

HiPath RG 2500

HiPath

Practical Convergence. Today.



Digital Gateway for VoIP Enterprise Solutions

HiPath™ RG 2500 is a voice over Internet Protocol (VoIP) gateway that can operate in two modes. Bridging circuit-switched (voice) and packet-switched (IP) networks in a HiPath 5000 enterprise softswitch, or in a toll bypass environment, HiPath RG 2500 gateway is an integral part of Siemens' HiPath migration strategy.

HiPath RG 2500 protects investments in your enterprise infrastructure. It offers a cost-effective way to gracefully migrate to packet-switched voice networks by transmitting voice across your existing IP networks by interfacing to circuit-switched systems. Using proven standards-based technologies, HiPath RG 2500 provides you with a risk-free method of converging voice, fax and data in your corporate network with optimal call quality.

Benefits at a Glance

- VoIP gateway can bridge circuit-switched and packet-switched networks in a HiPath 5000 enterprise softswitch environment, or in a toll bypass scenario
- Supports the ITU-T H.323 and H.450 standards, ensuring maximum compatibility with other VoIP applications and equipment
- Modular architecture enables maximum flexibility in configuring voice trunks for each location's requirements
- Allows you to migrate gracefully from circuit-switched to packet-switched voice networks
- Provides short latency with high voice quality using sophisticated digital signal processing (DSP) technology
- Enables voice communication on your existing enterprise IP infrastructure
- Offers option for 10 or 23 simultaneous universal voice/fax channels in a fractional or full PRI interface respectively
- Supports call by call codec selection (G.711, G.723.1 and G.729*)
- Designed for companies of any size
- Integrates with Siemens HiPath 5000 enterprise softswitches and Hicom 300 communications servers, as well as third-party PBX systems
- Supports all major central office switches
- Disaster recovery provided by redundant gatekeepers for toll-bypass application

*Available in the Toll Bypass (IP Trunking) mode only

Open Architecture Based on International Standards

HiPath RG 2500 supports H.323 and H.450, ITU-T standards for packet-based multimedia communications. Voice compression and packetization is performed using standard G.711, G.723.1 and G.729* codecs. HiPath RG 2500 also supports the T.38 protocol for real-time fax communication over IP networks, including automatic bandwidth negotiation to optimize transmission quality.

Gateway Management

HiPath RG 2500 provides an intuitive, browser-based graphical user interface. Built-in wizards and windows-based menus lead the administrator through configuration and administration tasks. HiPath RG 2500 provides robust configuration, statistics, diagnostics and alarm management. The graphical web-based interface enables easy configuration, installation and maintenance of all HiPath RG 2500 functions. In addition, software upgrades can be downloaded to the HiPath RG 2500 locally or via remote connection.

