





DIR-615A Wireless N300 Router

BEFORE YOU BEGIN

Delivery Package

- Router DIR-615A
- Power adapter DC 12V/0.5A
- Ethernet cable (CAT 5)
- "Quick Installation Guide" (brochure).

If any of the items are missing, please contact your reseller.

The "*User Manual*" and "*Quick Installation Guide*" documents are available on D-Link website (see www.dlink.ru).

Using a power supply with a different voltage rating than the one included will cause damage and void the warranty for this product.

Default Settings

IP address of wireless router 192.168.0.1

Username (login) admin

Password admin

Name of wireless network (SSID) DIR-615A

see WPS PIN on the

Network key (PSK password)

bottom panel of the

device

Router DIR-615A with default settings cannot connect to the Internet. To get started, please set your own password for access to the webbased interface and change the WLAN name (SSID); then, if needed, configure other settings recommended by your ISP.

System Requirements and Equipment

- A computer with any operating system that supports a web browser.
- A web browser to access the web-based interface of the router:
 - Apple Safari 8 and later
 - o Google Chrome 48 and later
 - Microsoft Internet Explorer 10 and later
 - Microsoft Edge 20.10240 and later
 - Mozilla Firefox 44 and later
 - Opera 35 and later.
- A NIC (Ethernet or Wi-Fi adapter) to connect to the router.
- An 802.11b, g, or n Wi-Fi adapter to create a wireless network.

CONNECTING TO PC

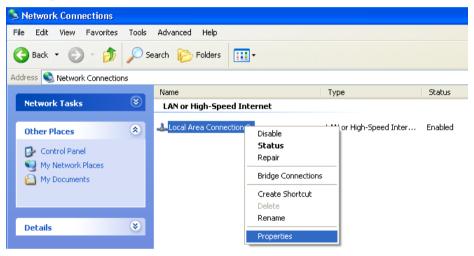
PC with Ethernet Adapter

- 1. Make sure that your PC is powered off.
- 2. Connect an Ethernet cable between any of LAN ports located on the back panel of the router and the Ethernet port of your PC.
- 3. Connect the power cord to the power connector port on the back panel of the router, then plug the power adapter into an electrical outlet or power strip.
- 4. Turn on the router by pressing the **POWER** button on its back panel.
- 5. Turn on your PC and wait until your operating system is completely loaded.

Now you should configure your PC to obtain an IP address automatically (as DHCP client).

Obtaining IP Address Automatically in OS Windows XP

- Click the Start button and proceed to the Control Panel > Network and Internet Connections > Network Connections window
- In the Network Connections window, right-click the relevant Local Area Connection icon and select the Properties line in the menu displayed.



 In the Local Area Connection Properties window, on the General tab, select the Internet Protocol (TCP/IP) line. Click the Properties button. 4. Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** radio buttons. Click the **OK** button.

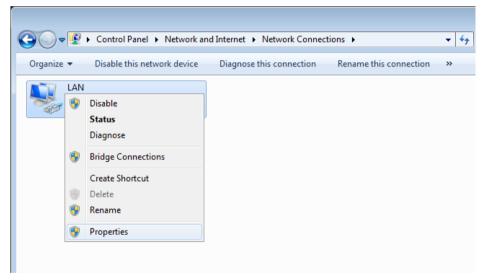


5. Click the **OK** button in the connection properties window.

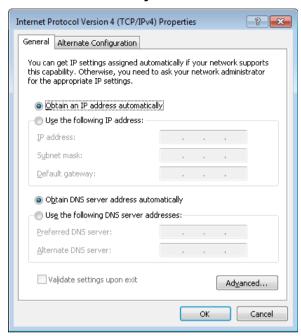
Now your computer is configured to obtain an IP address automatically.

Obtaining IP Address Automatically in OS Windows 7

- 1. Click the **Start** button and proceed to the **Control Panel** window.
- Select the Network and Sharing Center section. (If the Control Panel
 has the category view (the Category value is selected from the View by
 drop-down list in the top right corner of the window), choose the View
 network status and tasks line under the Network and Internet
 section.)
- 3. In the menu located on the left part of the window, select the **Change** adapter settings line.
- 4. In the opened window, right-click the relevant **Local Area Connection** icon and select the **Properties** line in the menu displayed.



