



AVAYA G-SERIES MEDIA GATEWAYS

Resilient Solutions for Head Office, Branch Office and all points in between

- Robust Resiliency Features that Support Business Continuity
- Deployment Flexibility
- High Capacity Scalability
- Enhanced Serviceability for lower TCO

Avaya G-Series Media Gateways provide a flexible, reliable, and scalable platform for your Avaya communications applications. From head office to the smallest branch, Avaya G-Series Media Gateways provide the scalability and configuration options for cost-effective and resilient connectivity. For high volume locations, Gateways can be stacked as required, with a single instance supporting up to 10,000 busy hour call completions. For lower traffic locations, like branch offices at the edge of an enterprise network or locations across a campus environment, Gateways can be flexibly scaled to meet immediate needs with the knowledge that future growth is always an option.

Select from either the G450 Media Gateway for higher volume requirements or the G430 Media Gateway for smaller capacity needs. Both platforms share many of the same capabilities, including common media module cards and the ability to provision an S8300 blade server for robust local communications survivability.





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Tailored capabilities for your unique requirements

Scalable, High Capacity Platform Provides Investment Protection

Grow as business needs expand with a modular architecture and capacity for 192 analog or digital endpoints, 8 T1/E1s, 320 Digital Signal Processors (DSPs), and up to 1024 announcements on a single G450 Media Gateway.

Robust Resiliency Features Support Business Continuity

The G-Series Gateways deliver a variety of voice survivability options to help ensure that the branch can continue to function effectively in the event of network outages. By using an S8300 Server in Survivable Remote Processor (SRP) mode, full-featured SIP/IP telephony is restored quickly when the WAN link between the main server and the remote Gateway is broken. Even without SRP, the G-Series Gateways support Standard Local Survivability, where basic telephony features are available when the WAN link fails. Furthermore, the G450 incorporates dual, redundant hot-swappable power supplies, and replaceable, hot-swappable main board modules and fan trays help to lower both MTBF and MTBR.

Enhanced Serviceability Lowers Total Cost of Ownership

The G-Series Media Gateway's modular design streamlines serviceability for both customers and field technicians. Fans can be easily replaced, DSPs and RAM added, supervisor modules swapped out, and power supplies changed. With hot-swappable media modules, main board modules, power supplies and fan trays, downtime is minimized.

Enhanced Security Protects Sensitive Information

The G-Series Media Gateways encrypt voice traffic and signaling over the IP network to help prevent eavesdropping. In addition, they support security features such as SSH/SCP and SMNP v3 to help network managers more securely configure and manage their gateways.

Branch Standardization

The design and cost effectiveness of the G-Series Media Gateways enables branch standardization. The Gateways can be configured to extend Avaya Aura® Communication Manager features and applications to branch offices at the edge of the enterprise network. In addition, they can be deployed throughout an enterprise environment but varied at each location to reflect local slot or DSP resource requirements.

Solution Details

	G450 Media Gateway	G430 Media Gateway
Overview	The Avaya G450 Media Gateway consists of a 3U high, 19" rack mountable chassis with field-removable supervisor main board modules, power supplies, fan tray, DSP resources and memory. It has eight Media Module slots that host a combination of interface boards to support T1/E1, ISDN-BRI, WAN interfaces, digital or analog telephones and analog trunks. The first Media Module slot can also host an S8300 Server to provide integrated IP Telephony for standalone businesses or mission-critical survivability for branch office-deployed G450s.	The Avaya G430 Media Gateway consists of a 1.5U high, 19" rack mountable chassis with DSP resources and memory. It has three Media Module slots that host a combination of interface boards to support T1/E1, ISDN-BRI, digital or analog telephones and analog trunks. For expansion, up to two 1.5U high EM200 expansion modules can be added to a G430, with two expansion slots each, providing a potential total of seven Media Module slots. The first Media Module slot can also host an S8300 Server to provide integrated IP Telephony for standalone businesses or mission-critical survivability for branch office-deployed G430s.
Field-replaceable Main Board Module	Supports optional DSP and Memory add-ons.	Not applicable
Built-in Interfaces	Two 10/100/1000 Base-T LAN ports, two 10/100 Base-T WAN ports, two USB ports, console and services ports, contact closure adjunct port, an ETR port (for emergency calls during power failures), and a Compact Flash slot for additional announcements storage.	Two 10/100 Base-T LAN ports, one 10/100 Base-T WAN port, two USB ports, services port, Contact closure adjunct port, and a Compact Flash slot for additional announcements storage.
Tone Detectors	64	32
Announcement Ports (Number of announcements that can be played simultaneously). Note there is always one port reserved for recording	64	16
Maximum Number of announcements Note: requires expansion kit	1024	1024
Maximum number of announcement hours. Note: requires expansion kit	4	4