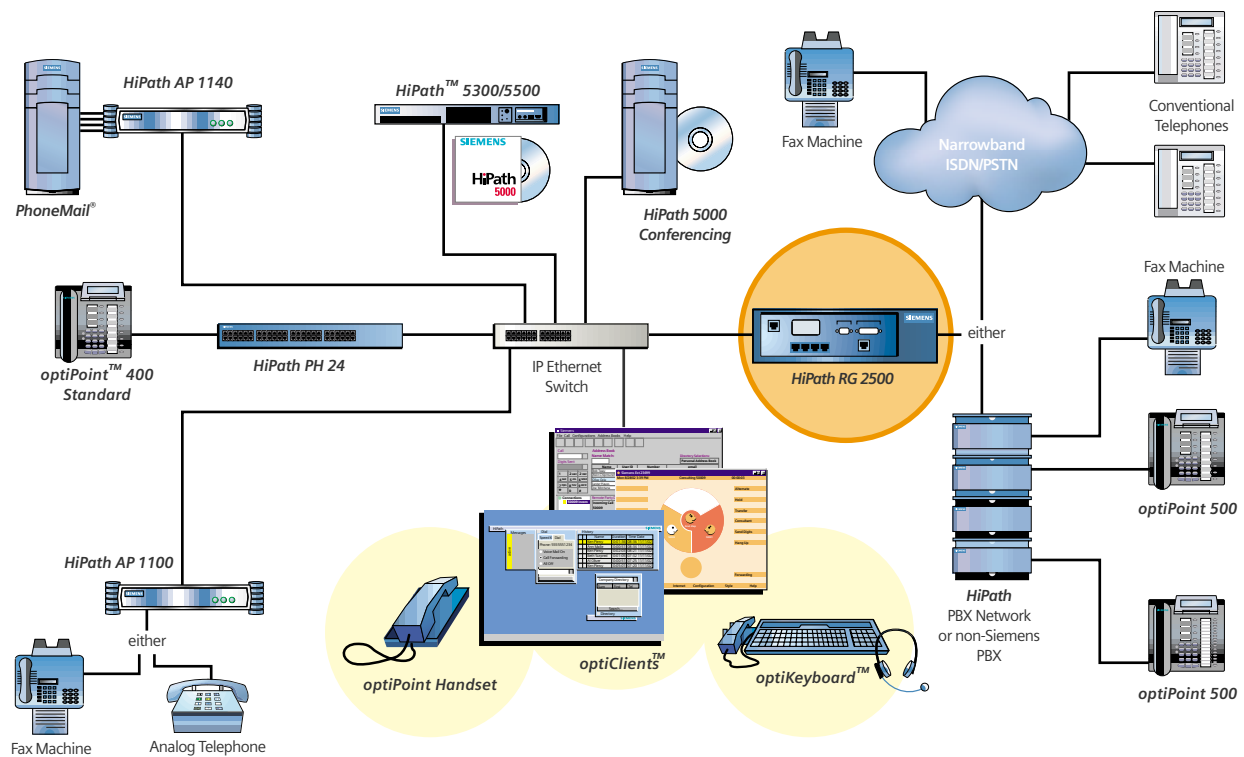
Exceptional Flexibility

HiPath RG 2500 gateway's modular architecture allows for maximum flexibility in configuring IP voice trunks to each enterprise location's requirements. In addition, multiple HiPath RG 2500s can be implemented in a single enterprise network, providing a highly scalable solution.

High Performance with Low Latency

HiPath RG 2500 platform features a RISC processor with a fast memory subsystem designed for high performance with very low latency. The embedded software is a real-time operating system with an efficient classification and forwarding architecture that enables high-speed packet forwarding. Advanced voice encoding also cuts network bandwidth requirements while minimizing delay.

*Available in the Toll Bypass mode only



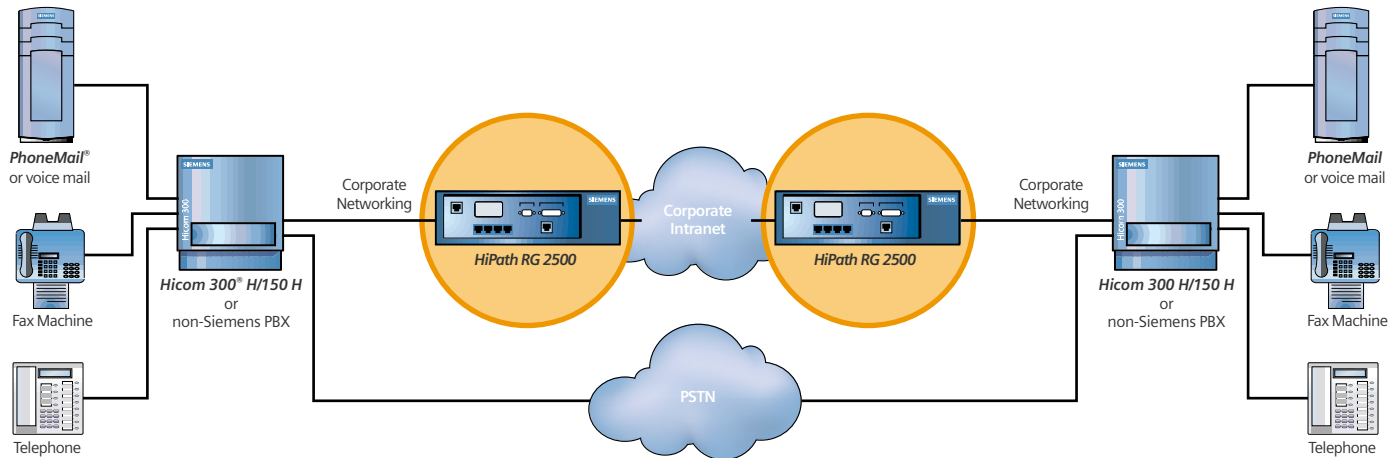
HiPath 5000 makes voice and data convergence a reality, giving your telephone users all the advantages of a data transport network.

