

# AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway

Product Name: AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway

Manufacturer: AudioCodes

Model Number: M800-12S-2L-P-2U12

## AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway

The AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway is an all-in-one, Multi-Service Business Gateway solution, designed to provide converged Voice & Data services for small-to-mid size business (SMB) customers, and to form a well-managed point of demarcation for service providers. The Mediant 800 MSBG is based on AudioCodes' VoIPerfectHD best-of-breed Media Gateway technology, integrating a variety of communication functions into a single platform to support fundamental services, such as VoIP mediation, Data Routing, WAN access, Voice & Data security, survivability, and third party value-added services applications. These services allow smooth connectivity to cloud services. Best-of-Breed Small-to-mid-Size Enterprise Class Media Gateway

The AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway is built upon a highly interoperable VoIP Media Gateway that can be delivered in several pre-defined configurations. In addition, the AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway provides enhanced dialing plans and voice routing capabilities along with SIP to SIP mediation, allowing business customers to enjoy the benefits of SIP Trunking services, IP Centrex connectivity, Unified Communications, as well as flexible PSTN and legacy PBX connectivity to VoIP.

LAN, Data Routing and WAN Access AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway is optimized for wire-speed delivery of data and wireless services supporting up to 8 10/100 Base-TX and 12 10/100/1000 Base-T PoE LAN ports (802.3af) and an integrated WiFi (802.11a/b/g/n) Access Point. The Integrated switch modules enable support for IP Phones and other PoE-powered devices. The AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway is equipped with a versatile WAN interface supporting 10/100/1000 copper and optical GigaBit Ethernet, and a selection of serial data transmission interfaces, providing great flexibility in connecting to Service Provider networks. Data routing capabilities are provided by static as well as dynamic routing protocols, including support for RIP, OSPF and BGP.

Session Border Controller (SBC) and Security Services AudioCodes Mediant

M800-12S-2L-P-2U12 12xFXS Gateway is designed as a secured VoIP and Data platform.

Enhanced Media Gateway security features include encryption schemes, such as SRTP for media, TLS for SIP control, IPSec for management, and additional features. A fully featured Enterprise-class Session Border Controller provides a secured voice network deployment, based on the embedded Back-to-Back User Agent (B2BUA). Data Security functions include integrated Stateful Firewall, IDS/IPS, and SSL for remote user access and site to site VPN.

Quality of Service (QoS) and Quality of Experience (QoE) AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway 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 AudioCodes Mediant M800-4S-2L Gateway 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 800 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 service discontinuities in case of a WAN failure. The integrated SAS (Stand Alone Survivability) feature of the Mediant 800 enables internal office communication between SIP clients (e.g. IP Phones), along with PSTN fallback, in case of disconnection from the centralized IP Centrex server or IP-PBX.

Value Added Services by an Open Platform for 3rd Party Applications In addition, an advanced, on-board DSP Resource Farm enables the implementation of narrowband as well as wideband/ High Definition VoIP (HD VoIP) 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. AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway in Service Provider Networks As SMB's strive to control their communication operating and equipment costs, outsourcing a Voice and Data infrastructure to a Service Provider is becoming an attractive option. The Mediant 800 MSBG offers service providers who are delivering hosted and managed communication services, a clear and easy-to-manage demarcation point, combining Data Routing and Security, WAN Access, Secured VoIP and the Stand Alone Survivability feature. Using the Mediant 800 MSBG. Service Providers' SMB customers can easily and securely consume cloud-based SaaS services.

Mediant 800 MSBG in Distributed Enterprise Networks Enterprises are motivated to be more productive, efficient, and responsive to their internal users. The convergence of secured voice services, Stand Alone Survivability, Data Routing, Security and WAN Access into a branch office's unified platform, ensures a high level of investment protection, cost-optimization and support for the growing communication needs of the Enterprise.

AudioCodes Mediant M800-12S-2L-P-2U12 12xFXS Gateway can be utilized at the company's remote branches, 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. In addition, the higher density Mediant 1000 MSBG is a well-suited platform for converging VoIP Gateways and a Session Border Controller, thereby improving the enterprise headquarter's service level.

