

Residential Seamless Mobility Gateway Series

Add seamless mobility to your mobile phone experience using your broadband connection



Easy to use and simple to install. Enhance your home network and enjoy high-quality voice services with Motorola's Residential Seamless Mobility Gateway (RSG) Series and your broadband connection.

The Motorola RSG Series products are designed to provide a seamless gateway for voice calls and data communication. With an RSG and a compatible dual-mode mobile handset (DMH), your voice call or data connection can roam across your home's Wi-Fi® network and the cellular network without interruption as the RSG seamlessly transfers the signal. Voice traffic is prioritized over Internet traffic, giving you high-quality voice calls even while surfing the Web. The RSG Series products also support a variety of rich CLASS features, such as caller ID, call waiting, three-way calling, and call forwarding.

The RSG Series products can plug into any cable or DSL broadband connection and feature a four-port wired router. Also built into every RSG product is a wireless access point using both the popular 802.11b wireless standard and the nearly five-times-faster 802.11g standard. With Wi-Fi Protected Access (WPA) and advanced firewall included, the RSG Series eliminates the need for stand-alone routers, hubs, and access points, providing a single platform for robust and secure home networking.

Residential Seamless Mobility Gateway Series

Enables full-featured telephone service plus seamless mobile and landline voice and data communication

Easy to use and simple to set up

Front-panel easy-to-read LEDs for power, data activity, and voice line status

Intuitive, Web-based configuration

Built-in security features

Power management enhancements for optimizing dual-mode handset battery performance

Plug and play—plugs into any broadband connection (cable or DSL)

Compact, low-profile design

Voice-over-data prioritization—talk on the phone while using the Internet, without a noticeable reduction in voice quality

Built-in advanced router and firewall with 802.11b/g wireless access point—eliminate the cost and clutter of stand-alone routers, hubs, and access points

Supports VPN pass-through for remote access via IPSEC/PPTP/L2TP NAT tunneling

Supports caller ID, call waiting, three-way calling, and other CLASS services

Enables the delivery of up to two lines (RJ-11) of full-featured telephone service (RSG3500 models only)

Benefits for the Consumer

- Reduced cellular bill resulting from off-loading the cellular air-interface when calls are made from the DMH in the home via the RSG.
- Improved in-home service coverage and reliability (sometimes limited with cellular service alone).
- Wireline audio quality when passed over the RSG's Wi-Fi connection.
- Convenience of a single mobile number and voicemail service, whether inside or outside the home.
- Mobile and landline voice service interworking, allowing for a shared "family" number as well as "individual" mobile and landline numbers.

Benefits for the Service Provider

- Ability to offer a consumer both residential and cellular phone service (RSG3500 models only).
- Increased customer satisfaction from improved in-home coverage, a key user network quality metric.
- Improved customer retention through unique value-added services and the packaging of mobile and landline phone services.
- Greater pricing flexibility resulting from multi-service packaging and migration of customers to higher revenue/margin wireless offerings.
- Ability to offer Quality-of-Service (QoS) for voice-over-data prioritization.

Security Features

- IPSEC/PPTP/L2TP NAT tunneling (for VPN pass-through)
- 802.11i security (WEP-64/128, WPA-PSK, WPA, WPA2, TKIP, AES, 802.1x)
- 802.11i (pre-authentication)
- Support for storing X.509 device certificate and operator public key
- Mobile pairing