Advanced Features

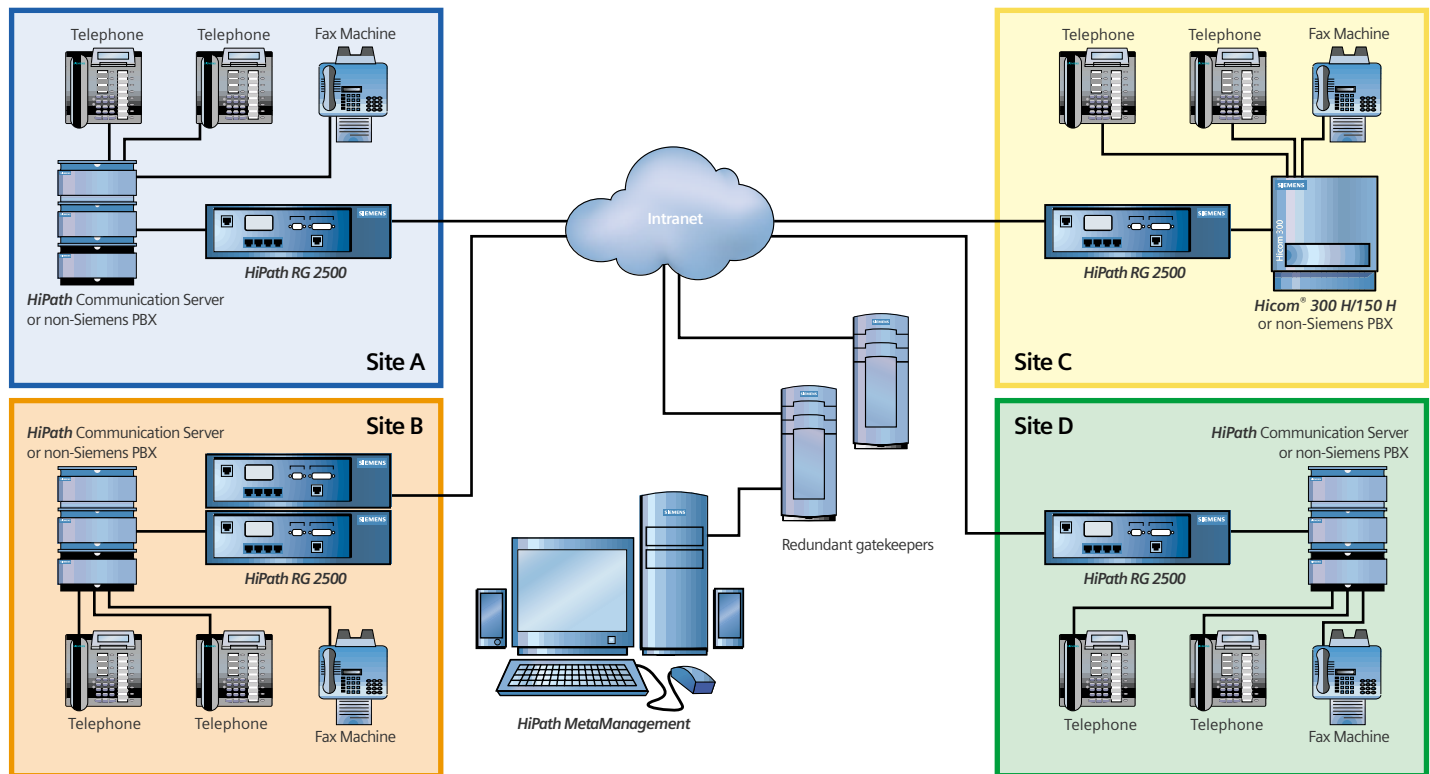
In the toll-bypass mode of operation, HiPath IP Trunking Gatekeeper can be installed on redundant servers and provide load-sharing and disaster recovery. In case of failure of one gatekeeper, the second one can take over routing, call processing and management of all the gateways.

Future-proof Your Communications

IP is fast becoming the universal standard for voice, data and video communications. By leveraging the IP standard, HiPath products and solutions not only reduce your network operating costs, they also guarantee that your enterprise softswitch is ready for future applications. To learn more about how HiPath RG 2500 and HiPath 5000 can take your IP network beyond data and enhance the way you do business, contact your local Siemens representative, or visit our website at www.siemensenterprise.com.



HiPath RG 2500 toll-bypass environment, without HiPath IP Trunking Gatekeeper, optional for networks up to ten gateways.



