

# **Product Highlights**

**VOIP GATEWAY** 

2 FXS ports, 1 PSTN (lifeline) port

## **GIGABIT ETHERNET**

High rate for wired connection (up to 1Gbps)

## **USB PORT**

Support of USB modem for Internet connection via 4G/3G/2G network, USB storage, and printer



# **DVG-N5402G**

# Wireless Gigabit Router with 3G/LTE Support, 2 FXS Ports, 1 PSTN (lifeline) Port, and USB Port

### Voice

The VoIP router is equipped with two FXS ports which allow connection of analog phones for calls via Internet and one PSTN (lifeline) port used to connect to the local exchange network.

#### **USB Port**

The router is equipped with a USB port for connecting a USB modem, which can be used to establish connection to the Internet. In addition, to the USB port of the router you can connect a USB storage device, which will be used as a network drive, or a printer.

#### Wireless Interface

Using the DVG-N5402G device, you are able to quickly create a high-speed wireless network at home or in your office, which lets computers and mobile devices access the Internet virtually anywhere (within the operational range of your wireless network). The router can operate as a base station for connecting wireless devices of the standards 802.11b, 802.11g, and 802.11n (at the wireless connection rate up to 300Mbps).

The router supports multiple functions for the wireless interface: several security standards (WEP, WPA/WPA2), MAC address filtering, WPS, WMM.

In addition, the device is equipped with a button for switching the Wi-Fi network off/on. If needed, for example, when you leave home, you can easily switch the router's WLAN by pressing the button, and devices connected to the LAN ports of the router will stay online.

#### Security

The wireless router DVG-N5402G includes a built-in firewall. The advanced security functions minimize threats of hacker attacks, prevent unwanted intrusions to your network, and block access to unwanted websites for users of your LAN.

## **Easy Configuration and Update**

You can configure the settings of the wireless router DVG-N5402G via the user-friendly web-based interface (the interface is available in several languages).

Now you can simply update the firmware: the router itself finds approved firmware on D-Link update server and notifies when ready to install it.

# **DVG-N5402G**

Hardware	
Interfaces	<ul> <li>10/100/1000BASE-T WAN port</li> <li>4 10/100/1000BASE-T LAN ports</li> <li>2 RJ-11 FXS ports</li> <li>1 RJ-11 PSTN (lifeline) port</li> <li>USB 2.0 port</li> </ul>
LEDs	POWER ALARM REGISTER WLAN WAN LAN LEDS LUSB PHONE LEDS LINE WPS
Buttons	ON/OFF button to power on/power off RESET button to restore factory default settings WPS button to set up secure wireless connection and enable/disable wireless network
Antenna	· Two external non-detachable antennas (5dBi gain)
MIMO	· 2 x 2
Power connector	· Power input connector (DC)
Mounting	· Desktop · Wall

Phone	
General SIP Features	Individual account per port Invite with Challenge Register by IP address or domain name of SIP server Backup proxy support Support of DHCP option 120 RFC3986 SIP URI format support Outbound proxy support STUN client NAT keep-alive Call types: voice/modem/fax User programmable Dial Plan Manual peer table (P2P) E.164 Numbering, ENUM support
Call Features	Direct IP-to-IP call without SIP proxy Lifeline (PSTN-backup) PSTN call by prefix Call hold/retrieve Call awaiting Forwarding (unconditional, busy, no answer) Do Not Disturb Speed dialing Phone book Hotline Vertical service codes Intercom (internal calls without SIP server)
Voice Features	Codecs: G.711 a/µ-law, G.729A, G.726, G.722, G.723.1  DTMF detection and generation In-band DTMF, out-of-band DTMF (RFC2833, SIP-INFO) Comfort Noise Generation (CNG) Voice Activity Detection (VAD) Dynamic Jitter Buffer Call progress tone generation (FXS) DTMF/PULSE dial support Caller ID detection and generation T.30 FAX bypass to G.711, T.38 Real Time FAX Relay Adjustable Flash Time Volume control (speaker/microphone)



Software	
WAN connection types	LTE 3G PPPoE Static IP / Dynamic IP PPPoE + Static IP PPPoE + Dynamic IP PPPoE + Dynamic IP
Network functions	DHCP server/relay DNS relay Dynamic DNS IGMP Proxy RIP Support of UPnP IGD Support of VLAN WAN ping respond Support of SIP Support of RTSP
Firewall functions	Network Address Translation (NAT)     Stateful Packet Inspection (SPI)     IP filter     MAC filter     URL filter     Prevention of ARP and DDoS attacks     Virtual servers
VPN	· IPSec/PPTP/L2TP/PPPoE pass-through
USB interface functions	USB modem Auto connection to available type of supported network (4G/3G/2G)¹ Enabling/disabling PIN code check, changing PIN code² USB storage File browser Print server Access to storage via accounts Built-in Samba server Built-in FTP server Built-in Transmission torrent client; uploading/downloading files from/to USB storage
Management	Local and remote access to settings through TELNET/WEB (HTTP) Multilingual web-based interface for configuration and management Firmware update via web-based interface Automatic notification on new firmware version Saving/restoring configuration to/from file Support of remote logging Automatic synchronization of system time with NTP server and manual time/date setup Ping function Traceroute utility TR-069 client