 In the Local Area Connection Properties window, on the Networking tab, select the Internet Protocol Version 4 (TCP/IPv4) line. Click the Properties button. 6. Select the **Obtain an IP address automatically** and **Obtain DNS server address automatically** radio buttons. Click the **OK** button.



7. Click the **OK** button in the connection properties window.

Now your computer is configured to obtain an IP address automatically.

PC with Wi-Fi Adapter

- Connect the power cord to the power connector port on the back panel of the router, then plug the power adapter into an electrical outlet or power strip.
- 2. Turn on the router by pressing the **POWER** button on its back panel.
- 3. Turn on your PC and wait until your operating system is completely loaded
- 4. Turn on your Wi-Fi adapter. As a rule, modern notebooks with built-in wireless NICs are equipped with a button or switch that turns on/off the wireless adapter (refer to your PC documents). If your PC is equipped with a pluggable wireless NIC, install the software provided with your Wi-Fi adapter.

Now you should configure your Wi-Fi adapter.

Configuring Wi-Fi Adapter in OS Windows XP

- Click the Start button and proceed to the Control Panel > Network and Internet Connections > Network Connections window.
- 2. Select the icon of the wireless network connection and make sure that your Wi-Fi adapter is on.



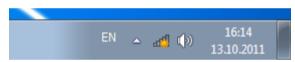
- 3 Search for available wireless networks
- 4. In the opened **Wireless Network Connection** window, select the wireless network **DIR-615A** and click the **Connect** button.
- 5. In the opened window, enter the network key (see WPS PIN on the barcode label on the bottom panel of the device) in the **Network key** and **Confirm network key** fields and click the **Connect** button.

After that the Wireless Network Connection Status window appears.

If you perform initial configuration of the router via Wi-Fi connection, note that immediately after changing the wireless default settings of the router you will need to reconfigure the wireless connection using the newly specified settings.

Configuring Wi-Fi Adapter in OS Windows 7

- 1. Click the **Start** button and proceed to the **Control Panel** window.
- Select the Network and Sharing Center section. (If the Control Panel
 has the category view (the Category value is selected from the View by
 drop-down list in the top right corner of the window), choose the View
 network status and tasks line under the Network and Internet
 section.)
- 3. In the menu located on the left part of the window, select the **Change** adapter settings line.
- 4. In the opened window, select the icon of the wireless network connection and make sure that your Wi-Fi adapter is on.
- To open the list of available wireless networks, select the icon of the wireless network connection and click the **Connect To** button or leftclick the network icon in the notification area located on the right side of the taskbar.



6. In the opened window, in the list of available wireless networks, select the wireless network **DIR-615A** and click the **Connect** button.



- 7. In the opened window, enter the network key (see WPS PIN on the barcode label on the bottom panel of the device) in the **Security key** field and click the **OK** button.
- 8. Wait for about 20-30 seconds. After the connection is established, the network icon will be displayed as the signal level scale.
 - If you perform initial configuration of the router via Wi-Fi connection, note that immediately after changing the wireless default settings of the router you will need to reconfigure the wireless connection using the newly specified settings.

CONFIGURING ROUTER

Connecting to Web-based Interface

Start a web browser. In the address bar of the web browser, enter the IP address of the router (by default, the following IP address is specified: 192.168.0.1). Press the Enter key.



If the error "The page cannot be displayed" (or "Unable to display the page"/"Could not connect to remote server") occurs upon connecting to the web-based interface of the router, make sure that you have properly connected the router to your computer.

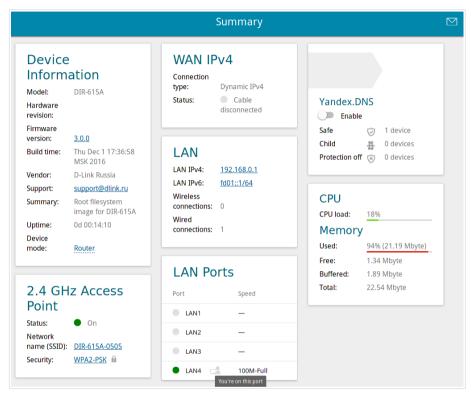
If the device has not been configured previously or the default settings have been restored, after access to the web-based interface the Initial Configuration Wizard opens (see the *Initial Configuration Wizard* section, page 17).