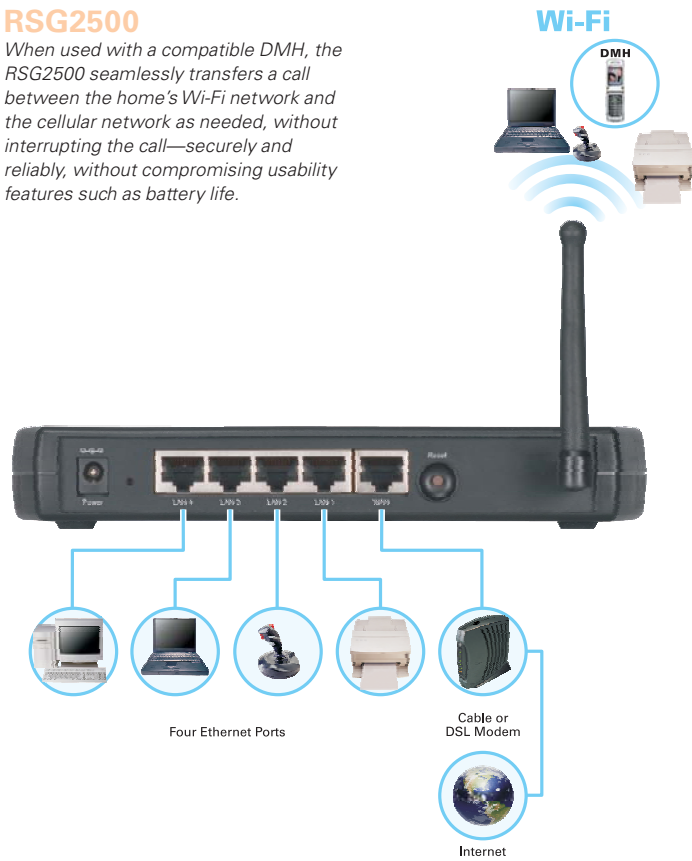
Power Optimization

Enhanced power management features optimize the battery life of the dual-mode handset (DMH). In addition to 802.11e U-APSD (WMM power save), a highlight of the 802.11 power management standard is the synchronization between the RSG and the DMH. The dual-mode cell phone receives data from the RSG at infrequent intervals, allowing the DMH to enter sleep mode when the phone is not in use, minimizing the phone's "on time" and improving battery utilization.

As part of Motorola's family of broadband telephony products, the RSG3500 enables consumers to enjoy an efficient telephony solution for both their landline and mobile communication services, offering them seamless mobile communications and the opportunity for service discounting via one bill.

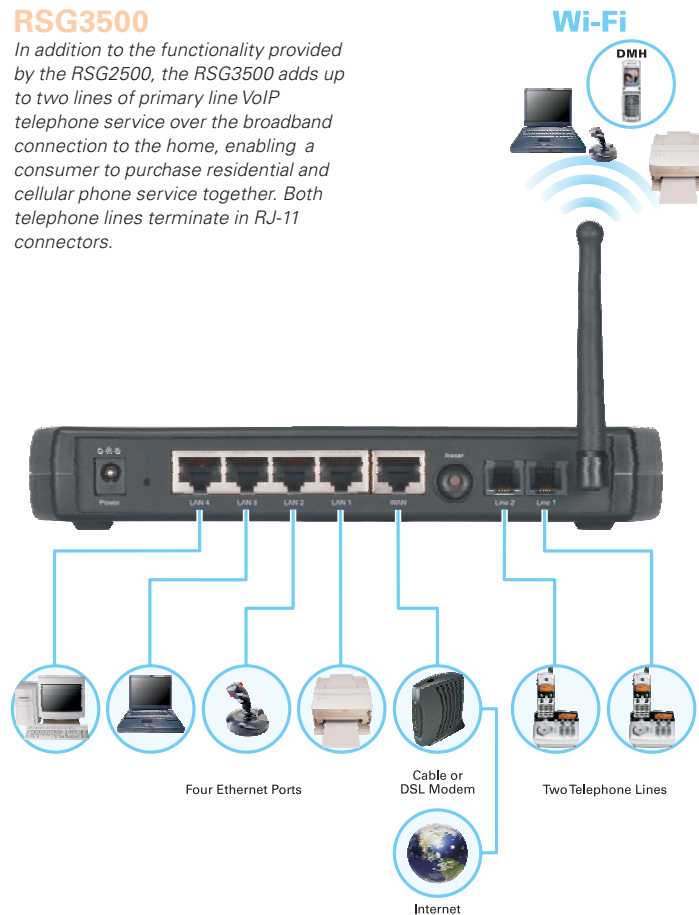
RSG2500

When used with a compatible DMH, the RSG2500 seamlessly transfers a call between the home's Wi-Fi network and the cellular network as needed, without interrupting the call—securely and reliably, without compromising usability features such as battery life.



