP network.

Off-net Calling. Telecommuters or customers off the IP network can make free long distance calls by dialing into a local MultiVOIP and placing toll-free calls to any location on the VOIP network. You can even have a MultiVOIP at a remote site dial a local phone number for a free person-to-person long distance call.

Create Off-premise Extensions. Extend the reach of your PBX into home office locations. Simply connect a MultiVOIP gateway to the PBX at the corporate office, and another MultiVOIP gateway at the remote office. Now, anyone can place calls to the remote office by simply dialing an extension number. To extend your PBX to a building across the street, utilize a wireless bridge to connect the two networks. Now, you have voice and data connectivity without having to lay cables or paying monthly charges for dedicated lines.

Replace Expensive Tie Lines. A corporation that utilizes Tie lines to connect branch office PBXs to the corporate PBX can now use the company's IP-based Wide Area Network to complete the call.

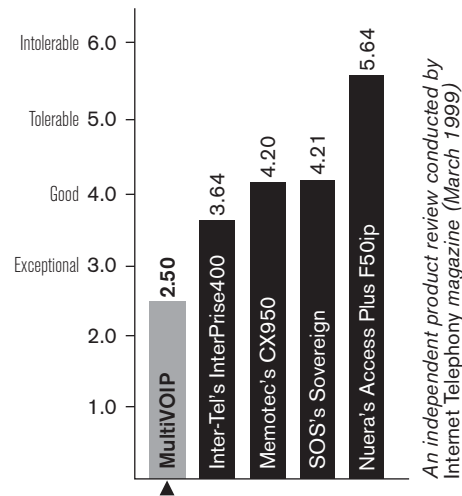
Easy Integration. With MultiVOIP, you avoid the hassle and expense of replacing your existing routers, WAN connections or phone system required by other VOIP solutions. MultiVOIP simply plugs into your Ethernet network. Neither your phone service or network is placed at risk. Minimum requirements: Ethernet network, WAN connection, IP addresses.

Save Thousands of Dollars Each Month. MultiVOIP can save your company substantial amounts in long distance charges. Even if your company uses one of the most inexpensive calling plans, a MultiVOIP network can quickly return your investment and begin paying you back.

Locations	MultiVOIP Cost	Long Distance Cost/Minute	Minutes/Line/Day	MultiVOIP Payback
Corporate Site/ Minneapolis	\$1,999 MVP400 (4 lines)	\$0.04	90	139 days
Branch Site/ Los Angeles	\$1,099 MVP200 (2 lines)	\$0.06	60	153 days
Branch Site/ London	\$1,099 MVP200 (2 lines)	\$0.08	60	115 days

Award-winning Voice Quality. With MultiVOIP, you'll experience consistent toll-quality voice connections. Using the Perceptual Speech Quality Measurement (PSQM), Internet Telephony magazine found that MultiVOIP delivered exceptional voice quality. In fact, MultiVOIP outranked the competition.

PSQM SCORES
The lower the better

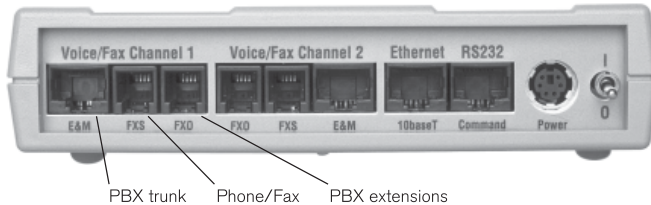


Interoperability. MultiVOIP utilizes the H.323 protocol providing complete interoperability among other H.323 telephony solutions.

Advanced Speech Technologies. MultiVOIP supports the Differentiated Services (DiffServ) Quality of Service (QoS) protocol which sets priorities for voice and fax traffic and allows transparent delivery. DiffServ helps move time-sensitive voice traffic across even low-bandwidth WAN connections, like 56K DDS and ISDN, with the priority and quality required by voice. Other features such as adaptive echo cancellation, forward error correction, bad frame interpolation, tunable latency and dynamic jitter buffers, further enhance voice quality.

Complete Support for Multiple Telephony Interfaces.

