NETGEAR®
Connect with Innovation™

Femtocell Voice Gateway
3G with Integrated ADSL2+ Modem, WiFi Router and Dual VoIP Ports

DVG834GH

Data Sheet

Integrated 3G Femtocell, Data and Voice Gateway Networking Solution

Instant Broadband Access with Internet Sharing and Voice over IP (VoIP)

- WCDMA radios operate in the 1.9 GHz Rx/2.1 GHz Tx bands

- Extends mobile device coverage into RF dead zones and improves reception in poor coverage areas, connecting mobile devices to the wireless network via ADSL

- Assures highest possible broadband data rates to mobile phones for downloads

- Delivers longer mobile device battery life between charging by using the device's automatic power reduction feature while in close proximity to Femtocell

- Combines private mobile base station, ADSL2+ modem, router, double firewall, 802.11g access point, and 4-port Ethernet switch

- 2 voice lines to make and receive VoIP calls

- Easy modem router set-up with Smart Wizard™ Installation CD

- NETGEAR Voice Wizard for easy configuration of your broadband VoIP provider

The DVG834GH Femtocell Voice Gateway is the power in your wireless and wired network. Seven products in one, it combines private mobile base station, ADSL2+ Modem, Router, 10/100 Wired LAN Switch, 802.11g Wireless Access Point, Voice over IP (VoIP), and SPI double firewall. Plug in your ADSL line and soon you can share your broadband connection to the Internet with all of your mobile devices and networked computers both wirelessly and wired. Featuring both high-speed 802.11g and 3G WCDMA mobile wireless capability, it allows you to download large files, video conference, and distribute and play high-quality digital movies, photos, and MP3s on mobile devices and computers in the blink of an eye. An integrated switch lets you directly connect any combination of up to four computers, network media devices such as video storage servers and media players. Setup couldn't be easier – NETGEAR's Smart Wizard install assistant and on-screen help guide you through each step. Firewall protects your network with business-class security against intruders, including logs and alerts of break-in attempts, while VPN pass-through allows safe connections to your business network from home or office. Ideal for VoIP, The DVG834GH turns your broadband line into both a mobile base station and a phone to save money on your calls. The analog phone ports can be implemented by service providers to make/receive calls over the mobile network. Designed to industry standards-based specifications with TR-069 remote management, the Femtocell can support the future addition of advanced features such as IGMP multimedia support, the DVG834GH meets the needs of today and tomorrow.

All-in-one Device

Seven products in one, the DVG834GH reduces the clutter of multiple networking devices and the jumble of wires. The integration of devices reduces difficulty in setting up and getting different devices to work together and simplifies control and management of your network environment. Simple, neat, and attractive, you will be proud to showcase the DVG834GH as the centerpiece in your network.
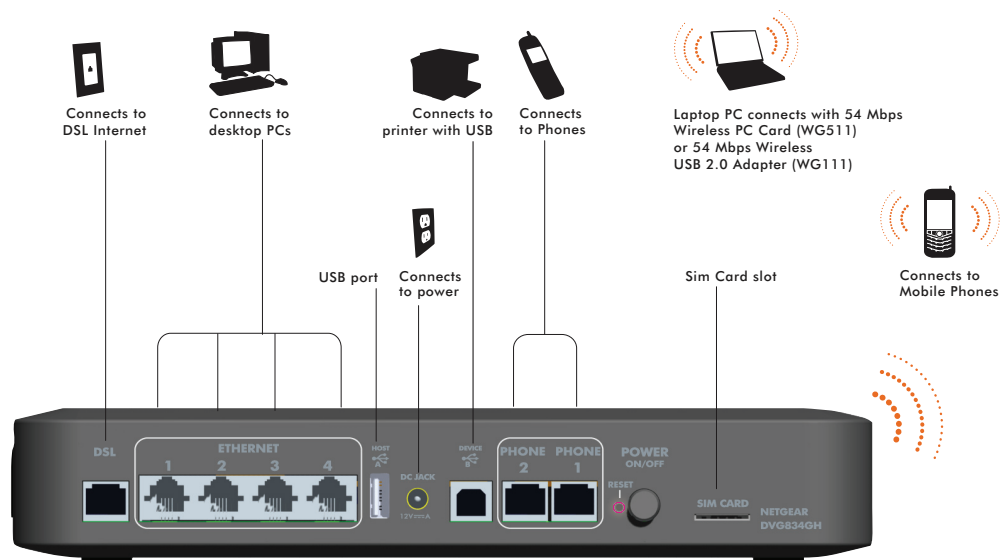
Advanced Features

The DVG834GH Femtocell implements the 3G UMTS standard Iu over IP in the network and offers advanced mobile features including WCDMA, a SIM slot, multiple UEs, 3GPP Release 5, HSDPA at 3.6 Mbps and 7.2 Mbps and DL monitor mode.