RSG3500

In addition to the functionality provided by the RSG2500, the RSG3500 adds up to two lines of primary line VoIP telephone service over the broadband connection to the home, enabling a consumer to purchase residential and cellular phone service together. Both telephone lines terminate in RJ-11 connectors.



RSG SERIES	
Dimensions	1.6" H x 5.5" W x 7.5" L (40.64 x 139.7 x 190.5 mm)
Indicators	8 multi-state, multi-color LEDs (RSG2500) 10 multi-state, multi color LEDs (RSGu3500, RSGs3500)
Power Source	AC input 90 to 264 VAC, 45 to 65 Hz
Average Power Consumption	4.8 W (nominal)
What's Included	Power supply and cord, Ethernet cable, vertical mounting stand, Configuration Wizard CD-ROM with User Guide
System Requirements	Broadband access (cable or DSL), PC with Ethernet port and Web browser (for configuration), dual-mode handset and accompanying wireless voice service
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	0 °C to 40°C (32 °F to 113 °F)
Storage Temperature	-30 °C to 80 °C (-22 °F to 176 °F)
Operating Humidity	5 to 95% R.H. non-condensing
Storage Humidity	95% R.H.
TECHNICAL SPECIFICATIONS	
Regulatory Approvals	CE, UL, FCC, CB, WEEE, and ROHS
Data Ports	1 WAN, 4 LAN (RJ-45 Ethernet plus)
WAN Interface	
Physical Interface	RJ-45 10/100Base-T
Electrical Interface	IEEE 802.3
Dynamic IP Address Assignment	DHCP client
Additional	Static IP address assignment, PPPoE, primary and secondary DNS servers, device control and discovery via UPnP
LAN Interface	
Physical Interface	10/100Base-T RJ-45 Auto-Sensing/Auto-MDIX Ethernet ports
Electrical Interface	IEEE 802.3
Enable/Disable	DHCP Server, NAPT, Bridge Mode, DMZ
Additional	Override/restore MAC address, dynamic DNS, DNS proxy
Routing	NAPT routing with support for port forwarding, DMZ, VPN pass-through, full suite of application layer gateway support
Firewall	Stateful packet inspection firewall with various pre-configured profiles, including content filtering for parental control
Remote Management	TFTP, HTTP, HTTPS push/pull configuration and firmware upgrade using XML, WAN HTTPS server for remote administration and diagnostics, local/remote management via HTTP GUI interaction
Traffic Prioritization	802.1p for voice traffic prioritization
Security	Support for X.509 operator public key and X.509 device certificates
Wireless LAN	IEEE 802.11b/g
SEAMLESS MOBILITY ENHANCEMENTS	
Quality of Service (QoS)	802.11e WMM Admission Control
Power Management	802.11e WMM power save/U-APSD (Unscheduled-Automatic Power Save Delivery)
Security	IPSEC/PPTP/L2TP NAT tunneling (for VPN pass-through), 802.11i security (WEP-64/128, WPA-PSK, WPA, WPA2, TKIP, AES, 802.1x), 802.11i (pre-authentication), support for storing for X.509 device certificate and operator public key
WIRELESS LAN	
Power Output	
IEEE 802.11b	19 dBm +1/-1.5 dB at all rates in all channels
IEEE 802.11g	16 dBm +1/-1 dB at 54 Mbps in all channels
Receiver Sensitivity	Better than -90 dBm at 11Mbps; better than -74 dBm at 54Mbps
Certification	Wi-Fi 802.11b/g, Wi-Fi WPA2, Wi-Fi WMM, Wi-Fi WMM power save
Antenna System	1 external removable, 1 internal

