



# The Avaya G350 Media Gateway



A complete branch office communications system ideally suited for enterprises with locations that have 8-40 extensions. This advanced TDM/IP architecture allows enterprises to benefit by leveraging existing investments and evolving to cutting-edge telephony that provides seamless connectivity and security.

## Solution Overview

This is a powerful converged networking solution that packs an IP telephony gateway, an advanced IP WAN router, and a high-performance LAN switch into a compact (3U) modular chassis. Designed to be a complete voice/data networking solution, the G350 Gateway is ideally suited for enterprises with distributed branch office locations using 8-40 extensions. Enterprises benefit long-term by leveraging existing telephony investments while supporting an evolution to recent protocols such as H.323 or SIP-based telephony.

An advanced TDM/IP architecture provides seamless connectivity and communications between a wide variety of analog, digital, H.323, and SIP-based telephony devices and applications. For communications security, the G350 can

secure VoIP media streams using Advanced Encryption Standard (AES), approved for use by U.S. Government agencies to protect sensitive information.

The Avaya G350 is also an edge router designed to support the consolidation of voice and data traffic over IP. Available IP WAN routing media modules add support for PPP / Frame Relay connectivity over E1/T1 or Universal Serial Port (USB) interfaces. Alternatively the G350 media gateway can connect to an external WAN device via a fixed 10/100 Ethernet WAN router port, which supports traffic shaping to match data transfer rates with available WAN bandwidth.

## Key Benefits

**Networked Telephony:** The Avaya networked server/gateway architecture allows enterprises to design and administer telephony services for all remote branch office locations from one central location.

**Business Continuity:** The G350 provides branch office users with a highly resilient system that continues to provide telephony call control even if the connection between the office and primary headquarters is lost.





**Emergency Transfer Relay:** An Emergency Transfer Relay (ETR) feature allows emergency calls even in the event of power failure.

**Multi-Protocol Capability:** Seamless TDM/IP support allows enterprises to take an evolutionary approach to IP telephony migration by maximizing investment protection for existing analog and digital devices.

**Converged All-in-One Device:** G350 integrates telephony, routing, and data switching into one box, reducing the overhead and complexity of managing disparate gateways, routers, and switches.

**Remote Deployment and Management:** The G350 can be easily installed and remotely configured by a central support staff, allowing the enterprise to get branch offices operational quickly and cost-effectively.

**Centralized Applications for the Branch:** The G350 supports a model allowing capabilities like messaging and call center to be extended to the branch with the benefits of centralized management.

## A Networked Gateway Solution

Avaya solutions are based on a modular architecture of centralized media servers that provide call processing and control through Avaya Communication Manager and a distributed network of media gateways. The Avaya G350 Media Gateway is designed to network back to a central media server such as the Avaya S8300, S8500 or S8700 using an IP WAN link. This enables the enterprise to design and administer telephony services for all remote branch office locations from one central location. For business continuity, the G350 can be configured to register with up to 3 back-up media servers if the primary server becomes unavailable. For mission-critical environments, a local S8300 media server blade can be installed as a Local Survivable Processor (LSP) that takes over telephony controller functions for the local office if all other means fail.

The S8300 can also be configured as the primary call controller for the G350, with an optional IA770 INTUITY™ AUDIX® card to provide local telephony and voice mail support. This allows G350-based remote office solutions to be easily integrated within existing networks, while providing a migration path towards a centralized, networked Avaya Communication Manager solution.

## Complete Branch Office Solution

The G350 provides a complete voice/data branch office communications system that integrates circuit-switched and packet-based telephony networks extending Avaya Communication Manager telephony functionality to the branch office. With the G350, enterprises with distributed branch office locations now have a resilient, centrally managed alternative to disparate key systems and standalone PBXs that can dramatically reduce the total cost of operation, simplify administrative support, and enhance branch office communications.



