

## 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

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.

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-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	
<b>Processor</b>	<ul style="list-style-type: none"> <li>RTL8685S</li> </ul>
<b>RAM</b>	<ul style="list-style-type: none"> <li>32MB, SDRAM</li> </ul>
<b>Flash</b>	<ul style="list-style-type: none"> <li>8MB, SPI</li> </ul>
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>RJ-11 DSL port</li> <li>4 10/100BASE-TX LAN ports</li> </ul>
<b>LEDs</b>	<ul style="list-style-type: none"> <li>POWER</li> <li>DSL</li> <li>INTERNET</li> <li>WLAN</li> <li>4 LAN LEDs</li> <li>WPS</li> </ul>
<b>Buttons</b>	<ul style="list-style-type: none"> <li>ON/OFF 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>WLAN button to enable/disable wireless network</li> </ul>
<b>Antenna</b>	<ul style="list-style-type: none"> <li>Two internal omnidirectional antennas (2dBi gain)</li> </ul>
<b>MIMO</b>	<ul style="list-style-type: none"> <li>2 x 2</li> </ul>
<b>Power connector</b>	<ul style="list-style-type: none"> <li>Power input connector (DC)</li> </ul>

DSL Parameters	
<b>VDSL/ADSL Standards</b>	<ul style="list-style-type: none"> <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>
<b>ATM/PPP Protocols</b>	<ul style="list-style-type: none"> <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>

<b>Software</b>	
<b>WAN connection types</b>	<ul style="list-style-type: none"> <li>· PPPoA</li> <li>· PPPoE</li> <li>· IPv6 PPPoE</li> <li>· PPPoE Dual Stack</li> <li>· IPoA</li> <li>· Static IP / Dynamic IP</li> <li>· Static IPv6 / Dynamic IPv6</li> <li>· Bridge</li> </ul>
<b>Network functions</b>	<ul style="list-style-type: none"> <li>· DHCP server/relay</li> <li>· Advanced configuration of built-in DHCP server</li> <li>· Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation</li> <li>· DNS relay</li> <li>· Dynamic DNS</li> <li>· Static IP routing</li> <li>· Static IPv6 routing</li> <li>· IGMP Proxy</li> <li>· IGMP snooping</li> <li>· RIP</li> <li>· Support of UPnP IGD</li> <li>· Support of VLAN</li> <li>· WAN ping respond</li> <li>· Support of SIP ALG</li> <li>· Support of RTSP</li> <li>· LAN/WAN conversion</li> </ul>
<b>Firewall functions</b>	<ul style="list-style-type: none"> <li>· Network Address Translation (NAT)</li> <li>· Stateful Packet Inspection (SPI)</li> <li>· IP filter</li> <li>· IPv6 filter</li> <li>· MAC filter</li> <li>· URL filter</li> <li>· DMZ</li> <li>· Prevention of ARP and DDoS attacks</li> <li>· Virtual servers</li> <li>· Built-in Yandex.DNS web content filtering service</li> </ul>
<b>VPN</b>	<ul style="list-style-type: none"> <li>· IPSec/PPTP/L2TP/PPPoE pass-through</li> </ul>
<b>QoS</b>	<ul style="list-style-type: none"> <li>· Interface grouping</li> <li>· VLAN priority (802.1p)</li> </ul>
<b>Management and monitoring</b>	<ul style="list-style-type: none"> <li>· Local and remote access to settings through TELNET/WEB (HTTP/HTTPS)</li> <li>· Multilingual web-based interface for configuration and management</li> <li>· Support of D-Link Assistant application for Android and iPhone smartphones</li> <li>· Firmware update via web-based interface</li> <li>· Automatic notification on new firmware version</li> <li>· Saving/restoring configuration to/from file</li> <li>· Support of logging to remote host</li> <li>· Automatic synchronization of system time with NTP server and manual time/date setup</li> <li>· Ping utility</li> <li>· Traceroute utility</li> <li>· TR-069 client</li> </ul>

<b>Wireless Module Parameters</b>	
<b>Standards</b>	<ul style="list-style-type: none"> <li>· IEEE 802.11b/g/n</li> </ul>
<b>Frequency range</b>	<ul style="list-style-type: none"> <li>· 2400 ~ 2483.5MHz</li> </ul>
<b>Wireless connection security</b>	<ul style="list-style-type: none"> <li>· WEP</li> <li>· WPA/WPA2 (Personal/Enterprise)</li> <li>· MAC filter</li> <li>· WPS (PBC/PIN)</li> </ul>
<b>Advanced functions</b>	<ul style="list-style-type: none"> <li>· WMM (Wi-Fi QoS)</li> <li>· Information on connected Wi-Fi clients</li> <li>· Advanced settings</li> <li>· Guest Wi-Fi / support of MBSSID</li> <li>· Limitation of wireless network rate</li> <li>· Periodic scan of channels, automatic switch to least loaded channel</li> <li>· Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence)</li> </ul>

Wireless Module Parameters	
<b>Wireless connection rate</b>	<ul style="list-style-type: none"> <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>
<b>Transmitter output power</b>  <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"> <li>802.11b (typical at room temperature 25 °C) 16dBm (+/-1dB)</li> <li>802.11g (typical at room temperature 25 °C) 14dBm (+/-1dB)</li> <li>802.11n (typical at room temperature 25 °C) 14dBm (+/-1dB)</li> </ul>
<b>Receiver sensitivity</b>	<ul style="list-style-type: none"> <li>802.11b (typical at room temperature 25 °C) -86dBm</li> <li>802.11g (typical at room temperature 25 °C) -72dBm</li> <li>802.11n (typical at room temperature 25 °C) HT20 -67dBm HT40 -65dBm</li> </ul>

Physical Parameters	
<b>Dimensions (L x W x H)</b>	<ul style="list-style-type: none"> <li>160 x 59 x 121 mm (6.3 x 2.32 x 4.76 in)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>215 g (0.47 lb)</li> </ul>

Operating Environment	
<b>Power</b>	<ul style="list-style-type: none"> <li>Output: 12V DC, 1A</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Operating: from 0 to 40 °C</li> <li>Storage: from -20 to 70 °C</li> </ul>
<b>Humidity</b>	<ul style="list-style-type: none"> <li>From 5% to 95% (non-condensing)</li> </ul>

Delivery Package	
<ul style="list-style-type: none"> <li>Router DSL-224</li> <li>Power adapter DC 12V/1A</li> <li>RJ-11 telephone cable</li> <li>Ethernet cable</li> <li>Splitter</li> <li>"Quick Installation Guide" (brochure)</li> </ul>	