Secure and Private

Mobile security includes SIM/USIM, Tunneling, integrated firewall, network lock and data integrity. LAN Security includes double firewall (NAT + SPI) which secures your network and protects against malicious attacks. Network Address Translation (NAT) shields your networked devices from intruders. Stateful packet inspection (SPI) and denial-of-service (DoS) attack prevention averts potential threats by scanning incoming traffic. Your wireless connections are secure with powerful WEP and WPA encryption, so your information is concealed from eavesdroppers. MAC address control prevents unauthorized access to your wireless network, and VPN pass-through ensures secure Internet access for your office or corporate network.

Simple and Convenient

Smart Wizard™ simplifies setup — it automatically detects and configures your router for virtually all ISP connections. Then, easy-to-follow prompts guide you through each step of your installation. Making calls is easy too. Just plug in a regular phone, sign up for VoIP phone service, and start calling. There is no additional equipment to buy. It's that easy!

Connects to DSL Internet

Connects to desktop PCs

Connects to printer with USB

Connects to Phones

Laptop PC connects with 54 Mbps Wireless PC Card (WG511) or 54 Mbps Wireless USB 2.0 Adapter (WG111)

USB port

Connects to power

Sim Card slot

Connects to Mobile Phones

Technical Specifications

• Interfaces
– WAN Connection: ADSL2+
– 10/100 BASE-T: 4x 10/100M
– Autosensing MDIX
– Internal xDSL Modem: ADSL2+
– ADSL backward compatible
– DSL type: Annex A/B
– WLAN: 802.11b/g
– USB 2.0 host port: 1
– FXS port: 2
– VoIP SIP
– Antennas: Internal antenna

• Software
– Static routing, port forwarding, PPPoE Client, PPPoA, IPoA, IPoE, PPTP
– Multi-PVC (ATM): 8

– 802.1p, 802.1q, QoS (high priority for SIP voice traffic), QoS (ATM), TR059, VLAN, telnet, web management, syslog NV, scheduling, UPnP, NTP, SMTP, IPCP, IGMPv2/3, RADIUS protocol, DHCP client/server/relay, DNS proxy, dynamic DNS, IP fragmentation and reassembly, dial on demand, SIP pass-through, IPsec pass-through, ALGS, statistics, HTTP FW upgrade, TR104, TR106, TR111, TR069, SIP (RFC3261), RTP port randomization, SRTP for SIP (RFC3711), SIP TLS (RFC2246)

– Caller ID, call hold, transfer, forwarding, return, conference, redial, speed dial, anonymous call, voice mail

– AMR, G.711, G723.1, G.726, G.729a, G.168, T.38 fax relay, tone detect/ generate, different tones, adaptive jitter buffer, VAD, silence suppression

– STUN for NAT traversal, NOTIFY for voicemail, G711 fax pass through, conference call with PSTN, fall to PSTN

• SIP function
– Support multiple SIP server, support multiple SIPID, RFC2833 DTMF relay, DTMF relay using SIP into packets, RFC3263 dns_srv which needs to be provisionable

• Analog phone
– Support EMEA/APAC

• WLAN
– Multi SSID, WEP 64/128 bit, WPA, WPA-PSK, WPA2, WPA2-PSK, MAC address access control, 802.1x, disable SSID broadcast, disable the wireless, WMM-QoS, WMM-UAPSD

• Security
– DoS protection, DDoS detection
– NAT/PAT, firewall
– Disable NAT/PAT/firewall, DMZ
– Email alert, URL filtering, WAN monitoring

• Hardware
– Power SW
– TR068
– Compliance: CE, UL, IC, FCC 15, A-TICK, C-TICK,
– VISTA ready
– Power adapter: full
– Smart Wizard™

• Tools
– Recovery utility, download utility, erase all utility

Package Contents
– Femtocell Voice Gateway (DVG834GH)
– Resource CD
– Power adapter
– Phone cable
– ADSL phone line filter (most countries)
– Installation guide
– Warranty/support information card

Femtocell Specifications

• Hardware
– 3G Radio interface compliance (Iu over IP optional): UMTS, WCDMA, FDD
– 3GPP release 5 (2005-6)
– SIM slot (push-to-insert, push-to-release type SIM card holder)
– Band I (receive 1920 MHz - 1980 MHz, transmit 2110 MHz -2170 MHz)
– Transmit power: 10dB maximum
– Max UEs (idle mode): 20 Max UEs (active Mode): 4
– Cell radius: 200m maximum

• UMTS
– IP time source, macro time source, DL monitor mode, HSDPA 3.6, HSDPA 7.2

• Services
– Network location services, data offload, homezone indication

• Security
– SIM/USIM, IMEI, secure tunnel, geographic tunnel, network lock, data integrity, intergrated firewall

• Network
– IETF SIP
– RAN GW support (Iu over IP), basic SS support, emergency call support, remote management,auto provisioning, basic CAC, DSCP marking, hand-out
– UMA Iu over IP support
– Customizable for additional GW interfaces