## Specifications

The chassis contains one High-Density Media Module (HDMM) slot designed to make it easy to add IP phones, wireless gateways, or any 802.3af-compliant device into the network. The G350 also features five media module slots that provide flexible configuration options, including support for analog, DCP, ISDN, and E1/T1, or the addition of an optional S8300 Media Server.

### Physical

- Dimensions (H x W x D): 133.3 mm x 482.6 mm x 400 mm
- Weight: 9-10 kg
- Power: 100-240 V~, 7 A Max, 50-60Hz

### Environmental

- Operating Temperature: +0° C - 40° C
- Humidity: 20% - 60% relative humidity

### Fixed Interfaces/Module Slots

- Fixed chassis interfaces
  - One analog trunk port
  - Two analog station ports. Emergency Transfer Relay (ETR) is supported between one of the station ports and the analog trunk port
  - One RJ-45 interface for an ACS (308) contact closure adjunct box
  - One RJ-45 10/100BaseTX Ethernet WAN port
  - One RJ-45 10/100Base TX Ethernet LAN port
  - One RJ-45 console port
  - One USB port
- One High Density Media Module (HDMM) slot
- Five Media Module Slots, including one for an optional S8300 Media Server

### Media Modules

#### Telephony Media Modules

- 8 Port Universal Analog Media Module
- 4+4 (Trunk/Station) Port Analog Media Module
- 24 Port HDMM DCP Media Module
- 8 or 24 port DCP modules
- T1/E1 Media Module
- 8 Port BRI Media Module
- 2 Port BRI Media Module

#### IP WAN Modules

- 1 T1/E1 Port WAN Routing Media Module
- 1 USP Port (supporting V.35/X.21) WAN Routing Media Module

#### PoE Module

- 24 Port HDMM 10/100 PoE and 1 SFP GBIC Port Module

#### Capacities

Maximum number of call center agents	10
Maximum number of All stations of Any Type	40
Maximum Number of Analog Stations	18
Maximum Number of Digital Stations	40
Maximum Number of IP Stations	40

#### Telephone Compatibility

- 6200/2500 Series Analog Phones
- Analog tip/ring devices such as single line telephones, modems or group 3 fax machines
- Two-wire 6400/8400 Series Digital Phones

- 4600 Series IP Phones
- IP Softphone R2.0+

### Server/Adjunct Options

- Avaya S8300 Media Server running Avaya Communication Manager Software as a Local Survivable Processor (LSP) or a Primary Internal Call Controller (ICC)
- IA770 INTUITY™ AUDIX® Messaging Application (residing on the S8300)

### Routing/LAN Switching Features

- Routing and WAN protocol support: OSPF, RIP v1, RIP v2, PPP, Frame Relay, and VRRP (Virtual Router Redundancy Protocol)
- RTP (Real-Time Protocol) header compression
- VoIP QoS Mode: Optimizes G.729 VoIP traffic by bounding voice traffic delay
- 802.1D Bridges and STA
- 802.1p Priority Tagging and 802.1Q VLAN Tagging
- 802.1w Rapid Spanning Tree
- 802.3af Power over Ethernet
- RMON - RFC 1757
- SMON - RFC 2613

### Agency/Type Approvals

- FCC part 15 and 68, CE Mark, BSMI, VCCI, Canadian ICES-003, UL, Gosstandart of Russia, Russian Telecom Ministry, NON NYCE, COFETEL, ANATEL

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### About Avaya

Avaya enables businesses to achieve superior results by designing, building and managing their communications networks. Over one million businesses worldwide, including more than 90 percent of the FORTUNE 500®, rely on Avaya solutions and services to enhance value, improve productivity and gain competitive advantage.

Focused on enterprises large to small, Avaya is a world leader in secure and reliable IP telephony systems, communications software applications and full life-cycle services. Driving the convergence of voice and data communications with business applications – and distinguished by comprehensive worldwide services – Avaya helps customers leverage existing and new networks to unlock value and enhance business performance.



IP Telephony

Contact Centers

Unified Communication

Services

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05/04 • EF-LB2265-01