For maximum investment protection, the MultiVOIP two, four and eight-port models accommodate changing communication needs by providing an FXS, FXO and E&M interface for each port. With the right interface, the MultiVOIP connects directly to phones, fax machines, key phone systems or a PBX. With this range of support, you can connect a phone directly to a port today, and tomorrow connect your PBX trunk. A single port MultiVOIP supports either FXS or FXO interfaces depending on model while T1/E1 models connect directly to a PBX or PSTN line.



Bandwidth Management. Bandwidth is used only when someone is speaking. The silence suppression/Voice Activity Detection (VAD) feature is an option that frees unused call bandwidth for data traffic. This is significant, since callers are usually silent for 60 percent of the call. When using silence suppression, MultiVOIP also offers Comfort Noise Generation (CNG) at the receiving end so the user knows the line has not dropped. In addition, MultiVOIP supports voice compression standards like G.729 (8:1) and G.723 (10:1). These standards help minimize the bandwidth required for voice. G.723, for instance, is the maximum compression rate and requires only 5.3K bps (plus minimal IP overhead). Even at maximum compression, your VOIP solution will still provide toll-quality voice.

Uniform Dialing Plan. MultiVOIP utilizes Multi-Tech's Uniform Dialing Plan (MUDP). This allows for single stage dialing and ensures that users will not require additional training to make VOIP calls.

Management. MultiVOIP is easily managed locally or remotely by the central office with a web browser*, Windows 95/98/Me/2000, Windows NT software, tftp, Telnet or SNMP. Multi-Tech also includes its own SNMP management software called MultiVOIPManager which provides central site configuration, management and call monitoring for all MultiVOIP gateways on the network. It utilizes a Windows interface that makes it easy to view events like usage tracking, live use reporting, call history, and voice quality statistics. Call detail records may also be transferred to third-party billing software.

* Not available on digital models.

No User Training. Placing calls with the MultiVOIP is like using your existing phone system. No end-user training is required. Users can begin making calls immediately with a published VOIP phone list and simple calling procedures.

Security. Your MultiVOIP network uses the same security as your data network. Therefore, if you have strong data security, your voice security will be strong as well. MultiVOIP also allows administrators to place it behind a compliant firewall to further enhance security. In addition, MultiVOIP provides interoperability with Virtual Private Network (VPN) products. And, when using MultiVOIP in proprietary mode, proprietary protocols make it difficult for hackers to access the VOIP network.

Access Voice Mail. Dual Tone Multifrequency (DTMF) support allows users to access their voice mail over the VOIP network.

Optional H.323 IP Telephony Gatekeeper. The MultiVOIP Gatekeeper is complementary product to the MultiVOIP Voice over IP gateway. The turnkey hardware and software solution provides corporate enterprise network managers and Intranet managers the power to define and control how H.323 voice traffic is managed over IP networks. With the MultiVOIP Gatekeeper, network managers have the ability to configure, monitor and manage the activity of registered network end points. In addition, managers can set policies and control network resources, such as bandwidth usage, to ensure optimal implementation.



You Be the Judge. Industry experts have recognized our VOIP gateways for their clarity. But don't take their word for it, or ours. You be the judge! Make a FREE VOIP call over the Internet by dialing 1-877-TRYVOIP. Hear for yourself how clear the connection can be.

Multi-Tech Solutions. Multi-Tech products help small- and medium-sized businesses share information remotely and over the Internet. Our products, known for their reliability, use industry-standard technologies for telephony, remote access, Internet access and client communications solutions.

Comprehensive Service and Support. The Multi-Tech commitment to service means we provide a five-year product warranty and service that includes technical support, 24-hour web site and ftp site support.

