# AudioCodes Session Border Controllers

# Mediant<sup>™</sup> 1000

## Hybrid SBC and Media Gateway

The AudioCodes **Mediant 1000 enterprise session border controller (E-SBC)** and media gateway offers a complete connectivity solution for small-to-medium sized enterprises.

Scaling up to 150 concurrent sessions, the Mediant 1000 connects IP-PBXs to any SIP trunking service provider and offers superior performance in connecting any SIP to SIP environment.



In addition, the Mediant 1000 supports up to 192 voice channels in a 1U platform to enable versatile connectivity between TDM and VoIP networks, such as connecting legacy TDM PBX systems to IP networks and IP-PBXs to the PSTN.

## 150 SBC Sessions | 192 TDM Sessions | Modular | Extensive Vocoder Support



### Comprehensive interoperability

Proven interoperability with SIP trunks, SIP platforms and IP cloud services



### Hybrid functionality

True hybrid SBC and gateway platform for gradual migration, low CAPEX and reduced space and power footprints



#### Enhanced security

Robust perimeter defense against cyber, DoS and DDoS attacks, as well as eavesdropping, fraud and service theft



## Superior voice quality Advanced capabilities for optimizing and monitoring voice service quality



High resiliency Local branch survivability and PSTN fallback with E911



DATASHEET

#### Mediant<sup>™</sup> 1000

Specifications

specifications					
Capacities					
Max. Signaling	150	Max. RTP/SRTP Sessions	120		
Max. Transcoding Sessions	96	Max. Registered Users	600		
Telephony Interfaces					
Modularity and Capacity	6 slots for hosting voic	e processing and PSTN termination modul	les (un to 192 channels)		
	6 slots for hosting voice processing and PSTN termination modules (up to 192 channels)				
Digital Module	Up to 6 E1 or 8 T1/J1 spans provided on trunk modules. Each module supports 1, 2, or 4 E1/T1/J1 spans, with an option of PSTN fallback				
Digital PSTN Protocols	Various ISDN PRI protocols such as EuroISDN, North American NI-2, Lucent™ 4/5ESS, NorteI™ DMS- 100 and others. Different CAS protocols, including MFC R2 E&M immediate start, E&M delay dial/start and others.				
BRI Module	Up to 20 BRI ports provided on BRI modules. Each module supports 4 BRI ports, with PSTN fallback. Providing S/T interfaces; NT or TE termination; 2W per por (power supplied)				
Analog Module	Up to 24 FXS interfaces, provided on 4-port FXS modules, ground/loop start Up to 24 FXO interfaces, provided on 4 port-FXO modules, ground/loop start				
Media Processing Module	Up to 4 Media Processing modules (MPM), providing additional DSP resources				
Network Interfaces					
Ethernet	Up to 6 GE interfaces configured in 1+1 redundancy or as individual ports				
Security					
Access Control	DoS/DDoS line rate protection, bandwidth throttling, dynamic blacklisting (Intrusion Detection System)				
VoIP Firewall	RTP pinhole management, rogue RTP detection and prevention, SIP message policy, advanced RTP latching				
Encryption/Authentication	TLS, SRTP, HTTPS, SSH, client/server SIP Digest authentication, RADIUS Digest				
Privacy	Topology hiding, user privacy				
Traffic Separation	VLAN/physical interface separation for multiple media, control and OAMP interfaces				
Interoperability					
SIP B2BUA	Full SIP transparency, mature and broadly deployed SIP stack, stateful proxy mode				
SIP Interworking	3xx redirect, REFER, PRACK, session timer, early media, call hold, delayed offer and more				
Registration and Authentication	SIP Registrar, registration on behalf of users/servers, SIP Digest access authentication				
Transport Mediation	Mediation between SIP over UDP/TCP/TLS, IPv4/IPv6, RTP/SRTP (SDES)				
Header Manipulation	Add/modify/delete SIP headers and message body using simple WireShark-like language with powerful capabilities such as variables and utility functions				
Number Manipulations	Ingress and egress digit manipulation				
Transcoding and Vocoders	Coder normalization including transcoding, coder enforcement and re-prioritization, extensive vocoder support: G.711, G.723.1, G.726, G.729, GSM-FR, AMR-NB G.727, iLBC, QCELP, GSM EFR				
Signal Conversion	DTMF/RFC 2833/SIP, T.38 fax, V.34, packet-time conversion				
NAT	Local and far-end NAT traversal for support of remote workers				
Voice Quality and SLA					
Call Admission Control	Limit number and rate of concurrent sessions and registers per peer for inbound and outbound directions				
Packet Marking	802.1p/Q VLAN tagging, DiffServ, TOS				
Standalone Survivability	Maintains local calls in the event of WAN failure. Outbound calls can use PSTN fallback (including E911).				
Voice Monitoring and Enhancement	Transrating, RTCP-XR, acoustic echo cancellation, replacing voice profile due to impairment detection, fixed and dynamic voice gain control, packet loss concealment, dynamic programmable jitter buffer, silence suppression/comfort noise generation, RTP redundancy, broken connection detection				
Direct Media	Hair-pinning (no media anchoring) of local calls to avoid unnecessary media delays and bandwidth consumption				
Test Agent	Ability to remotely verify connectivity, voice quality and SIP message flow between SIP UAs				
SIP Routing					
Routing Criteria	Incoming SIP trunk, DID ranges, host names, any SIP headers, codecs, QoE, bandwidth				
Querying External Databases	Routing based on customized queries of ENUM, LDAP, HTTP server (REST API)				
Advanced Routing Features	Alternative routes, load balancing, least-cost routing, call forking, E911 emergency call detection and prioritization				
Route To	Configured SIP peers, registered users, IP address, request URI				
Management					
OAM&P	Browser-based GUI, CL	I, SNMP, INI Configuration file, REST API, E	EMS		
OSN Server Platform (Optional)					
Single Chassis Integration	Optional embedded, x	86, Intel-based Open Solution Network pla	atform for third-party applications		
Physical/Environmental					
Dimensions	1U x 444 x 355 mm (Hx	WxD) Weight	Approx. 9.7lb (4.4kg)		

Physical/Environmental					
Dimensions	1U x 444 x 355 mm (HxWxD)	Weight	Approx. 9.7lb (4.4kg)		
Mounting	Desktop or 19" mount	Power	Dual power supply 100-240V, 50-60 Hz, 1.5A max		
Environmental	Operational: 0 to 40° C (32 to 104°F); Storage: -20 to 70°C (-4 to 158°F) Relative Humidity: 10 to 85% non-condensing				



#### **International Headquarters**

1 Hayarden Street, Airport City Lod 7019900, Israel Tel: +972-3-976-4000 Fax: +972-3-976-4040

#### AudioCodes Inc.

27 World's Fair Drive, Somerset, NJ 08873 Tel:+1-732-469-0880 Fax:+1-732-469-2298 Contact us: www.audiocodes.com/contact Website: www.audiocodes.com

©2018 AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VolP, HD VolP Sounds Better, IPmedia, Mediant, MediaPack, What's Inside Matters, OSN, SmartTAP, User Management Pack, VMAS, VolPerfect, VolPerfectHD, Your Gateway To VolP, 3GX, VocaNom, AudioCodes One Voice and CloudBond are trademarks or registered trademarks of AudioCodes Limited. All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.