AudioCodes CPE & Access Gateway Products

Mediant™ 800 MSBR

**Multi-Service Business Router**

**Flexible WAN Access Capabilities**

AudioCodes Mediant 800 MSBR has a versatile WAN interface supporting copper and fiber Gigabit Ethernet, T1/E1 WAN and a selection of DSL protocols such as SHDSL, ADSL2+ and VDSL2. It also supports a 4G/3G cellular connection through a USB dongle. This range of options enables great flexibility and branch resiliency in connecting to service provider networks.

The Mediant 800 MSBR provides redundant WAN connectivity links for continued services in the event of WAN failure. Each device comes with copper Gigabit Ethernet (GE) along with a mix of additional two WAN ports of VDSL or GE copper or Optical Fiber SFP.

**Integrated Router and LAN Switch**

AudioCodes Mediant 800 MSBR has an integral LAN switch supporting up to 12 Power-over-Ethernet (PoE) LAN ports for IP phones and other PoE devices. It is equipped with an integrated WiFi (802.11n) access point, as well as optional dynamic and static routing capabilities.

To accommodate connectivity support for rich multimedia devices, such as video phones and motored cameras, the Mediant 800 MSBR supports 802.3at PoE of up to 30 Watts per port and 200 Watts in total.

**Branch Survivability, Security and QoE for Cloud Services**

With support for multiple redundant WAN links and the integrated Cloud Resilience Package (CRP) and Standalone Survivability (SAS) features, the Mediant 800 MSBR facilitates local internal calling, alternate WAN connectivity and PSTN fallback for making and receiving external calls during WAN interruptions, along with advanced security features and quality of experience (QoE) tools.

**Open Platform for Hosting Value Added Applications**

AudioCodes Mediant 800 MSBR extends the flexibility of the Multi-Service Business Router with a 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 such as IP-PBX, IVR, call center, conferencing, and more.

**Target Applications**

- SIP Trunking
- IP Centres and hosted services
- Service Provider managed services
- Migration from TDM to IP

**About AudioCodes**

AudioCodes designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology market leader focused on converged VoIP & data communications and its products are deployed globally in Broadband, Mobile, Enterprise networks and Cable. The company provides a range of innovative, cost-effective products including Media Gateways, Multi-Service Business Routers, Session Border Controllers (SBC), Residential Gateways, IP Phones, Media Servers and Value Added Applications.

**AudioCodes Mediant™ 800 MSBR**

An all-in-one integrated device for VoIP, Data, Security and Access
- Consistent performance driven by dual-core architecture
- Branch survivability for distributed enterprises during WAN failures
- Flexible multiple WAN connectivity for redundancy and improved SLA
- Ideal for small and medium sized businesses (SMB) and enterprises (SME)
- Clear single managed point of demarcation
- SIP Trunking connectivity through E-SBC
- 802.11n WiFi and LAN Power-over-Ethernet (PoE) support
- Microsoft Lync Enhanced Gateway
- Scalability: from four analog voice channels, up to two Es/T1 voice trunks
- **AudioCodes Mediant™ 800 MSBR** is an all-in-one box solution, designed to provide converged data and voice connectivity for small-to-mid size enterprise and business (SME and SMB) customers, and to form a well managed point of demarcation for service providers.

Based on AudioCodes VoIPerfectHD technology, the Mediant 800 MSBR integrates a variety of communication functionalities into a single platform, including Router, WAN access, branch survivability, VoIP mediation, Enterprise Session Border Controller, voice and data security, and an optional server for hosting added value services.

**Security**

- Session Border Controller (SBC) SIP Media gateway SIP Normalization/Survivability
- Translation of RTP, SRTP
- Support SIP Trunk with multi-TSP (Registration to TSPs is invoked independently) Topology hiding
- Call Admission Control
- Call Block/White list

**Data Plane**

- Pack.
- EAP – Tunnel mode Encryption Authentication
- AC mode – PACVP
- DES/3DES
- Frag. traffic
- Multi-homed request
- Ping of Death
- Properly formed request from unauthenticated source
- DoS attack
- 802.11n
- Sniffer/packet inspection firewall
- MAC hosts
- Port Teaming
- Packet Filtering
- Application Layer Gateway

**OSN Server Platform (Optional)**

- Integrated Router and LAN Switch
- Single Chassis Integration
- Embedded, open Network Solution Platform for third-party services
- OSN Server Platform (Optional)

**Application Layer Gateway**

- Packet filtering
- Port triggering
- IDS/IPS:
  - SYN flood
  - DDoS attack
  - Properly formed request from unauthenticated source
  - Ping of Death
  - Malformed Request
  - Fragmented traffic

**OSN Server Platform (Optional)**

- Call Black/White list
- Call Admission Control
- Translation of RTP, SRTP
- Session Border Controller
- SIP Header conversion
- SIP Normalization
- Survivability
- Session Border Controller (SBC) IP-to-IP routing translations of various SIP transport types; UDP, TCP, TLS

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Mediant™ 800 Multi-Service Business Router

Powerful Media Processing Services
The on-board DSP resource farm enables the implementation of a variety of narrowband and wideband VoIP media processing services such as recording, integrated voice response (IVR), conferencing and transcoding. Utilizing AudioCodes' dedicated DSP resources enables a more robust and predictable voice performance compared to systems that are based on general purpose CPUs.