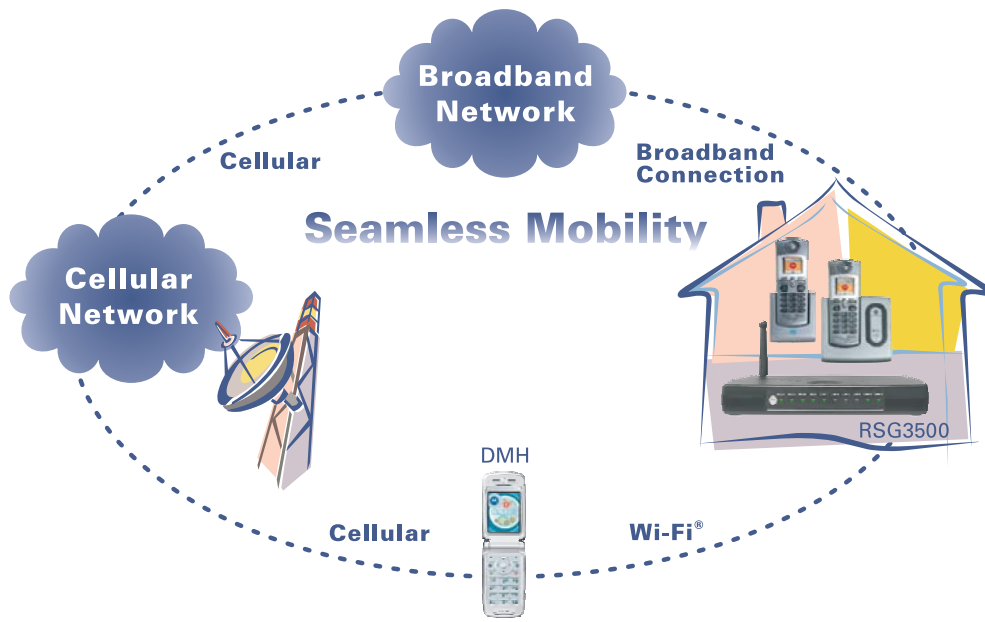


Secure Mobile Communication	User-friendly mobile secure pairing with compatible dual-mode handset
Regulatory Domains	US, Canada, ETSI, Spain, France, Japan, World
TELEPHONY INTERFACE (RSGU3500 AND RSGS3500 ONLY)	
Lines	1 or 2 voice lines RJ-11 plus
PSTN Fail-over Port	Optional feature
Maximum Line Length	5 REN 1000 ft
Additional	G.165/G.168 echo cancellation with a 16-millisecond tail, dynamic jitter buffer, ITU-T V.21 and T.30 fax signal detection, ITU-T V.8 and V.25 modem signal detection, T.38 fax relay
Call Signaling Protocol	
RSGu3500	Unlicensed Mobile Access (UMA) using GSM over IP
RSGs3500	SIP/IMS
Call Features	Caller ID block/unblock, Caller ID with Call Waiting enable/disable, Group 3 fax, connect to voicemail, three-way calling (two simultaneous three-way calls using G.711 codecs only), Caller Name CNAP/CLIP/CLIR, Call Offering CFU/CFB/CFNRy/CRFNRC, Call Waiting/Call Hold, Multi-party
Tone Generation	Distinctive ringing, busy tone, confirmation tone, dial tone, off-hook warning tone, ringback tones, reorder tone, stutter dial tone, message waiting tone, call waiting tone
Codec Support	
RSGu3500	G.711 (a-law and μ -law), GSM AMR, GSM FR
RSGs3500	G.711 (a-law and μ -law), G.729AB, G.726 (16, 24, 32, 40 kbps), G.723.1, G.728

Be advised that any services provided through this equipment are not intended to replace or be a substitute for primary line voice services or Plain Old Telephone Service (POTS) and are not meant to provide guaranteed 911 or E911 services or to permit access to 411 directory assistance services. Your service provider, not Motorola, is responsible for the provision of Voice-over-IP (VOIP) telephony services through this equipment. Motorola shall not be liable for, and expressly disclaims, any direct or indirect liabilities, damages, losses, claims, demands, actions, causes of action, risks, or harms arising from or related to the services provided through this equipment.

Important: Be aware that you will not be able to make any calls using this Voice-over-IP (VOIP) device if your broadband connection is not functioning properly. You will also not be able to make any calls using this Voice-over-IP (VOIP) device if you have lost electrical power.

Motorola Delivers Fixed Mobile Convergence



For more information, please visit <http://broadband.motorola.com/ips/>



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