If you configured the device previously, after access to the web-based interface the login page opens. Enter the username (admin) in the **Username** field and the password you specified in the **Password** field, then click the **LOGIN** button.



The **Summary** page displays general information on the router and its software.



The web-based interface of the router is bilingual (English/Russian). You can select the needed language upon the initial configuration of the web-based interface of the router or in the **System / Configuration** section of the menu

To configure the router use the menu in the left part of the page. Go to the relevant section and select the needed page or run the wizard in the **Quick Setup** section.

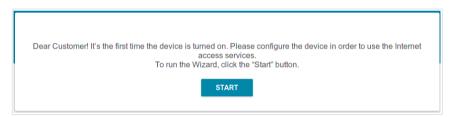
Initial Configuration Wizard

In order to start the Initial Configuration Wizard manually, go to the **Quick Setup** section and click the **START** button in the **Initial Configuration** box



Click the **OK** button and wait until the factory default settings are restored. Then click the **START** button again.

If the device has not been configured previously or the default settings have been restored, the Initial Configuration Wizard starts automatically upon access to the web-based interface or upon opening a web site on the Internet.



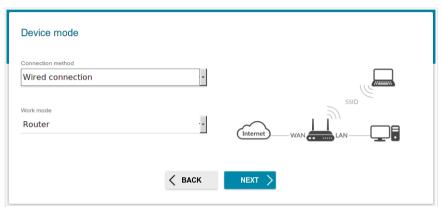
1. Click **YES** in order to leave the current language of the web-based interface or click **NO** to select the other language.



2. On the next page, click the **CONTINUE** button.

Selecting Operation Mode

In order to connect your device to a wired ISP, on the **Device mode** page, from the **Connection method** list, select the **Wired connection** value. Then from the **Work mode** list select the **Router** value. In this mode you can configure a WAN connection, set your own settings for the wireless network, configure LAN ports to connect an STB or VoIP phone, and set your own password for access to the web-based interface of the device.



In order to connect your device to a wireless ISP (WISP), on the **Device** mode page, from the **Connection method** list, select the **Wi-Fi** value. Then from the **Work mode** list select the **WISP Repeater** value. In this mode you can connect your device to another access point, configure a WAN connection, set your own settings for the wireless network, configure LAN ports to connect an STB or VoIP phone, and set your own password for access to the web-based interface of the device.

In order to connect your device to a wired router for adding a wireless network to the existing local network, on the **Device mode** page, from the **Connection method** list, select the **Wired connection** value. Then from the **Work mode** list select the **Access point** value. In this mode you can set your own settings for the wireless network and set your own password for access to the web-based interface of the device.

In order to connect your device to a wireless router for extending the range of the existing wireless network, on the **Device mode** page, from the **Connection method** list, select the **Wi-Fi** value. Then from the **Work mode** list select the **Repeater** value. In this mode you can connect your device to another access point, set your own settings for the wireless network, and set your own password for access to the web-based interface of the device.

In order to let wired PCs connected to your device access the network of a wireless router, on the **Device mode** page, from the **Connection method** list, select the **Wi-Fi** value. Then from the **Work mode** list select the **Client** value. In this mode you can connect your device to another access point and set your own password for access to the web-based interface of the device.

When the operation mode is selected, click the **NEXT** button.

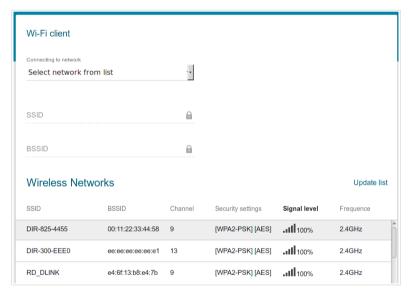
Wi-Fi Client

This configuration step is available for the WISP Repeater, Repeater, and Client modes

On the **Wi-Fi client** page, in the **Wireless Networks** section, select the network to which you want to connect. When you select a network, the **SSID** and **BSSID** fields are filled in automatically.

If you cannot find the needed network in the list, click the **Update list** button.

1. If a password is needed to connect to the selected network, fill in the relevant field.



If you connect to a hidden network, from the **Connecting to network** list select the **Connect to hidden network** value. Enter the network name to the **SSID** field. Then select a needed value from the **Network authentication** list and then, if needed, enter the password in the relevant field.

2 Click the **NEXT** button

Configuring WAN Connection

This configuration step is available for the **Router** and **WISP Repeater** modes.