Mediant 800 MSBR in Business Services Implementations
As small and medium businesses and enterprises strive to control their communications' operating and equipment costs, outsourcing their voice and data infrastructure to a service provider is becoming an attractive option. The Mediant 800 MSBR offers service providers who are delivering hosted and managed communication services, a clear and easy-to-manage demarcation point, combining multiple WAN Access, routing and security, dual PSTN fallback, secured VoIP and branch survivability.

By using the Mediant 800 MSBR, service providers' business customers can easily and securely hook up to cloud-based services.

Mediant 800 MSBR in Microsoft Lync Enterprise Networks
Reliable network services at branch offices are essential for maintaining application availability for critical business processes. In Microsoft Lync environment, AudioCodes Mediant 800 MSBR can be deployed as an Enhanced Gateway or Survivable Branch Appliance (SBA) to offer branch-office resiliency for the local IP-Phones along with their voice and data infrastructure to a service provider is becoming an attractive option. The Mediant 800 MSBR offers service providers who are delivering hosted and managed communication services, a clear and easy-to-manage demarcation point, combining multiple WAN Access, routing and security, dual PSTN fallback, secured VoIP and branch survivability.

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Enterprise Session Border Controller (E-SBC)
By upgrading the platform with software E-SBC licenses, the Mediant 800 MSBR protects the enterprise network and provides secure connectivity into SIP Trunking and other service provider applications. The key security features include Call Admission Control (CAC), encryption and authentication, topology hiding, traffic separation and protection against Denial of Service (DoS) attacks.

Specifications*

Networking Interfaces
- WAN: Multiple WAN interfaces
  - Support for IPv4, IPv6, PPPoE, L2TP, PPTP, IP-VPN, IPoE, MAC-in-IPv4/IPv6
- LAN: 2 configurations: 4 ports 10/100/1000Base-T plus additional 8 10/100Base-T or 2 ports 10/100/1000Base-T or 4 ports 10/100/1000Base-T
- IPS: Power-over Ethernet on all ports is optional (Compliant to IEEE 802.3at 2009 with auto-detection up to 30W per port, up to 30W in total), IP management
- WiFi: Access Point support for 802.11a, b/g/n, dualband 2.4 GHz, 5 GHz

WAN Interfaces
- ADSL2+ (Max 1.1 Mbit/s)
- SMDS (64 kbps, 16 kbps, 8 kbps, 4 kbps, 2 kbps)
- VDSL2 (VDSL2, VDSL2, VDSL2, VDSL2)
- ISDN BRI: (Europe, Japan, China, Australia, New Zealand, South Africa)

Tel. Protocols
- SIP: Support for SIP v1 and v2
- MGCP: multiple interfaces
- STP: T.30, T.38, T.38
- IP Phones: 10/100/1000Base-T, 100Base-FX, 1000Base-SX/LX
- Analog Interface: 12 FXS, 8 FXO, 8 BRI
- Digital Interface: 2 E1/T1/J1, 8 E1/T1/J1
- Fax Transport: T.38 compliant, optional T.30
- VoIP Transport: IP Protocol, RTP/RTCP, IPv4, IPv6
- NAT: Support for 802.1Q VLAN tagging, Layer 3 routing, NAT, NAPT
- AudioCoding: G.711, G.726, G.729, AMR, G.722, AMR-WB, SILK
- Echo Cancellation: G.165, G.168-2002
- Denial of Service: DoS, ARP, DNS, Buffer Overflow, SQL Injection, XSS
- IPS: Power-over Ethernet on all ports is optional (Compliant to IEEE 802.3at 2009 with auto-detection up to 30W per port, up to 30W in total), IP management

Router/switching
- 2 configurations:
  - 4 ports 10/100/1000Base-T plus additional 8 10/100Base-TX ports or 2 ports 10/100/1000Base-T or 4 ports 10/100/1000Base-T
- ATM: Service Categories (UBR, VBR-RT, VBR-nRT, CBR)
- IPv6: IPv6 supported
- 10/100/1000Base-T: Full-Duplex SFP, 100Base-FX, 1000Base-SX/LX
- VDSL1, VDSL2 (bandplan 997, 998, profiles 8, 12, 17, 30, 31), E1 CAS
- E1/CAS: MSBR: E1 CAS (R2 MFC), E1/T1 CAS (E&M, loop start, Feature Group-D, E911CAMA)
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