TELECONNECT
99 Product of the year

TELECONNECT
99 Editors choice



Specifications

Analog Models

- Number of Ports: 1, 2, 4 or 8
- Port Interface: FXO, FXS & E&M support on each port
- FXS Interface: KTS, telephone set, or fax; ground and loop start
- FXO Interface: PBX station; CO line, loop start, 2-wire
- E&M Interface: PBX E&M trunk; 2- or 4-wire
- E&M Signal Types: I, II/IV, III & V
- Signaling: AC is DTMF; DC is pulsed
- Connectors: 1 RJ-48 (E&M); 2 RJ-11 (FXO & FXS) per port

Digital Models

- Number of Trunks: 1 (T1-24 Channels, E1-30 Channels)
- Port Interface: T1-CAS/Robbed bit signaling; E&M wink start, immediate start, delay start, loop start and ground start; E1-MFC/R2
- Line Code: T1-AMI or B8Zs; E1-AMI or HDB3
- Frame Format: T1-ESF or D4 (SF); E1-16 Frame plus CRC
- Connectors: 1 RJ48

LAN Port

- Interface: 10BaseT (Analog); 10/100BaseT (Digital)
- Format: Ethernet/Ethernet II or SNAP

Command Port

- 1-, 2-port and Digital Interface: RS-232C/D; RJ-45 (RJ-45 to DB9 cable included)
- 4- & 8-port Interface: RS-232C/D; DB25
- Speed & Format: 19.2K bps asynchronous

Protocols

- DiffServ, H.323, RTP, RTCP Q.931, Group 3 fax relay

Bandwidth Management

- G.729, G.723, G.726, G.727, Silence suppression, VAD, CNG

Voice Quality

- DiffServ, G.165, G.168, adaptive echo cancellation, forward error correction, bad frame interpolation, tunable latency, dynamic jitter buffers

Management

- Web browser*, Windows 95/98/Me/2000, Windows NT, tftp, Telnet or SNMP management, flash upgradeable (*Except on digital models)

Power

- Voltage & Frequency: 115v/240v AC, 50/60 Hz
- Power Consumption: 1-port – 4.5W; 2-port – 18W; 4- & 8-port – 30W; Digital models – 16W

Dimensions

- 1-port model: 4.3" w x 1.0" h x 5.6" d; 8 oz. (10.9 cm x 2.5 cm x 14.2 cm; 0.23 kg)
- 2-port & digital model: 6.2" w x 1.4" h x 9.0" d; 2 lbs. (15.8 cm x 3.6 cm x 22.9 cm; 0.92 kg)
- 4-port & 8-port model: 17.4" w x 3.8" h x 8.0" d; 7.4 lbs. (44.2 cm x 9.6 cm x 20.3 cm; 3.4 kg)

Certifications

- FCC Part 15 & 68; UL 1950, CTR-21, IC, CE Mark

Ordering Information

Product	Description	Region
MVP110	1-Port FXS VOIP Gateway (includes U.S. power cord)	US/Can
MVP110-Euro	1-Port FXS VOIP Gateway (includes Euro power cord)	Euro/ROW
MVP120	1-Port FXO VOIP Gateway (includes U.S. power cord)	US/Can
MVP120-Euro	1-Port FXO VOIP Gateway (includes Euro power cord)	Euro/ROW
MVP200	2-Port VOIP Gateway (includes U.S. power cord)	US/Can
MVP200-Euro	2-Port VOIP Gateway (includes Euro power cord)	Euro/ROW
MVP400	4-Port VOIP Gateway (includes U.S. power cord)	US/Can
MVP400-Euro	4-Port VOIP Gateway (includes Euro power cord)	Euro/ROW
MVP800	8-Port VOIP Gateway (includes U.S. power cord)	US/Can
MVP800-Euro	8-Port VOIP Gateway (includes Euro power cord)	Euro/ROW
MVP4-8	4-Port Expansion Card	Global
MVP2400	24-Port T1 VOIP Gateway	US/Can
MVP3010	30/60-Port E1/PRI VOIP Gateway (specify country when ordering)	ROW
MVP3010-Euro	30/60-Port E1/PRI VOIP Gateway (includes Euro power cord)	Europe
MVP3010-GB/IE	30/60-Port E1/PRI VOIP Gateway (includes U.K. power cord)	UK/Ireland

* Specify country when ordering.

Made in Mounds View, MN, U.S.A.

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World Headquarters
Tel: (763) 785-3500
(800) 328-9717

www.multitech.com

Multi-Tech Systems (France)
Tel: +(33) 1 64 61 09 81

Multi-Tech Systems (UK)
Tel: +(44) 118-959 7774