

### **Product Highlights**

HIGH-SPEED CONNECTION VDSL2/VDSL/ADSL2+/ADSL2/ADSL, Fast Ethernet

802.11N

Faster rate
and superior wireless range

IPV6 SUPPORT
All needed functions
for up-to-date networking



## **DSL-224**

## Wireless N300 VDSL2 Router with ADSL2+/Ethernet WAN Support

#### **DSL Port and 4-port Switch, Ethernet WAN Support**

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, any Ethernet port of the device can be used to connect to a private Ethernet line.

#### Wireless Interface

Using the DSL-224 device, you are able to quickly create a 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.

#### **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.

#### **Advanced Capabilities of Wireless Network**

Smart adjustment of Wi-Fi clients is useful for networks based on several D-Link access points or routers – when the smart adjustment function is configured on each of them, a client always connects to the access point (router) with the highest signal level.

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.

#### Security

The wireless router DSL-224 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.



# DSL-224 Wireless N300 VDSL2 Router with ADSL2+/Ethernet WAN Support

#### Easy configuration and update

You can configure the settings of the wireless router DSL-224 via the user-friendly web-based interface (the interface is available in several languages).

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

Also DSL-224 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	· RTL8685S (500MHz)
RAM	· 32MB, DDR2 SDRAM
Flash	· 8MB, SPI
Interfaces	· RJ-11 DSL port · 4 10/100BASE-TX LAN ports
LEDs	<ul> <li>Power</li> <li>Internet</li> <li>DSL</li> <li>4 LAN LEDs</li> <li>WLAN</li> <li>WPS</li> </ul>
Buttons	<ul> <li>POWER button to power on/power off</li> <li>RESET button to restore factory default settings</li> <li>WPS button to set up wireless connection</li> <li>WIFI button to enable/disable wireless network</li> </ul>
Antenna	· Two external non-detachable omnidirectional antennas (5dBi gain)
МІМО	· 2 x 2
Power connector	· Power input connector (DC)

DSL Parameters	
VDSL/ADSL Standards	<ul> <li>VDSL2: ITU G.993.2, support of 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a profiles</li> <li>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)</li> <li>ADSL2: ITU-T G.992.3 (G.dmt.bis) Annex A/L/M, ITU-T G.992.4 (G.lite.bis) Annex A</li> <li>ADSL2+: ITU-T G.992.5 Annex A/L/M</li> </ul>
ATM/PPP Protocols	<ul> <li>Bridged and routed Ethernet encapsulation</li> <li>VC-based or LLC-based multiplexing</li> <li>ATM Forum UNI3.1/4.0 PVC (up to 8 PVCs)</li> <li>ATM Adaptation Layer Type 5 (AAL5)</li> <li>ITU-T I.610 OAM F4/F5 loopback</li> <li>ATM QoS</li> <li>PPP over ATM (RFC 2364)</li> <li>PPP over Ethernet (PPPoE)</li> <li>Keep-alive for PPP connections</li> </ul>



# DSL-224 Wireless N300 VDSL2 Router with ADSL2+/Ethernet WAN Support

Software	
WAN connection types	PPPoA PPPoE PPPoE PPPoE Dual Stack PPoA Static IPv4 / Dynamic IPv4 Static IPv6 / Dynamic IPv6 Bridge
Network functions	DHCP server/relay Advanced configuration of built-in DHCP server Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation DNS relay Dynamic DNS Static IPv4/IPv6 routing IGMP Proxy IGMP snooping RIP Support of UPnP IGD Support of VLAN WAN ping respond Support of SIP ALG Support of RTSP LAN/WAN conversion
Firewall functions	Network Address Translation (NAT) Stateful Packet Inspection (SPI) IPv4/IPv6 filter MAC filter URL filter DMZ Virtual servers
VPN	· IPsec/PPTP/L2TP/PPPoE pass-through
QoS	<ul><li>Interface grouping</li><li>VLAN priority (802.1p)</li></ul>
Management and monitoring	Local and remote access to settings through TELNET/WEB (HTTP/HTTPS)     Multilingual web-based interface for configuration and management     Support of D-Link Assistant application for Android and iPhone smartphones     Firmware update via web-based interface     Automatic notification on new firmware version     Saving/restoring configuration to/from file     Support of logging to remote host     Automatic synchronization of system time with NTP server and manual time/date setup     Ping utility     Traceroute utility     TR-069 client

Wireless Module Parameters	
Standards	· IEEE 802.11b/g/n
Frequency range  The frequency range depends upon the radio frequency regulations applied in your country	· 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) Information on connected Wi-Fi clients Advanced settings Smart adjustment of Wi-Fi clients 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)



#### Wireless N300 VDSL2 Router with **DSL-224 ADSL2+/Ethernet WAN Support**

Wireless Module Parameters	
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>
Transmitter output power  The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country	<ul> <li>802.11b         <ul> <li>15dBm (+/-1dB)</li> </ul> </li> <li>802.11g         <ul> <li>14dBm (+/-1dB)</li> </ul> </li> <li>802.11n         <ul> <li>14dBm (+/-1dB)</li> </ul> </li> </ul>
Receiver sensitivity	<ul> <li>802.11b</li> <li>-86dBm</li> <li>802.11g</li> <li>-72dBm</li> <li>802.11n</li> <li>HT20</li> <li>-67dBm</li> <li>HT40</li> <li>-65dBm</li> </ul>
Modulation schemes	<ul> <li>802.11b: CCK (11, 5.5Mbps), DQPSK (2Mbps), DBPSK (1Mbps), DSSS</li> <li>802.11g: PSK/CCK, DBPSK, DQPSK, OFDM, BPSK, QPSK, 16QAM, 64QAM</li> <li>802.11n: PSK/CCK, DBPSK, DQPSK, OFDM, etc.</li> </ul>

Physical Parameters	
Dimensions (L x W x H)	· 205 x 139 x 32 mm (8 x 5.5 x 1.3 in)
Weight	· 260 g (0.6 lb)

Operating Environment	
Power	· Output: 12V DC, 1A
Temperature	Operating: from 0 to 40 °C Storage: from -20 to 70 °C
Humidity	· From 5% to 95% (non-condensing)

### **Delivery Package**

- Router DSL-224
- Power adapter DC 12V/1A
- RJ-11 telephone cable
- Ethernet cable
- Splitter
  "Quick Installation Guide" (brochure)