- You should configure your WAN connection in accordance with data provided by your Internet service provider (ISP). Make sure that you have obtained all necessary information prior to configuring your connection. Otherwise contact your ISP.
- 1. On the **Internet connection type** page, from the **Connection type** list, select the connection type used by your ISP and fill in the fields displayed on the page.

Static IPv4: Fill in the following fields: IP address, Netmask, Gateway IP address, and DNS IP address.

IP address*		
Netmask*		
Gateway IP address*		

Static IPv6: Fill in the following fields: IP address, and Gateway IP address.

IP address*	
Gateway IP address*	

Without authorization		
Username*		
Password*	③	

PPPoE + Static IP (PPPoE Dual Access): Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon (③) to display the entered password. If authorization is not required, select the **Without authorization** checkbox. Also fill in the following fields: **IP address**, **Netmask**, **Gateway IP address**, and **DNS IP address**.

Without authorization			
Username*			
Password*	■		
IP address*			
Netmask*			
Gateway IP address*			
DNS IP address*			

PPTP + **Dynamic IP or L2TP** + **Dynamic IP:** Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon () to display the entered password. If authorization is not required, select the **Without authorization** checkbox. In the **VPN server address** field, enter the IP or URL address of the PPTP or L2TP authentication server.



PPTP + Static IP or L2TP + Static IP: Enter authorization data provided by your ISP (the username (login) in the **Username** field and the password in the **Password** field). Click the **Show** icon (③) to display the entered password. If authorization is not required, select the **Without authorization** checkbox. In the **VPN server address** field, enter the IP or URL address of the PPTP or L2TP authentication server. Also fill in the following fields: **IP address**, **Netmask**, **Gateway IP address**, and **DNS IP address**.

Without authorization	
Username*	
Password*	●
VPN server address*	
IP address*	
Netmask*	
Gateway IP address*	
DNS IP address*	

- 2. If your ISP uses MAC address binding, select the **Clone MAC address of your device** checkbox.
- 3. If the Internet access is provided via a VLAN channel, select the **Use VLAN** checkbox and fill in the **VLAN ID** field.

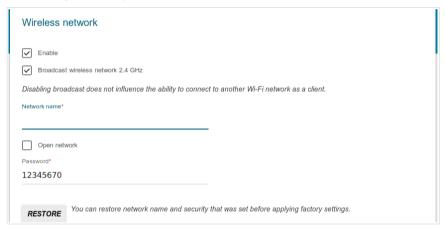
Clone MAC address of your device
In some ISP's networks, it is required to register a certain MAC address in order to get access to the Internet.
✓ Use VLAN
Select the checkbox if the Internet access is provided via a VLAN channel.
VLAN ID*

4. Click the **NEXT** button.

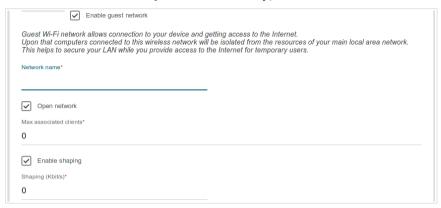
Configuring Wireless Network

This configuration step is available for the Router, Access point, WISP Repeater, and Repeater modes.

- 1. On the **Wireless Network** page, in the **Network name** field, specify your own name for the wireless network or leave the value suggested by the router.
- 2. In the **Password** field, specify your own password for access to the wireless network or leave the value suggested by the router (WPS PIN of the device, see the barcode label).
- 3. You can restore the parameters of the wireless network specified before resetting to factory defaults. To do this, click the **RESTORE** button.



4. If you want to create an additional wireless network isolated from your LAN, select the **Enable guest network** checkbox (available for the **Router** and **WISP Repeater** modes only).



- 5. In the **Network name** field, specify your own name for the guest wireless network or leave the value suggested by the router.
- 6. If you want to create a password for access to the guest wireless network, deselect the **Open network** checkbox and fill in the **Password** field.
- 7. If you want to limit the bandwidth of the guest wireless network, select the **Enable shaping** checkbox and fill in the **Shaping** field.
- 8. Click the **NEXT** button.

Configuring LAN Ports for IPTV/VoIP

This configuration step is available for the **Router** and **WISP Repeater** modes.