Solution Details		
	G450 Media Gateway	G430 Media Gateway
Routing Capabilities	OSPF, RIP, PPP, Frame Relay and VRRP support. Available IP WAN routing media modules add support for PPP/Frame Relay connectivity over E1/T1 or Universal Serial Port (USP) interfaces. The G450 can also connect to an external WAN device via fixed 10/100 Ethernet WAN router ports, which support traffic shaping to match data transfer rates with available WAN bandwidth.	OSPF, RIP, and VRRP support. The G430 can also connect to an external WAN device via fixed 10/100 Ethernet WAN router port, which support traffic shaping to match data transfer rates with available WAN bandwidth.
Survivability	Dual, redundant, load-sharing power supplies; modular fan tray, standard Local Survivability and enhanced Local Survivability (with S8300 Server).	Standard Local Survivability and enhanced Local Survivability (with S8300 Server).
Enhanced Quality of Service	Support for Dynamic Call Admission Control for improved bandwidth utilization and Respond Time Report for better WAN monitoring.	
Security	VPN support, TLS, AES, SRTP and SRTCP encryption, SSH/SCP, SNMP v3 support, secrets management.	

Specifications		
	G450 Media Gateway	G430 Media Gateway
Physical	<ul style="list-style-type: none"> • Dimensions (H x W x D): 133.3mm x 482.6 mm x 460 mm • Weight of empty chassis: 7.5 kg • Power: 90V-264V AC, 48-62 Hz 	<ul style="list-style-type: none"> • Dimensions (H x W x D): 66.5 mm x 482.6 mm x 325 mm • Weight of empty chassis: less than 5 kg • Power: 90V-264V AC, 48-62 Hz
Environmental	<ul style="list-style-type: none"> • Operating Temperature: +0°C to +40°C • Humidity: 10%-90% relative humidity, non-condensing • Front clearance: 30 cm • Rear clearance: 45 cm • Operating Altitude: up to 3000 m 	
Supervisor Module	<ul style="list-style-type: none"> • Field removable • DSP daughterboard(s) - up to 4 • 2 10/100 Base T WAN ports • 2 10/100/1000 Base T LAN ports • 2 USB ports • Console and Services ports for services and maintenance access • ETR (Emergency Transfer Relay) port • Contact closure adjunct port • Compact Flash Slot 	Not applicable
Media Module Slots	<ul style="list-style-type: none"> • 8 media module slots, supporting up to 8 telephony media modules, and a maximum of 3 IP WAN modules and 1 S8300 Server 	<ul style="list-style-type: none"> • 3 media module slots on the G430 plus up to 2 EM200 expansion modules with 2 slots each for a total of 7 slots), supporting up to 7 telephony media modules, and 1 S8300 Server

Specifications

	G450 Media Gateway	G430 Media Gateway
Media Modules	<ul style="list-style-type: none"> • MM711: 8 port Analog Media Module • MM714: 4 trunk + 4 telephone Analog Media Module • MM714B: 4 trunk + 4 telephone Analog with ETR Media Module • MM716: 24 port Analog Media Module • MM712: 8 port DCP Media Module • MM717: 24 port DCP Media Module • MM710: 1 port T1/E1 Media Module • MM721: 8 port BRI Media Module • MM722: 2 port BRI Media Module 	
Capacities	<ul style="list-style-type: none"> • Busy Hour Call Completions: 10,000 • Chassis slot count: 8 Media Module slots • DSP Channels: 20/80/160 on daughterboard, scale to 320 total • Touch Tone Receivers: 64 • Announcement Port: 63 Playback; 1 Record • Announcement and MOH Storage: 45 Minutes/4 hours with Branch Memory Kit • Power Supplies: 2 • Maximum DCP/Analog endpoints: 192 • Maximum IP Telephones with S8300D Server: 1000 • Maximum BRI Telephones: 128 • Maximum BRI Trunks: 64 • Maximum PSTN Trunks: 184 T1, 238 E1 • Maximum G450s per External Avaya Server: 250 • Maximum G450s per S8300 Server: 50 	<ul style="list-style-type: none"> • Busy Hour Call Completions: 2400 • Chassis slot count: 7 Media Module slots (with 2 EM200) • DSP Channels: up to 120 channels (required an MP120 daughterboard) for all voice codecs (G.711, G.726, G.729) and V.150.1 Modem over IP (MoIP) • Touch Tone Receivers: 32 • Announcement Port: 15 Playback; 1 Record • Announcement and MOH Storage: 45 Minutes/ 4 hours with memory upgrade kit • Power Supplies: 1 • Maximum DCP/Analog endpoints: 152 • Maximum IP Telephones with S8300 Server: 1000 • Maximum BRI Telephones: 112 • Maximum BRI Trunks: 56 • Maximum PSTN Trunks: 96 T1 and 96 E1 (limited by DSP resources) • Maximum G430s per External Avaya Server: 250 • Maximum G430s per S8300 Server: 50
Phone Compatibility	<ul style="list-style-type: none"> • Avaya 96XX, 1600 and 4600 Series IP Telephones • Avaya 9400, 1408, 1416, 2400, 6400 and 8400 Series Digital Telephones • Avaya or other analog telephones 	
Server and Application Options	<ul style="list-style-type: none"> • Avaya S8300 Server running as either a Survivable Remote Processor (SRP) or Primary Call Controller • Communication Manager Messaging Application (on S8300) • Branch Session Manager (BSM) 	

