

Product Highlights

HIGH-SPEED CONNECTION

VDSL2/VDSL/ADSL2+/ADSL2/ADSL,
Gigabit Ethernet WAN, total wireless
connection rate up to 1200Mbps¹

IPV6 SUPPORT

All needed functions
for up-to-date networking

SECURITY

Multiple firewall functions,
several security standards
for wireless connection

USB PORT

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



DSL-G2452GR

MU-MIMO Wireless Dual Band VDSL2 Router with ASDL2+/3G/LTE/Gigabit Ethernet WAN Support, 2 FXS Ports and USB Port

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.

DSL Port, 4-port Switch, and Gigabit Ethernet WAN Port

The router is equipped with a DSL port to connect to a high-speed VDSL line. The built-in 4-port switch enables you to connect Ethernet-enabled computers, game consoles, and other devices to your network. In addition, Gigabit Ethernet WAN port enables you to connect the device to a high-speed Ethernet line.

Wireless Interface

Using the DSL-G2452GR 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). Simultaneous activity of 2.4GHz band and 5GHz band allows performing a wide range of tasks. The router can operate as a base station for connecting wireless devices of the standards 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac (at the wireless connection rate up to 1167Mbps¹).

Secure Wireless Connection

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.

¹ Up to 300Mbps for 2.4GHz and up to 867Mbps for 5GHz.

Advanced Capabilities of Wireless Network

Multi-user MIMO technology allows to distribute the router's resources to let multiple wireless clients use the Wi-Fi network efficiently, keeping high rates for HD media streaming, lag-free gaming, and fast transfer of large files.

Support of guest Wi-Fi network allows you to create a separate wireless network with individual security settings and maximum rate limitation. Devices connected to the guest network will be able to access the Internet, but will be isolated from the devices and resources of the router's LAN.

Voice

The device is equipped with two FXS ports which allow connection of analog phones for calls via Internet.

Security

The wireless router DSL-G2452GR 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.

In addition, the router supports IPsec and allows to create secure VPN tunnels.

Built-in Yandex.DNS service protects against malicious and fraudulent web sites and helps to block access to adult content on children's devices.

Easy configuration and update

You can configure the settings of the wireless router DSL-G2452GR via the user-friendly web-based interface (the interface is available in two languages – in Russian and in English).

The fast and easy configuration wizard allows you to specify all needed parameters in several simple steps.

Also DSL-G2452GR supports configuration and management via mobile application for Android and iPhone smartphones.

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

Hardware	
Processor	<ul style="list-style-type: none"> RTL8685PB (1GHz)
RAM	<ul style="list-style-type: none"> 128MB, DDR2, built in processor
Flash	<ul style="list-style-type: none"> 16MB, SPI
Interfaces	<ul style="list-style-type: none"> 10/100/1000BASE-T WAN port 4 10/100/1000BASE-T LAN ports 1 RJ-11 DSL port 2 RJ-11 FXS ports USB 2.0 port
LEDs	<ul style="list-style-type: none"> POWER DSL INTERNET WAN LAN 1-4 2.4GHz 5GHz WPS USB FXS 1-2
Buttons	<ul style="list-style-type: none"> Power button RESET button to restore factory default settings WPS button to set up wireless connection WLAN button to enable/disable wireless network
Antenna	<ul style="list-style-type: none"> Two internal antennas for 2.4GHz band (2dBi gain) Two internal antennas for 5GHz band (2dBi gain)
MIMO	<ul style="list-style-type: none"> 2 x 2, MU-MIMO
Power connector	<ul style="list-style-type: none"> Power input connector (DC)

DSL Parameters	
VDSL/ADSL Standards	<ul style="list-style-type: none"> VDSL2: ITU G.993.2, support of 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a, 35b ADSL: Multi-mode, ANSI T1.413 Issue 2, ITU-T G.992.1 (G.dmt) Annex A, ITU-T G.992.2 (G.lite) Annex A, ITU-T G.994.1 (G.hs) ADSL2: ITU-T G.992.3 (G.dmt.bis) Annex A/L/M, ITU-T G.992.4 (G.lite.bis) Annex A ADSL2+: ITU-T G.992.5 Annex A/L/M
ATM/PPP Protocols	<ul style="list-style-type: none"> Bridged and routed Ethernet encapsulation VC-based or LLC-based multiplexing ATM Forum UNI3.1/4.0 PVC (up to 8 PVCs) ATM Adaptation Layer Type 5 (AAL5) ITU-T I.610 OAM F4/F5 loopback ATM QoS PPP over ATM (RFC 2364) PPP over Ethernet (PPPoE) Keep-alive for PPP connections

