

# Audiocodes M1000 4E1/T1 H.248 VoIP Gateway

Product Name: Audiocodes M1000 4E1/T1 H.248 VoIP Gateway

Manufacturer: AudioCodes

Model Number: M1K-D15

## Audiocodes M1000 4E1/T1 H.248 VoIP Gateway

The Mediant 1000 MSBG is an all-in-one multi-service access solution for Service Providers offering managed services and distributed Enterprises. This multi-service business gateway is designed to provide converged Voice & Data services for business customers at wire speed, while maintaining SLA parameters for superior voice quality. The Mediant 1000 MSBG is based on AudioCodes' VoIPerfect best-of-breed Media Gateway technology, combined with Enterprise class Session Border Controller, Data & Voice security elements, Data Routing, LAN Switching and WAN Access. These services allow smooth connectivity to cloud services.

**Best-of-Breed Enterprise Class Media Gateway** The Mediant 1000 MSBG is based on a highly interoperable Media Gateway which supports a mix of 1-4 E1/T1/J1 Spans, 4-20 BRI lines and 4-24 Analog FXS/FXO interfaces. Enhanced dialing plans and voice routing capabilities along with SIP to SIP mediation, allow Enterprise customers to enjoy the benefits of SIP Trunking services and IP based Unified Communications, as well as flexible PSTN and legacy PBX connectivity. **Data Routing and WAN Access** The Mediant 1000 MSBG offers Data Routing capabilities by providing static routing and dynamic routing protocols such as RIP/OSPF and BGP. In addition, the MSBG supports a selection of WAN interfaces providing flexibility in connecting to Service Providers. **SBC (Session Border Controller) and Security Services** AudioCodes' Mediant 1000 MSBG is designed as a secured VoIP and Data platform. Enhanced Media Gateway security features include SRTP for media, TLS for SIP control, IPSec for management, and other additional features. Data Security functions include integrated Stateful Firewall, IDS/IPS, SSL for remote user access and site to site VPN. A fully featured Enterprise class Session Border Controller provides a secured voice network deployment based on a Back-to-Back User Agent (B2BUA) implementation. **Quality of Service (QoS) and Quality of Experience (QoE)** AudioCodes Mediant 1000 MSBG supports enhanced IP Quality of Service (QoS) enforcement and Quality of Experience (QoE) Monitoring. Leveraging a BroadSoft PacketSmart embedded agent - a SaaS-based lifecycle management solution, the Mediant 1000 MSBG enables service providers and multi-site enterprises to assess networks, certify VoIP deployments, and measure, monitor, track, and help optimize the QoE of their VoIP services. The PacketSmart solution is either offered as a public cloud service or within the customer's data center in a private cloud deployment. **AudioCodes' Mediant 1000 MSBG also supports enhanced IP Quality of Service (QoS), including Ethernet frame tagging (802.1P), IP packet marking (Diffserv), and traffic shaping.** **Survivability Services** Customers served by a centralized SIP-based IP-Centrex server or branch offices of distributed enterprises may face a service continuity challenge. The SAS (Stand Alone Survivability) functionality enables internal office communication between SIP clients, along with PSTN fallback, in the case of disconnection from the centralized SIP IP-Centrex server or IP-PBX. **Value-Added Services** by an Open Platform for 3rd Party Applications AudioCodes Mediant 1000 MSBG extends the flexibility of the Multi-Service Business Gateway with the built-in Open Solution Network (OSN)

server option (based on an Intel processor). Independent Software Vendors and OEM customers can utilize this integrated, general purpose server to host their own applications (e.g. IP-PBX, IVR, Call Center, Conferencing, and more). In addition, an advanced, on-board DSP Resource Farm enables the implementation of media processing services, such as announcements, recording, IVR, conferencing and transcoding, all controlled by standard protocols (e.g., SIP and MSCML). Utilizing AudioCodes dedicated DSP resources, enables a more robust and predictable voice performance, as compared to typical software implementations, based on general purpose CPU's. Mediant 1000 MSBG in Distributed Enterprise Networks Enterprises are striving to be more productive, efficient, and responsive to their internal users. The convergence of secured voice services, Stand Alone Survivability, Data Routing and Security and WAN Access into a branch office's unified platform, enables a high level of protection, cost-optimization and support for the growing communication needs of the Enterprise. Additionally, the Mediant 1000 MSBG can be utilized at company headquarters, providing a suite of services which include secured SIP Trunking by an Enterprise-class Session Border Controller, a survivable VoIP media gateway and a cost-effective IP-PBX platform. Target Applications

- Voice over Broadband (VOBB) and MSOs
- SIP Trunking
- IP Centrex
- Distributed Enterprises

## Interfaces PSTN Modularity and Capacity

Voice interface: the Mediant 1000 is equipped with 6 Slots for hosting voice processing and PSTN termination modules (up to 120 TDM-VoIP channels per Gateway) Digital Modules

1, 2 or 4 E1/T1/J1 spans per module using RJ-48c connectors with an option of PSTN

Fallback Analog Modules

4 ports FXO or FXS per module using RJ-11 connectors, ground start and loop start BRI Module

4 BRI ports (8 calls) per module, network ST interfaces. NT or TE termination, support Euro

ISDN, VN4/6 or QSIG Media Processing Module

Support Media processing options of up to 60 Conferencing legs (3 way or N-way), play, record to IP or PSTN

Networking Interfaces

- WAN: 10/100/1000Base-T, 1000Base-SX/LX, T1 DSU/CSU, SHDSL, ADSL2+\*, E1 DSU/CSU\*
- LAN: 3 ports 10/100/1000 Base-T

## OSN Server Platform

- Single Chassis Integration: Embedded, Partner Application Platform for third party services
- CPU: Pentium M 1.4 GHz
- Memory: 1G RAM or 2G RAM
- Storage: Single/Dual hard disk drives
- Interfaces: 10/100/1000Base-T, USB, VGA, RS-232

## Media Processing

- Voice Coders: G.711, G.726, G.727, G.723.1, G.729, GSM-FR, MS-GSM, iLBC, EG.711, EVRC, QCELP, AMR, GSM-EFR, G.722
- Independent dynamic vocoder selection per channel
- Echo Cancellation: G.165 and G.168-2002, with 32, 64 or 128 tail length
- Quality Enhancement: Dynamic programmable jitter buffer, VAD, CNG
- DTMF/MF Transport: Packetside or PSTN side detection and generation, RFC 2833 compliant DTMF relay
- Call Progress tones Detection and Generation

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- IP Transport: VoIP (RTP/RTCP) per IETF RFC 3550 and 3551
- Fax and Modem Transport: T.38 compliant (real time fax), Automatic bypass to PCM or ADPCM, V.34

## Signaling Digital & PSTN Protocols

- CAS: MF-R1: T1 CAS (E&M, loop start, Feature Group-D, E911CAMA), E1 CAS (R2 MFC), R1.5 numerous protocol and country variants.
- ISDN PRI: ETSI/EURO ISDN, ANSI NI2 and other variants (DMS100, 5ESS) QSIG.IUA (SIGTRAN), VN3, VN4, VN6.
- ISDN BRI: Support Euro ISDN, VN4/6 or QSIG.
- Analog Signaling: FXS; Caller ID; polarity reversal; metering tones, distinctive ringing, visual message waiting indication, loop start, ground start.

**Price: £7,254.30**

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