Specifications

	G450 Media Gateway	G430 Media Gateway
Switching and Routing Features	<ul style="list-style-type: none"> • G430: OSPF, RIP, PPPoE, VRRP. • G450: OSPF, RIP, PPP, PPPoE, Frame Relay, VRRP • RTP Header Compression • Dynamic Call Admission Control • WFVQ (Weighted Fair Voice Queuing) • Traffic shaping • 802.1p/q VLAN tagging • Inter-VLAN routing • Port Redundancy • 802.1d/802.1w Spanning Tree/Rapid Spanning Tree support • IPv6 • IP Clock Sync Support 	
Agency / Type Approvals	<ul style="list-style-type: none"> • FCC part 15 and 68, CE Mark, A Tick Mark, China CCC and MII, Japan Telecom, BSMI, VCCI, Canadian ICES-003, UL, GOST, Russian Telecom Ministry, NOM NYCE, COFETEL, ANATEL 	
Avaya Aura Communication Manager Compatibility	Release 5.0 or higher	Release 5.2 or higher

S8300 Server

Overview

The S8300 Server with a G450 and G430 Gateway provides a flexible solution for growing companies to streamline voice and data operations over one networked infrastructure. It can be used as a standalone communication system or as a fully survivable remote gateway. A S8300 can be the primary controller for up to 50 remote G450 and G430 Gateways.

Resilient, Local Access to Avaya Aura Communication Manager and Avaya Aura Session Manager

- Complete access to the full set of Communication Manager and Session Manager features and capabilities
- Survivable Remote Processor (SRP) fail over in the event that the central media server or communications link is disrupted
- Broad Scalability supporting a wide range of needs from a single office to a campus to a global enterprise
- Supported by Avaya Aura System Manager, Avaya's comprehensive system management capability

Specifications

FEATURE	S8300D	S8300E (requires at the minimum, System Platform 6.3.7 and Communication Manager 6.3)	NOTES
Processor	1.06 GHz Dual Core U7500	2.0 GHz Dual Core Ivy Bridge	Higher CPU performance
L2 cache	2 MB	512 KB	Included in the processor chip
L3 cache	None	4 MB	L3 cache provides higher performance
Chipset	3100 MICH	Cave Creek PCH	New higher performance platform
Type of memory	DDR2 SDRAM	DDR3 SDRAM	DDR3 is faster and provides a longer life cycle with lower cost at the higher densities
Maximum memory	8 GB	16 GB	S8300E ships with 16 GB SDRAM installed
Type of memory socket	Single RDIMM	2 Very Low Profile (VLP) SO DIMMs	SO DIMMs are required to fit within a single MM slot
Internal SSD	8 GB	Not supported	Avaya's System Platform no longer uses the SSD, however, the S8300D will support the installed base requiring the SSD
Hard drive	250 GB Serial ATA	320 GB Serial ATA	Enterprise class required.
Faceplate Ethernet ports	One for Services	Two ports, one for Services and one for future use	The second faceplate port is planned for out of band management but could have other uses
USB ports	Three USB 1.1/2.0	Three USB 1.1/2.0	
USB DVD drive	Supported	Supported	
USB Compact Flash reader	External USB CF reader	External USB CF reader supported	Not supported in SP 6.x, but may be a field support need

Learn More

For more information about how the Avaya G-Series Media Gateways or the S8300 Server may be leveraged to support your business, please contact your Avaya Account Manager, Avaya Authorized Partner or visit us at avaya.com.

About Avaya

Avaya is a leading, global provider of customer and team engagement solutions and services available in a variety of flexible on-premise and cloud deployment options. Avaya's fabric-based networking solutions help simplify and accelerate the deployment of business critical applications and services. For more information, please visit www.avaya.com.

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