Software	
WAN connection types	<ul style="list-style-type: none"> LTE / 3G PPPoE / IPv6 PPPoE / PPPoE Dual Stack / PPPoA Static IPv4 / Dynamic IPv4 / IPoA Static IPv6 / Dynamic IPv6 PPPoE + Static IP (PPPoE Dual Access) PPPoE + Dynamic IP (PPPoE Dual Access) PPTP/L2TP + Static IP PPTP/L2TP + Dynamic IP Bridge

Software	
Network functions	<ul style="list-style-type: none"> · Support of IEEE 802.1X for Internet connection · DHCP server/relay · Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation · DNS relay · Dynamic DNS · Static IP routing · Static IPv6 routing · IGMP Proxy · IGMP snooping · RIP · Support of UPnP IGD · Support of VLAN · WAN ping respond · Support of SIP ALG · Support of RTSP · WAN failover · LAN/WAN conversion
Firewall functions	<ul style="list-style-type: none"> · Network Address Translation (NAT) · Stateful Packet Inspection (SPI) · IPv4/IPv6 filter · MAC filter · URL filter · DMZ · Prevention of ARP and DDoS attacks · Virtual servers · Built-in Yandex.DNS web content filtering service
VPN	<ul style="list-style-type: none"> · IPsec/PPTP/L2TP/PPPoE pass-through · IPsec tunnels
QoS	<ul style="list-style-type: none"> · Interface grouping · VLAN priority (802.1p)
USB interface functions	<ul style="list-style-type: none"> · USB modem Auto connection to available type of supported network (4G/3G/2G) Auto configuration of connection upon plugging in USB modem Enabling/disabling PIN code check, changing PIN code² · USB storage File browser Print server Access to storage via accounts Built-in Samba/FTP/DLNA server Built-in Transmission torrent client; uploading/downloading files from/to USB storage
Management and monitoring	<ul style="list-style-type: none"> · Local and remote access to settings through TELNET/WEB (HTTP/HTTPS) · Bilingual web-based interface for configuration and management (Russian/English) · Support of D-Link Assistant application for Android and iPhone smartphones · Notification on connection problems and auto redirect to settings · Firmware update via web-based interface · Automatic notification on new firmware version · Saving/restoring configuration to/from file · Support of logging to remote host/connected USB storage · Automatic synchronization of system time with NTP server and manual time/date setup · Ping utility · Traceroute utility · TR-069 client

Wireless Module Parameters	
Standards	<ul style="list-style-type: none"> · IEEE 802.11a/n/ac · IEEE 802.11b/g/n
Frequency range	<ul style="list-style-type: none"> · 2400 ~ 2483.5MHz · 5150 ~ 5350MHz · 5650 ~ 5850MHz
Wireless connection security	<ul style="list-style-type: none"> · WEP · WPA/WPA2 (Personal/Enterprise) · MAC filter · WPS (PBC/PIN)

² For some models of USB modems.

Wireless Module Parameters	
Advanced functions	<ul style="list-style-type: none"> · Support of client mode · WMM (Wi-Fi QoS) · Information on connected Wi-Fi clients · Advanced settings · Guest Wi-Fi / support of MBSSID · Limitation of wireless network rate · Periodic scan of channels, automatic switch to least loaded channel · Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence) · Support of 802.11ac (5GHz) TX Beamforming
Wireless connection rate	<ul style="list-style-type: none"> · IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54Mbps · IEEE 802.11b: 1, 2, 5.5, and 11Mbps · IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps · IEEE 802.11n (2.4GHz/5GHz): from 6.5 to 300Mbps (from MCS0 to MCS15) · IEEE 802.11ac (5GHz): from 6.5 to 867Mbps (from MCS0 to MSC9)
Transmitter output power <i>The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country</i>	<ul style="list-style-type: none"> · 802.11a 16dBm at 6, 54Mbps · 802.11b 18dBm at 1, 11Mbps · 802.11g 17dBm at 6, 54Mbps · 802.11n HT20/HT40 16dBm at MCS0, 7 · 802.11ac HT20 16dBm at MCS0, 8 HT40 16dBm at MCS0, 9 HT80 15dBm at MCS0, 9
Receiver sensitivity	<ul style="list-style-type: none"> · 802.11a -86dBm at 6Mbps -65dBm at 54Mbps · 802.11b -90dBm at 1Mbps -76dBm at 11Mbps · 802.11g -86dBm at 6Mbps -68dBm at 54Mbps · 802.11n 2.4GHz HT20 -85dBm at MCS0 -67dBm at MCS7 HT40 -82dBm at MCS0 -64dBm at MCS7 5GHz HT20 -85dBm at MCS0 -65dBm at MCS7 HT40 -82dBm at MCS0 -61dBm at MCS7