Wireless Module Parameters	
Standards	· IEEE 802.11b/g/n
Frequency range	· 2400 ~ 2483.5MHz
Wireless connection security	<ul> <li>WEP</li> <li>WPA/WPA2 (Personal/Enterprise)</li> <li>MAC filter</li> <li>WPS (PBC/PIN)</li> </ul>
Advanced functions	WMM (Wi-Fi QoS) Managing connected stations Advanced settings
Wireless connection rate	<ul> <li>IEEE 802.11b: 1, 2, 5.5, and 11Mbps</li> <li>IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps</li> <li>IEEE 802.11n: from 6.5 to 300Mbps (from MCS0 to MCS15)</li> </ul>

For LTE and GSM USB modems. For GSM USB modems only.



Wireless Module Parameters	
Transmitter output power	
The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country	· Less than 20dBm (100mW)
Receiver sensitivity	802.11b (typical at PER = 8% at room temperature 25 °C) -85dBm at 1Mbps -83dBm at 2Mbps -81dBm at 5.5Mbps -79dBm at 11Mbps  802.11g (typical at PER = 10% at room temperature 25 °C) -85dBm at 6Mbps -84dBm at 9Mbps -82dBm at 12Mbps -80dBm at 18Mbps -73dBm at 24Mbps -73dBm at 36Mbps -69dBm at 48Mbps -69dBm at 44Mbps -68dBm at 54Mbps  -802.11n (typical at PER = 10% at room temperature 25 °C) 2.4GHz, HT20 -85dBm at MCS0/8 -82dBm at MCS0/8 -82dBm at MCS1/9 -80dBm at MCS3/11 -73dBm at MCS3/11 -73dBm at MCS4/12 -69dBm at MCS5/13 -68dBm at MCS6/14 -67dBm at MCS6/14 -77dBm at MCS3/11 -77dBm at MCS6/14 -67dBm at MCS0/8 -79dBm at MCS0/8 -79dBm at MCS0/8 -79dBm at MCS5/13 -68dBm at MCS0/8 -79dBm at MCS3/11 -70dBm at MCS3/13 -65dBm at MCS6/14 -65dBm at MCS5/13
Modulation schemes	802.11b: DQPSK, DBPSK, DSSS, CCK 802.11g: BPSK, QPSK, 16QAM, 64QAM c OFDM 802.11n: BPSK, QPSK, 16QAM, 64QAM c OFDM

Physical Parameters	
Dimensions	· 224 x 171 x 50 mm (8.82 x 6.73 x 1.97 in)
Weight	· 480 g (1.06 lb)

Operating Environment	
Power	· Output: 12V DC, 1.5A
Temperature	<ul> <li>Operating: from 0 to 40 °C</li> <li>Storage: from -20 to 65 °C</li> </ul>
Humidity	Operating: from 10% to 90% (non-condensing)     Storage: from 5% to 95% (non-condensing)

## **Delivery Package**

- Router DVG-N5402G
- Power adapter DC 12V/1.5A
- Ethernet cable (CAT 5E)
  Two RJ-11 telephone cables
- "Quick Installation Guide" (brochure)



Supported USB modems <sup>3</sup>	
GSM	. Alcatel X500 . D-Link DWM-152C1 . D-Link DWM-156A6 . D-Link DWM-156A7 . D-Link DWM-156C1 . D-Link DWM-157B1 . D-Link DWM-157B1 (Velcom) . D-Link DWM-157B1 . D-Link DWM-158D1 . Huawei E150 . Huawei E1550 . Huawei E156G . Huawei E16GG . Huawei E169G . Huawei E171 . Huawei E173 (Megafon) . Huawei E220 . Huawei E352 (Megafon) . ZTE MF112 . ZTE MF626 . ZTE MF627 . ZTE MF652 . ZTE MF668 . ZTE MF668 . ZTE MF668 . ZTE MF668
CDMA	<ul> <li>Airplus MCD-650</li> <li>Airplus MCD-800</li> <li>AnyDATA ADU-300A</li> <li>AnyDATA ADU-500A</li> <li>AnyDATA ADU-510A</li> <li>Huawei EC306</li> <li>ZTE AC5710</li> <li>ZTE AC5730</li> </ul>
LTE	<ul> <li>Huawei E3372</li> <li>Huawei E367</li> <li>Huawei E392</li> <li>Megafon M100-1</li> <li>Megafon M100-2</li> <li>Megafon M150-2</li> <li>Yota LU-150</li> <li>Yota WLTUBA-107</li> </ul>