



Ascom FreeNET VoIP Gateway

Providing smart integration with your telephone system

The VoIP Gateway is a component of the Ascom FreeNET System that enables seamless integration with a circuit-switched Private Branch Exchange (PBX) or public switched telephone network (PSTN) to provide superior quality voice communication between FreeNET portable handsets and any other telephone. Specifically designed for the enterprise environment — providing advanced digital telephony services for over 1,000 FreeNET portable handsets — the VoIP Gateway contains two T1 or E1 interfaces toward the PBX. It also includes 2 additional interface ports, allowing interconnection to an alternate VoIP Gateway for redundancy planning.

To ensure maximum compatibility, the VoIP Gateway supports a variety of ISDN and CAS protocols. VoIP Gateways may also be stacked to optimize the grade of service to the PBX, while maintaining a single browser-based management application. Highly reliable, with no moving components such as spinning disks or fans, the VoIP Gateway also features an integrated Gatekeeper that manages portable handset registration and call routing, optimizing the channels allocated to the PBX.

The VoIP Gateway, as part of the Ascom FreeNET system, provides cost-effective, seamless integration with existing communication networks. For more information on how an Ascom smart integration solution can improve efficiency at your facility, visit ascomwireless.com or call 877-71ASC0M.



Ascom FreeNET VoIP Gateway features at a glance

- Name and number call line identification
- Hold / Retrieve
- Transfer with and without consultation
- 3 party conference
- Call waiting notification
- Diversion with redirection identification
- Message waiting notification
- 60 simultaneous speech channels to PBX (per gateway)
- Stacks to optimize grade of service toward PBX
- Includes Gatekeeper
- Supports redundancy for disaster recovery planning
- Two Ethernet ports with separate addressing
- 19" rack mount option (1U height)
- Web browser-based management
- Supports clock synchronization with time server
- Includes Call Detail Recording (CDR)

Ascom FreeNET VoIP Gateway technical specifications

INTERFACES	PHYSICAL	ROUTING
<p>4 x T1/E1 (Shielded) All interfaces can be configured as TE/Slave or NT/Master</p> <p>Power-off loop Interconnects two T1/E1 interfaces in power off status</p> <p>2 x Ethernet 10/100-BASE-TX auto negotiation. Automatic recognition - Uplink/downlink. Power over Ethernet (PoE) - IEEE 802.3af. Interfaces individually addressable. LED for link status and activity</p> <p>Compact Flash Compact Flash Cards, Type I</p>	<p>Size 8.27" x 7.24" x 1.26". Optional 19" rack mount kit</p> <p>Weight 2.81 lbs</p> <p>Casing Stainless-steel</p> <p>Memory 32 MB DRAM. 8 MB Flash</p> <p>CPU RISC CPU for protocol processing. Digital Signal Processor (DSP) for voice data processing</p> <p>Operating temperature 32°F to 113°F</p> <p>Humidity 10% to 90% non-condensing</p> <p>Storage temperature 14°F to 158°F</p>	<p>Telephony routing VoIP-TDM, TDM-TDM, VoIP-VoIP</p> <p>Re-routing Configuration of alternative routes</p> <p>ISDN protocols QSIG ECMA V.2, NI-2, 5ESS, DMS100</p> <p>CAS protocols E&M wink start</p>
ADMINISTRATION	VOIP	ADDITIONAL FEATURES
<p>Access HTML / Web-browser, password protected authentication</p> <p>Troubleshooting logs and traces, status display of interfaces and connections, PING</p> <p>Update Configuration save / reload. Bootcode and firmware update via HTML upload.</p> <p>Registrations Up to 1000 subscriber registrations per Gateway</p>	<p>Internet TCP/UDP, DHCP</p> <p>VoIP H.323 version 4 incl. H.225, H.235, H.245, H.450 and RAS Gatekeeper routed signaling. Real time protocol (RTP), Real time control protocol (RTCP)</p> <p>Fax over IP T.38 real time fax</p> <p>RAS protocol Support for external gatekeeper</p> <p>DTMF H.245 Alphanumeric or Signal Type</p> <p>Additional features H.245 fast connect. En-block dialing, overlapped sending</p> <p>Quality of Service TOS, DiffServ, IEEE 802.1p/802.1q</p> <p>Voice encoding G.711 A-law / mu-law (64 kbps), G.723.1 (5.3 and 6.3 kbps), G.729A (16 kbps), G.726 (32 kbps), Voice Activity Detection (VAD), Comfort Noise Generation (CNG), Dynamic Jitter Buffering</p> <p>Echo compensation G.168</p>	<p>HTTP interface Plays recorded messages from server</p> <p>Time clock synchronized by external time server, SNTP client and server</p> <p>Music on hold internal/external via software interface</p>

Specifications are subject to change without notice.