Wireless Module Parameters	
Receiver sensitivity	<ul style="list-style-type: none"> · 802.11ac HT20 -82dBm at MCS0 -59dBm at MCS8 HT40 -79dBm at MCS0 -54dBm at MCS9 HT80 -76dBm at MCS0 -51dBm at MCS9
Modulation schemes	<ul style="list-style-type: none"> · 802.11a: BPSK, QPSK, 16 QAM, 64 QAM with OFDM · 802.11b: DQPSK, DBPSK, DSSS, and CCK · 802.11g: BPSK, QPSK, 16 QAM, 64 QAM with OFDM · 802.11n: BPSK, QPSK, 16 QAM, 64 QAM with OFDM · 802.11ac: BPSK, QPSK, 16 QAM, 64 QAM, 256 QAM with OFDM

Phone	
General SIP Features	<ul style="list-style-type: none"> · 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 public IP address · NAT keep-alive · Session timer (re-invite/update) · Call types: voice/modem/fax · User programmable Dial Plan · Manual peer table (for P2P calls) · Handling numbers in E.164 format
Call Features	<ul style="list-style-type: none"> · Direct IP-to-IP call without SIP proxy (P2P) · Call hold/retrieve · Call awaiting · Forwarding (unconditional, busy, no answer) · Do Not Disturb · Anonymous call blocking · Speed/abbreviated dialing · PIN code before dialing · Hotline · Vertical service codes · CLIR · Intercom (internal calls without SIP server) · Filtering SIP packets by IP address/domain name (white/black list) · Logging and recording calls · Sending text messages to VoIP gateways/IP phones

Phone	
Voice Features	<ul style="list-style-type: none"> · Codecs: G.711 a/μ-law, G.729A, G.726, G.722, G.723.1, GSMFR, ILBC, SPEEX · 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 · Echo Cancellation (LEC/NLP) · 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, V.152 · Adjustable Flash Time · Advanced call transfer · Volume control (speaker/microphone)

Physical Parameters	
Dimensions (L x W x H)	· 198 x 59 x 168 mm (7.8 x 2.3 x 6.6 in)
Weight	· 340 g (0.75 lb)

Operating Environment	
Power	· Output: 12V DC, 1.5A
Temperature	<ul style="list-style-type: none"> · Operating: from 5 to 40 °C · Storage: from -20 to 70 °C
Humidity	<ul style="list-style-type: none"> · Operating: from 10% to 90% (non-condensing) · Storage: from 5% to 95% (non-condensing)

Delivery Package	
	<ul style="list-style-type: none"> · Router DSL-G2452GR · Power adapter DC 12V/1.5A · RJ-11 telephone cable · Ethernet cable · Splitter · "Quick Installation Guide" (brochure)

Supported USB modems ³	
GSM	<ul style="list-style-type: none"> · Alcatel X500 · D-Link DWM-152C1 · D-Link DWM-156A6 · D-Link DWM-156A7 · D-Link DWM 156A8 · D-Link DWM-156C1 · D-Link DWM-157B1 · D-Link DWM-157B1 (Velcom) · D-Link DWM-158D1 · D-Link DWR-710 · Huawei E150 · Huawei E1550 · Huawei E156G · Huawei E160G · Huawei E169G · Huawei E171 · Huawei E173 (Megafon) · Huawei E220 · Huawei E3131 (MTS 420S) · Huawei E352 (Megafon) · Prolink PHS600 · Prolink PHS901 · ZTE MF112 · ZTE MF192 · ZTE MF626 · ZTE MF627 · ZTE MF652 · ZTE MF667 · ZTE MF668 · ZTE MF752
LTE	<ul style="list-style-type: none"> · Alcatel IK40V · D-Link DWM-222 · Huawei E3131 · Huawei E3272 · Huawei E3351 · Huawei E3372 · Huawei E367 · Huawei E392 · Megafon M100-1 · Megafon M100-2 · Megafon M100-3 · Megafon M100-4 · Megafon M150-1 · Megafon M150-2 · Quanta 1K6E (Beeline 1K6E) · MTS 824F · MTS 827F · Yota LU-150 · Yota WLTUBA-107 · ZTE MF823 · ZTE MF827
Smartphones in USB tethering mode	<ul style="list-style-type: none"> · Some models of Android smartphones

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³ The manufacturer does not guarantee proper operation of the router with every modification of the firmware of USB modems.