HiPath RG 2500 toll-bypass environment, with HiPath IP Trunking Gatekeeper, required for networks larger than ten gateways.

Feature Highlights

- Option for 10 or 23 simultaneous universal voice/fax channels in a fractional or full PRI interface
- CorNet™-N, and Q.SIG support of telephony feature across an IP network
- DID and DOD
- DTMF recognition and generation
- Caller ID presentation/suppression (CLIP/CLIR)
- Overlap receiving (single-digit dialing/receiving)
- Single-digit extension (attendant console, e.g. operator "0")
- Fast Connect procedure accelerates call setup time
- Early H.245 improves call setup time when the other party's system does not support Fast Connect
- Support of PBX and central office protocols
- Interoperability with HiPath 5000 and H.323/H.450-compliant gatekeepers as well as Hicom 300 H and other PBXs
- Fallback to PSTN*
- Redundant Gatekeeper*
- Load-sharing*

Technical Specifications

Public Network Interfaces

- 1 x T1/ISDN S2M/PRI digital voice interface (supports E-DSS1, Bellcore NI-2, AT&T 4ESS, MCI protocols and T1-CAS†)
- Fractional-PRI option with 10 voice/fax channels

PBX Interfaces

- CorNet-N, Q.SIG and T1-CAS†

IP Interfaces

- 1 x 10/100Base-TX, auto-sensing, hdx/fdx

Console Interface

- V.24, RS232

Standard Conformance

- IPv4, H.323, H.450, G.165 echo cancellation with 32 ms tail length
- Real-time fax H.323 Annex D (T.38)

Voice Compression

- G.711 (μ-law/a-law)
- G.723.1
- G.729*

Management Administration

- SNMP agent
- SNMP management for statistics, maintenance, trouble shooting, diagnostics, and alarm handling
- Command line user interface via telnet or serial link
- Web-based management (configuration, viewing and installation wizards)
- Software downloads and upgrades during operation
- Fault logging and tracing

Performance

- Latency: 70 ms
- Jitter buffer: configurable
- Calls/hour: 3,600 (max. call setup < 2 s on digital interfaces)
- Call capacity: 10/23 simultaneous voice/fax calls
- Silence suppression
- Comfort noise insertion
- Echo cancellation

Reliability

- Product: 99.99%
- MTBF: 60,000 hours according to Bellcore stipulations

Physical Data

- Dimensions (H-W-D) 88 mm x 440 mm x 380 mm
(3.46 in. x 17.3 in. x 15 in.)
- All modules are installable/replaceable while the HiPath RG 2500 is mounted in a 19 inch rack without having to remove its cover

Power Supply

- Input range 100 - 240 Vac auto-selecting
50 - 60 Hz nominal

Environmental

- Operating temperature: 5 °C to 40 °C (41°F to 104°F)
- Relative humidity: 10 % to 90 % non-condensing

*Available in the Toll Bypass (IP Trunking) mode only

† Available only with HiPath 5000

Making Global Connections

Siemens Information and Communication Networks is an innovator and world leader in e-business solutions. Siemens delivers proven solutions to 70 percent of the Fortune 500, and one million enterprise customers worldwide. Siemens is shaping the future of telecommunications—Mobile Business—with a portfolio of powerful communications and information solutions delivered over the Next Generation Internet. Our high-bandwidth broadband access and HiPath communication solutions make Siemens the only company that can deliver a full range of Mobile Business products and services.

HiPath RG 2500 and the HiPath Solution

HiPath RG 2500 is part of the HiPath solution, a comprehensive, IP-based portfolio, including workpoints, messaging, contact centers, networking and system management.

HiPath is unique in that it is not an “all or nothing” solution. Its flexible architecture provides an affordable way for your enterprise to evolve and converge communications over time. You have the choice of implementing a complete, feature-rich Business-over-IP solution today, or migrating toward a full IP solution on your own timetable, using your existing PBX equipment.

HiPath allows employees to stay connected to customers and co-workers as if they have never left their offices, no matter where they are working.



Siemens—Award Winning Solutions
2002 Business Development Strategy Award
Frost & Sullivan
HiPath Convergence Architecture



2002 Editor's Choice
Customer Inter@ction Solutions Magazine
HiPath Portfolio



2001 Product of the Year
Communications Solutions Magazine
optiPoint 400
HiPath AllServe



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