



ENTERPRISE VoIP SOLUTION

Elite Gateway 400

ibridge Elite Gateway 400 is a cost effective and highly reliable Voice over IP (VoIP) gateway that offers toll quality voice and real-time fax data over IP networks. With its embedded architecture, ibridge Elite gateway 400 is ideal for VoIP applications associated with Small-to-Medium size Business (SMB), Remote Office and Branch Office (ROBO), and ISP/ITSP markets.



Elite Gateway 400

Features

- Supports 4 channels of real-time voice and fax in a single embedded box.
- Modular design to accommodate various types of telephony interfaces.
- Field programmable CP tone detection and generation to support PBX and CO line interconnections.
- Supports programmable line interfaces with country specific telephone settings.
- Supports ITU standard vocoders and voice processing algorithms including G.711, G.723.1, and G.729 A/B, and G.168 Echo Cancellation.
- User friendly management including console port interface, HTTP and Telnet servers, and Elite Server for VoIP related management such as call control and dial plan set up.
- Built-in TFTP and flash memory for software download and upgrade via network.
- H.323 call control protocol compliant.
- QoS support for VoIP packets.

Technical Specifications

- **Digital Signal Processors**
 - One TI TMS320VC5409 DSP per module.
 - 100 MIPS per DSP processor.
 - On-chip memory: 16K word of SRAM, 4K word of ROM
 - Local SRAM 128K x 16 for each DSP.

- **Control Processor**
 - 32-bit ARM7 TDMI core.
 - 8K byte unified cache.
 - 4K words Write buffer.
 - Embedded on-chip Ethernet MAC with associated BDMA.
 - Local 2M x 16 SDRAM and 1M x 16 Flash.

- **I / O**
 - Standard 10/100 BaseTX RJ 45 interface.
 - RJ 11 Loop Start interfaces for FXS / FXO.
 - RJ 45 for E&M Type V 4w Interface.

- **Mechanical, Environment & Power**
 - LxWxH = 240.60 x 134.40 x 45.00 mm
 - 19" Rack mountable or desktop.
 - Operating temperature 32 - 122°F (0°C - 50°C).
 - Operating humidity 10 - 95% (non-condensing).
 - Storage temperature: 14 to 140 °F (-10 to 60°C).
 - AC-to-DC power supply (90-260 VAC, auto-ranging, 50-60 Hz.).

- **Compliance**
 - CE.
 - FCC part 15 A.
 - FXS/FXO (Compliant with ITU-T G.712).
 - UL.

Software

- **Speech**
 - **Compression algorithms ITU G. 711, G.723.1 & G.729A/B.**
 - **Hybrid echo cancellation G.168 (16 ms).**
 - **Auto switch between Fax and voice**
 - **DTMF tone detection/regeneration.**
 - **Channel: four channels per module.**
 - **Comfort Noise Generation (CNG).**
 - **User programmable Call Progress detection/generation.**
 - **Voice Activity Detection (VAD).**
 - **User programmable Gain Control.**

- **Fax**
 - **Facsimile protocol: T.30 Group 3, T.38.**
 - **Modulation formats: V.21, V.27ter, V.29, V.17.**
 - **Real-time fax over IP.**
 - **DTMF tone detection/regeneration.**

- **Management Tools**
 - **RS 232 console port interface.**
 - **HTTP Server.**
 - **Telnet Server.**
 - **Elite Server for RAS and dial plan management.**
 - **TFTP and flash memory for remote software download and upgrade H.323 Protocol Stack.**
 - **RAS sub-stack for Terminals and Gatekeepers: supports all mandatory and optional messages (Tx and Rx) as specified in table 19/H.255.0.**
 - **H.245 sub-stack: supports the Signaling Entities of Master Slave Determination, Capability Exchange, Open Logical Channels, and Close Logical Channels.**
 - **Q.931 sub-stack: supports all mandatory messages as specified in table 4/H.255.0.**
 - **Compliant with H.323 Version 1, Version 2, and Version 3.**