1. On the **IPTV** page, select the **Is an STB connected to the device** checkbox.



- 2. Select a free LAN port for connecting your set-top box.
- 3. If the IPTV service is provided via a VLAN channel, select the **Use VLAN ID** checkbox and fill in the **VLAN ID** field.
- 4 Click the **NEXT** button
- 5. On the VoIP page, select the In an IP phone connected to the device checkbox



- 6. Select a free LAN port for connecting your IP phone.
- 7. If the VoIP services provided via a VLAN channel, select the **Use VLAN ID** checkbox and fill in the **VLAN ID** field.
- 8. Click the **NEXT** button.

Changing Web-based Interface Password

On this page you should change the default administrator password. You may set any password except **admin**. Use digits, Latin letters (uppercase and/or lowercase), and other characters available in the US keyboard layout.¹



Remember or write down the new password for the administrator account. In case of losing the new password, you can access the settings of the router only after restoring the factory default settings via the hardware **RESET** button. This procedure wipes out all settings that you have configured for your router.

Click the **NEXT** button

On the next page, check all the settings you have just specified.

Also you can save a text file with parameters set by the Wizard to your PC. To do this, click the **SAVE CONFIGURATION FILE** button and follow the dialog box appeared.

To finish the Wizard, click the **APPLY** button. The router will apply settings, reboot, if needed, and check the Internet connection if the Wizard has configured a WAN connection.

^{1 0-9,} A-Z, a-z, space, !"#\$%&'()*+,-./:;<=>?@[\]^ `{|}~.

Configuring Local Area Network

- 1. Go to the Connections Setup / LAN page.
- If needed, change the IPv4 address of the router's LAN interface and the mask of the local subnet. To do this, click the IPv4 tab and specify needed values in the IP Address and Subnet mask fields in the IP section.



If needed, specify your own IPv6 address of the router's LAN interface.
 To do this, click the IPv6 tab and select the Static value from the Addressing Mode drop-down list in the IP section. Then specify the needed value in the IP address field.



4. **IPv4 address assignment**. By default, the built-in DHCP server of the router assigns IPv4 addresses to the devices of the LAN. If you want to manually assign IPv4 addresses, disable the DHCP server (click the **IPv4** tab and select the **Disable** value from the **Mode** drop-down list in the **DHCP** section).



5. **IPv6 address assignment**. By default, the devices of the LAN automatically assign IPv6 addresses to themselves (the **Stateless** value is selected from the **Autoconfiguration mode** drop-down list in the **DHCP** section on the **IPv6** tab). If the devices of the LAN do not support IPv6 address autoconfiguration, enable the built-in DHCPv6 server of the router (select the **Statefull** value from the **Autoconfiguration mode** drop-down list). If you want to manually assign IPv6 addresses to devices of the LAN, select the **Disable** value from the **Mode** drop-down list.

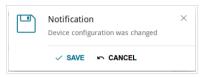


 After specifying the needed parameters on the Connections Setup / LAN page, click the APPLY button.

Saving Settings to Non-volatile Memory

In order to avoid losing the new settings upon hardware reboot (accidental or intentional power-off of the device), it is recommended to save the settings to the non-volatile memory of the router.

After changing the configuration of the router, a relevant notification appears in the right top part of the page.



Click the **SAVE** button.

Now you can use the router to access the Internet or access the web-based interface of the router to configure additional parameters. For detailed description of every page of the web-based interface, see the "*User Manual*" document (see www.dlink.ru).

SPECIFICATIONS*

Hardware	
Interfaces	· 10/100BASE-TX WAN port · 4 10/100BASE-TX LAN ports
LEDs	POWER STATUS WLAN / WPS INTERNET A LAN LEDs
Buttons	 POWER 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 internal omnidirectional antennas (2dBi gain)
МІМО	· 2 x 2
Power connector	· Power input connector (DC)

Software	
WAN connection types	 PPPoE IPv6 PPPoE PPPoE Dual Stack Static IPv4 / Dynamic IPv4 Static IPv6 / Dynamic IPv6 PPPoE + Static IP (PPPoE Dual Access) PPPoE + Dynamic IP (PPPoE Dual Access) PPTP/L2TP + Static IP PPTP/L2TP + Dynamic IP

^{*} The device features are subject to change without notice. For the latest versions of the firmware and relevant documentation, visit www.dlink.ru.