## Target Applications

- SIP Trunking
- IP Centrex and hosted services
- IP-PBX for SMB/SOHO
- Remote connection to IP-PBX in distributed Enterprise branches
- Unified Communications mobility and Value Added Services for SMB/SOHO

## AudioCodes Mediant M800-4S-2L 4FXS Gateway Technical Specifications Interfaces

- PSTN Capacity: Voice interfaces: The Mediant 800 is equipped with up to 12 analog PSTN interfaces.
- Analog Interfaces: 12 FXS ports

## Networking Interfaces

- WAN: WAN interface 10/100/1000 Base-T Copper Support for T1, SHDSL, ADSL2+, VDSL
- LAN: 2 ports
- WiFi\*: WiFi Access Point support for 802.11 a/b/g/n

## OSN Server Platform (Optional)

- Single Chassis Integration: Embedded, open Network Solution Platform for third-party services
- CPU: Intel Atom 1.6 GHz
- Memory: 1G RAM
- Storage: SATA storage

## Media Processing

- Voice Coders: G.711, G.723.1, G.729A, G.722, AMR-WBIndependent dynamic vocoder selection per channel
- Echo Cancellation: G.165 and G.168-2002, with 32, 64 or 128 msec tail length
- Quality Enhancement: Dynamic programmable jitter buffer, VAD, CNG
- DTMF/MF Tones: Packet-side or PSTN-side detection and generation, RFC 2833 compliant DTMF relay and Call Progress tones Detection and Generation
- IP Transport: VoIP (RTP/RTCP) per IETF RFC 3550 and 3551, IPv6 Supported
- Fax Transport: T.38 compliant (real time fax), Automatic bypass to PCM

## 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), VN3, VN4, VN6 ISDN BRI: Euro ISDN, VN4/6 or QSIG
- Analog Signaling: Loop Start FXS/FXO, Caller ID, polarity reversal, distinctive ringing, visual Message Waiting Indication

## Data Routing (Optional)

- DHCP/PPPoE/L2TP/PPTP client towards WAN;
- DHCP server towards LAN
- VLAN
- Layer 3 routing
- Internal layer 2 switching
- Static and dynamic routing (RIP1, RIP2, OSPF, BGP)

## Control and Management

- Control Protocols: SIP-TCP, SIP-UDP, SIP-TLS and SIP-MSCML\*, IPv6 Supported - Stand alone Survivability for service continuity
- Operations & Management: AudioCodes's Element Management SystemEmbedded HTTP Web Server, SNMP V2/V3Remote configuration and software download via HTTP or HTTPS, RADIUS, Syslog (for events and alarms)

## IP/VoIP Quality of Service

- IEEE 802.1P, TOS, DiffServ labeling
- IEEE 802.1Q VLAN tagging
- RTCP-XR\* (Extended Reports per RFC 3611)
- Shaping Policing, Queuing, Bandwidth Reservation (Optional)

## Security -

### Session Border Controller (SBC)

- SIP Header conversion
- SIP Normalization
- Survivability
- IP-to-IP routing translations of various SIP transport types; UDP, TCP, TLS
- Translation of RTP, SRTP
- Support SIP trunk with multi-ITSP (Registrations to ITSPs is invoked independently)
- Topology hiding
- Call Admission Control
- Call Black/White list

## Data Security

- IPsec
- ESP & Tunnel mode
- Encryption
- Authentication
- IKE mode & IPsec VPN
- IDS/IPS:- Fragmented traffic- Malformed Request- Ping of Death- Properly formed request from unauthenticated source- DDoS attack- SYN flood
- Stateful packet inspection firewall
- DMZ Host
- Port Triggering
- Packet Filtering
- Application Layer Gateway

## Hardware Specifications

- Power Supply: Single, universal 90-260 V AC
- Physical Dimensions: 320mm x 345mm x 1U

## Regulatory Compliance

- Safety and EMC Standards: UL60950-1, EN60950-1, CB certification including National deviations EN55024, EN55022 Class A, EN61000-3-2, EN61000-3-3, EN300 386, FCC 47 Part 15 Class A
- Telecommunication Standards: TIA/EIA-IS-968, ETSI ES 203 021 (FXO interface)

\* Future Release

**Price: £1,168.60**

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