



AbovEdge™ MA series Intelligent VoIP Gateway

The **AbovEdge™** MA is a series of high performance Voice over IP (VoIP) gateways. The built-in IVR function and intelligent routing capabilities make it an ideal product for businesses to implement cost saving IP telephony without changing their dialing habits. The AbovEdge™ MA series supporting standard VoIP protocol can be easily merged into an existing VoIP domain as an origination and/or termination node(s). The compact rack-mountable unit of AbovEdge™ MA provides versatile VoIP functions with the most competitive price. Its advanced processor and in-house developed technology ease the process of adding intelligent functionality and make it a perfect solution to fulfill leading telecommunications and business requirements.

FEATURES

- ▶ Conforms to IETF latest SIP protocol RFC-3261
- ▶ Peer-to-peer or routing through a proxy server
- ▶ DTMF dialing, Support Out-Band DTMF delivery
- ▶ Dynamic jitter buffer to improve voice quality
- ▶ Maximum length of extension line connect to FXS = 1 km
- ▶ Caller ID receiving/generating function
- ▶ Polarity Reverse signal detection on FXO port
- ▶ Polarity Reverse signal insertion on FXS port
- ▶ Call progress detection (dial tone, busy tone, ringback tone)
- ▶ Remote system maintenance and upgrade
- ▶ Intelligent Routing Management
 - Backup route
 - Routing by time section
 - Routing by Answer Success Ratio (ASR) condition
 - Routing as trunk group distribution
- ▶ Call Incoming Management
 - Hotline mode
 - DID mode
 - DNI/ANI re-dialing by dial tone or IVR
 - Built-in IVR for Calling Card System or alike application
- ▶ System call back
- ▶ CDR exporting, support Syslog CDR
- ▶ Support TeleSynergy Web Server Management system
- ▶ On line configuration management, status monitoring and fault management

SPECIFICATIONS

- ▶ Call Control: SIP
- ▶ Voice Codec : G.711, G.729A , G.723.15.3/6.3kbps
- ▶ Silence Suppression: G.729B for G.729A, G.723.1A for G.723.1
- ▶ Echo cancellation: Comply with G.165 & G.168
- ▶ Gain Control : ±18db
- ▶ Media stream : RTP / RTCP with jitter buffering
- ▶ DTMFdialing/receiving : EIA464 & RFC2833 Out-Band
- ▶ Analog Trunk Interface:
 - Loop start
 - Loop current: 20 - 80 mA polarity insensitive
 - Loop voltage polarity reverse detection
 - Interface impedance : 600 ohms
 - Frequency response: 200 -- 3400 Hz
 - Ring detection: 30Vrms -- 140Vrms (16 -- 68 Hz)
 - Pulse dialing: 10/20 PPS, M/B ratio 33/66, 40/60 selectable
 - Caller ID receiving: Bellcore GR-30-CORE & DTMF
 - Loop current drop detection
- ▶ Extension Interface:
 - Loop start
 - Loop Range : 0~200 ohms
 - DC Supply: 48 V (standby)
 - Loop current: 26 mA
 - Interface impedance : 600 ohms
 - Frequency response: 200 -- 3400 Hz
 - Ringing: 56 Vrms (20 Hz)
 - Caller ID generation: Bellcore GR-30-CORE / DTMF
 - Message light: Bellcore FSD 01-02-2000
 - Flash detection & programmable Flash duration
- ▶ SIP Protocol : RFC-3261 SIP / RFC-2833 out-band DTMF / RFC-2327 SDP / RFC-3264 offer / answer model
- ▶ Management : Web / SNMP / Telnet / Console
- ▶ Connector:
 - Analog POTS line : RJ-45
 - WAN: RJ-45 x 1; LAN: RJ-45 x 1
- ▶ Input Voltage, Frequency: AC 100V~240V, 50~60 Hz
- ▶ power consumption:40W(max.)
- ▶ Dimension: 438mm x 44mm x 173 mm, 1U
- ▶ Operating Temperature:0°C to 45°C
- ▶ Storage Temperature: -20°C to 70°C
- ▶ Ordering Information:
 - MA-0404: 4 FXO / 4 FXS / 4 VoIP
 - MA-0808: 8 FXO / 8 FXS / 8 VoIP

*Information and specification are subject to change without prior notice.