Software	
Network functions	 DHCP server/relay DHCPv6 server (Stateful/Stateless), IPv6 prefix delegation DNS relay Support of DNSv6 AAAA records Dynamic DNS Static IP routing Static IPv6 routing IGMP Proxy RIP Support of UPnP IGD Support of VLAN WAN ping respond Support of SIP ALG Support of RTSP Autonegotiation of speed, duplex mode, and flow control/Manual speed and duplex mode setup for each Ethernet port Setup of maximum TX rate for each port of the router Built-in UDPXY application
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) Web-based interface for configuration and management in two languages Support of Click'n'Connect application for Android 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 remote logging 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	WEPWPA/WPA2 (Personal/Enterprise)MAC filterWPS (PBC/PIN)	
Advanced functions	 Support of client mode 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 	
Wireless connection rate	 IEEE 802.11b: 1, 2, 5.5, and 11Mbps IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps IEEE 802.11n: from 6.5 to 300Mbps (from MCS0 to MCS15) 	

Wireless Module Parameters

Transmitter output power

The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country

- 802.11b (typical at room temperature 25 °C)
 17dBm (+/-1.5dB) at 1, 2, 5.5, 11Mbps
- 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
 - 802.11n (typical at room temperature 25 °C) HT20
 16.5dBm (+/-1.5dB) at MCS0/1/2/8/9/10
 16dBm (+/-1.5dB) at MCS3/4/11/12
 15.5dBm (+/-1.5dB) at MCS5/13
 15dBm (+/-1.5dB) at MCS6/14
 14dBm (+/-1.5dB) at MCS7/15
 HT40
 16.5dBm (+/-1.5dB) at MCS0/1/2/8/9/10
 16dBm (+/-1.5dB) at MCS3/4/11/12
 15.5dBm (+/-1.5dB) at MCS5/13
 15dBm (+/-1.5dB) at MCS5/13

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 12Mbps -80dBm at 12Mbps -80dBm at 18Mbps -77dBm at 24Mbps -69dBm at 48Mbps -69dBm at 48Mbps -68dBm at 54Mbps -802.11n (typical at PER = 10% (1000-byte PDUs)) HT20 -82dBm at MCS0/8 -79dBm at MCS2/10 -74dBm at MCS2/10 -74dBm at MCS5/13 -65dBm at MCS6/14 -64dBm at MCS0/8 -79dBm at MCS0/8 -76dBm at MCS0/10 -74dBm at MCS2/10 -74dBm at MCS2/10 -74dBm at MCS3/11 -67dBm at MCS3/11 -67dBm at MCS2/10 -71dBm at MCS3/11 -67dBm at MCS3/13 -62dBm at MCS6/14 -61dBm at MCS6/14 -61dBm at MCS6/15 	
Modulation schemes	 802.11b: DQPSK, DBPSK, DSSS, CCK 802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM 802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM 	

Physical Parameters		
Dimensions (L x W x H)		134 x 98 x 83 mm (5.3 x 3.9 x 3.3 in)
Weight		202 g (0.45 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)	

SAFETY RULES AND CONDITIONS

Please carefully read this section before installation and connection of the device. Make sure that the power adapter and cables are not damaged. The device should be used only as intended in accordance with the documents.

The device is intended for use in dry, clean, dust-free, and well ventilated areas with normal humidity away from strong heat sources. Do not use the device outdoors or in the areas with high humidity. Do not place foreign objects on the device. Do not obstruct the ventilation openings of the device. The environmental temperature near the device and the temperature inside the device's cover should be within the range from 0 °C to +40 °C.

Only use the power adapter supplied with the device. Do not plug in the adapter, if its case or cable are damaged. Plug the adapter only into working electrical outlets with parameters indicated on the adapter.

Do not open the cover of the device! Unplug the device before dusting and cleaning. Use a damp cloth to clean the device. Do not use liquid/aerosol cleaners or magnetic/static cleaning devices. Prevent moisture getting into the device or the power adapter.

The service life of the device is 2 years.

TECHNICAL SUPPORT

You can find software updates and user documentation on our website.

D-Link provides its customers with free support within the product's warranty period.

Customers can contact the technical support group by phone or by e-mail/Internet.

FOR TELEPHONE NUMBERS AND ADDRESSES OF D-LINK OFFICES WORLDWIDE VISIT

http://www.dlink.com/corporate/worldwideoffices/