

# **Product Highlights 802.11N**

High connection rate (up to 150Mbps) and superior wireless range

## **SECURITY**

Multiple firewall functions, several security standards for wireless connection

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



# **DIR-300**

# Wireless N150 Router

#### Wireless Interface

Using the DIR-300 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 (at the rate up to 150Mbps).

## **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.

#### 4-port Switch

The built-in 4-port switch enables you to connect Ethernet-enabled computers, game consoles, and other devices to your network.

#### Security

The wireless router DIR-300 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 DIR-300 via the user-friendly web-based interface (the interface is available in two languages – in Russian and in English).

The configuration wizard allows you to quickly switch DIR-300 to one of the following modes: router (for connection to a wired or wireless ISP), access point, repeater, or client, and then configure all needed setting for operation in the selected mode in several simple steps.

Also DIR-300 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	· RTL8196E (400MHz)
RAM	· 32MB, SDRAM
Flash	· 4MB, SPI
Interfaces	· 10/100BASE-TX WAN port · 4 10/100BASE-TX LAN ports
LEDs	POWER WPS INTERNET WLAN LAN LEDS
Buttons	<ul> <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 and enable/disable wireless network</li> </ul>
Antenna	· Internal antenna (3.75dBi gain)
Power connector	· Power input connector (DC)

Software	
WAN connection types	<ul> <li>PPPoE</li> <li>IPv6 PPPoE</li> <li>PPPoE Dual Stack</li> <li>Static IPv4 / Dynamic IPv4</li> <li>Static IPv6 / Dynamic IPv6</li> <li>PPPoE + Static IP (PPPoE Dual Access)</li> <li>PPPoE + Dynamic IP (PPPoE Dual Access)</li> <li>PPTP/L2TP + Static IP</li> <li>PPTP/L2TP + Dynamic IP</li> </ul>
Network functions	<ul> <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>Automatic obtainment of LAN IP address (for access point/repeater/client modes)</li> <li>DNS relay</li> <li>Dynamic DNS</li> <li>Static IP routing</li> <li>Static IPv6 routing</li> <li>IGMP Proxy</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>WAN reservation</li> <li>Autonegotiation of speed, duplex mode, and flow control/Manual speed and duplex mode setup for each Ethernet port</li> <li>Setup of maximum TX rate for each port of the router</li> <li>Built-in UDPXY application</li> </ul>
Firewall functions	Network Address Translation (NAT) Stateful Packet Inspection (SPI) IP filter IPv6 filter MAC filter URL filter DMZ Prevention of ARP and DDoS attacks Virtual servers Built-in Yandex.DNS web content filtering service
VPN	· IPsec/PPTP/L2TP/PPPoE pass-through



Software		
Management	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     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	· 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	<ul> <li>Support of client mode</li> <li>WMM (Wi-Fi QoS)</li> <li>Information on connected Wi-Fi clients</li> <li>Advanced settings</li> <li>Smart adjustment of Wi-Fi clients</li> <li>Guest Wi-Fi / support of MBSSID</li> <li>Rate limitation for wireless network/separate MAC addresses</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 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 150Mbps (from MCS0 to MCS7)</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 (typical at room temperature 25 °C) 17dBm (+/-1.5dB) at 1, 2, 5.5, 11Mbps</li> <li>802.11g (typical at room temperature 25 °C) 17dBm (+/-1.5dB) at 6, 9, 12Mbps 16dBm (+/-1.5dB) at 18, 24Mbps 15dBm (+/-1.5dB) at 36, 48, 54Mbps</li> <li>802.11n (typical at room temperature 25 °C) HT20 16.5dBm (+/-1.5dB) at MCS0/1/2 16dBm (+/-1.5dB) at MCS3/4 15.5dBm (+/-1.5dB) at MCS5 15dBm (+/-1.5dB) at MCS6 14dBm (+/-1.5dB) at MCS7 HT40 16.5dBm (+/-1.5dB) at MCS7 HT40 16.5dBm (+/-1.5dB) at MCS3/4 15.5dBm (+/-1.5dB) at MCS3/4 15.5dBm (+/-1.5dB) at MCS5/4 15.5dBm (+/-1.5dB) at MCS5</li> <li>15dBm (+/-1.5dB) at MCS5/4 15.5dBm (+/-1.5dB) at MCS5/4 15.5dBm (+/-1.5dB) at MCS5</li> <li>15dBm (+/-1.5dB) at MCS6</li> <li>14dBm (+/-1.5dB) at MCS6</li> <li>14dBm (+/-1.5dB) at MCS6</li> <li>14dBm (+/-1.5dB) at MCS6</li> </ul>



Wireless Module Parameters	
Receiver sensitivity	802.11b (typical at PER = 8% (1000-byte PDUs) at room temperature 25 °C)     -82dBm at 1Mbps     -80dBm at 2Mbps     -78dBm at 5.5Mbps     -76dBm at 11Mbps       802.11g (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C)     -85dBm at 6Mbps     -84dBm at 9Mbps     -82dBm at 12Mbps     -80dBm at 18Mbps     -77dBm at 24Mbps     -73dBm at 36Mbps     -68dBm at 48Mbps     -68dBm at 54Mbps      -80dBm at 48Mbps     -8dBm at 45Mbps      -80dBm at MCS0     -79dBm at MCS0     -79dBm at MCS1     -77dBm at MCS2     -74dBm at MCS3     -70dBm at MCS5     -65dBm at MCS5     -65dBm at MCS6     -64dBm at MCS7     HT40     -79dBm at MCS0     -76dBm at MCS0     -76dBm at MCS1     -74dBm at MCS3     -7ddBm at MCS3     -7ddBm at MCS6     -64dBm at MCS5     -65dBm at MCS6     -64dBm at MCS7
Modulation schemes	<ul> <li>802.11b: DQPSK, DBPSK, DSSS, CCK</li> <li>802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM</li> <li>802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM</li> </ul>

Physical Parameters	
Dimensions (L x W x H)	· 160 x 58 x 115 mm (6.3 x 2.3 x 4.5 in)
Weight	· 200 g (0.44 lb)

Operating Environment	
Power	· Output: 12V DC, 0.5A
Temperature	Operating: from 0 to 40 °C Storage: from -20 to 65 °C
Humidity	Operating: from 10% to 90% (non-condensing)     Storage: from 5% to 95% (non-condensing)

# **Delivery Package**

- · Router DIR-300
- · Power adapter DC 12V/0.5A
- Ethernet cable
- · "Quick Installation Guide" (brochure)