

# Audiocodes M2000 1T1 RS232 VoIP Gateway



Product Name: Audiocodes M2000 1T1 RS232 VoIP Gateway

Manufacturer: AudioCodes

Model Number: M2K-1SPAN-RS232

## Audiocodes M2000 1T1 RS232 VoIP Gateway

This Media Gateway is intelligently packaged in a stackable 1U chassis and is the right-sized solution for small-scale needs. Incorporating AudioCodes' leading Voice over Packet technology, the Mediant 2000 enables Network Equipment Providers (NEPs) and System Integrators (SIs) rapid time-to-market and reliable cost-effective deployment of next-generation networks. The gateway is based on VoIPerfect architecture, AudioCodes' underlying best-of-breed core media gateway technology for all of its products.

Deploy Right-Sized Solution

The Mediant 2000 VoIP Gateway matches the density requirements for smaller locations while meeting Network Service Providers' demands for scalability. The compact Mediant 2000 VoIP Gateway scales from 1 to 16 E1/T1/J1 spans in a 1U chassis and provides a best-of-breed mediation solution for enterprise as well as carrier locations. Create Flexible Products and Services

The Mediant 2000 VoIP Gateway system enables NEPs and SIs to immediately address opportunities that utilize a myriad of legacy circuit switched infrastructure features and functionalities. The Mediant 2000 can communicate with PBXs, PSTN, local IP Radio Access Networks, and centralized Mobile Switching Center (MSC) servers, enabling complete 2G and 3G enterprise solutions. The Mediant 2000 allows superior deployment flexibility for these solutions which include Softswitches, Cable Call Management Systems (CMS), Media Terminal Adaptors (MTAs), PacketCable solutions and Broadband Wireless Local Loop (WLL) Base Stations (WiFi, WiMax). The gateway's open platform offers NEPs the option to add one cPCI Single Board Computer (SBC) to run complementary applications within the Mediant chassis.

This Media Gateway offers the enterprise a flexibility of out-of-the-box interoperability with numerous IP-PBX vendors, allowing PSTN functionality and connectivity, enriching VoIP applications such as Unified Communications and Contact Centers.

Benefit from Extensive Gateway Experience

AudioCodes is one of the world's leading providers of packet-enabled new voice infrastructure network technologies. AudioCodes' commitment to innovation yields consistently high-quality voice processing products that are flexible, intelligent and comprehensive.

Mediant 2000 Features

- NEBS Level 3 certified
- Multiple density options
- Field-proven, high voice quality
- Open, scalable architecture
- SIGTRAN Backhauling (SS7: M2UA/M3UA, PRI: IUA)
- Rich SIP support
- SS7 and TDM peer-to-peer tunneling over IP
- Stand Alone Survivability for service continuity
- Small footprint
- UMTS, CDMA, GSM compliant Capabilities

Capacity:

- VoIP LBRs: Up to 30, 60, 120, 240 or 480 independent, simultaneous Wireline LBR VoIP voice

calls

- GSM/UMTS: Up to 60, 120, 240 or 480 independent, simultaneous GSM/UMTS and Wireline LBR VoIP voice calls
- CDMA: Up to 24, 48, 96, 180 or 360 independent, simultaneous CDMA & Wireline LBR VoIP voice calls
- PSTN (TDM): 1, 2, 4, 8 or 16 E1/T1/J1 spans

Voice Coders

- VoIP: G.711, G.723.1, G.726/7, G.729A/B, GSM-FR, NetCoder
- CABLE: G.711, G.723.1, G.726/7, G.729A/B, G.7281, G.729E1
- GSM/UMTS: GSM-FR, GSM-EFR, AMR (8 rates) & VoIP Coders
- CDMA: EVRC, QCELP 8k, QCELP 13k & VoIP Coders
- Independent dynamic vocoder selection per channel (within each group)
- Echo Cancellation: G.165 and G.168 compliant, 32, 64 or 1281 msec tail length

Fax Support

- T.38 (IP) compliant Group 3 fax relay and fax bypass ( automatic fallback to G.711) support
- DTMF: Packet side or PSTN side detection and generation, RFC 2833 compliant
- Quality Enhancement: Dynamic programmable jitter buffer, VAD, CNG, 802.1p/Q VLAN tagging, DiffServ, voice quality monitoring, G.729B
- Signaling & Transport PSTN CAS: MF-R1: Wink Start, delay dial, immediate start, FGB, FGD, E911 CAMA

MFC/R2 numerous country variants

Unique script for each country variant, enabling maximum flexibility of the entire state machine of each CAS protocol

- ISDN: ISDN PRI: ETSI EURO ISDN, ANSI N12, DMS Switch, 5ESS Switch, Japan INS1500, QSIG supplementary services, Australian Telecom, New Zealand Telecom, Hong Kong Variant, Korean MIC and others, VN 3, 4, 6 (French variant)
- SIGTRAN: M3UA/M2UA/IUA/DUA adaptation layers (over SCTP)
- SS7 and TDM Tunneling application (peer-to-peer tunneling)
- SS7 MTP3 point code sharing
- IP Transport: IETF RFC 3550, RFC 3551 RTP/RTCP Transport, TCP, UDP, SCTP

Media Gateway Control & Management

- Control Protocols: SIP, H.323, MEGACO (H.248), and MGCP
- AudioCodes' extensive TPNCP API over IP
- TPNCP API Supported OS: Windows NT, 2000, XP, Linux, Solaris on Intel/Sparc

Operations Management

User friendly GUI via Embedded Web Server, Centralized Element Management System, SNMP v3, Remote configuration and software download via TFTP & BootP, HTTP, Syslog Telnet (for CLI)

Security

- IPSEC – for control protocols and for Management Interfaces
- HTTPS
- SRTP
- TLS, Telnet SSL, IP access list, Radius Login

Interfaces

# Audiocodes M2000 1T1 RS232 VoIP Gateway

- Ethernet: Dual Redundant 10/100 BASE-T Ethernet ports via 2 RJ-45 connectors on RTM
- Telephony Interface: 16 E1/T1/J1 using dual 50-pin Telco connectors on RTM or up to 8 E1/T1/J1 spans using RJ-48c connectors

## Hardware Specifications

- Power Supply: Single universal 90-260 V AC or dual-redundant AC or single -48 V DC
- Physical: 1U high, 19-inch wide rack mount

## Regulatory Compliance

- Telecommunication Standards: FCC part 68
- TBR4 and TBR13
- Safety and EMC Standards: UL60950, FCC part 15 Class A, CE Mark (EN55022 Class A, EN60950, EN55024, EN300 386)
- Environmental: NEBS Level 3: GR - 63-Core (DC-powered model), GR -1089-Core Type 1 & 3, ETS300 019

## Benefits

- Deliver competitive, complete, best-of-breed media gateway functionality featuring highest voice quality.
- Meet the demands of converged, wireless, wireline, cable broadband access and fixed-mobile converged VoIP networks from a single media gateway platform.
- Increase flexibility with a media gateway that supports a wide variety of call control protocols and scales down to meet the demand of enterprises and small carrier POPs.
- Integrate 3G and 2G packet-enabled media gateway functionality into an end-to-end system solution.
- Meet the needs for VoIP Trunking, IP Centrex, and VoIP Access Gateway markets with a right-sized and cost-effective media gateway.
- Deploy globally with a rich offering of PSTN interfaces and signaling.
- React quickly to dynamic market requirements.

**Price: £4,185.70**

---