

## Product Highlights

### HIGH SPEED

Gigabit SFP port,  
Gigabit Ethernet ports,  
total wireless connection rate  
up to 1200Mbps

### IPV6 SUPPORT

All needed functions  
for up-to-date networking

### USB PORT

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



## DIR-825/GF

### Wireless AC1200 MU-MIMO Dual Band Gigabit Router with Fiber WAN Port, 3G/LTE Support 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.

#### Ethernet WAN

Any Ethernet port of the device can be configured to connect to a private Ethernet line.

#### Wireless Interface

Using the DIR-825/GF 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 1167Mbps<sup>1</sup>).

#### 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

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.

Transmit Beamforming technology allows to flexibly change the antennas' radiation pattern and to redistribute the signal directly to wireless devices connected to the router.

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.

<sup>1</sup> Up to 300Mbps for 2.4GHz and up to 867Mbps for 5GHz.

### **Security**

The wireless router DIR-825/GF 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.

The SSH protocol support provides more secure remote configuration and management of the router due to encryption of all transmitted traffic, including passwords.

In addition, the router supports IPsec and allows to create secure VPN tunnels. Support of the IKEv2 protocol allows to provide simplified message exchange and use asymmetric authentication engine upon configuration of an IPsec tunnel.

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

The router also supports the SkyDNS web content filtering service, which provides more settings and opportunities for safer Internet experience for home users of all ages and for professional activities of corporate users.

Now the schedules are also implemented; they can be applied to the rules of various filters and used to reboot the router at the specified time or every specified time period and to enable/disable the wireless network.

### **Easy configuration and update**

You can configure the settings of the wireless router DIR-825/GF via the user-friendly web-based interface (the interface is available in several languages).

The configuration wizard allows you to quickly switch DIR-825/GF 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-825/GF 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"> <li>RTL9607C (900MHz)</li> </ul>
RAM	<ul style="list-style-type: none"> <li>256MB, DDR3, built in processor</li> </ul>
Flash	<ul style="list-style-type: none"> <li>128MB, SPI NAND</li> </ul>
Interfaces	<ul style="list-style-type: none"> <li>1000BASE-X SFP WAN port</li> <li>4 10/100/1000BASE-T LAN ports</li> <li>USB 2.0 port</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>Power</li> <li>SFP</li> <li>Internet</li> <li>LAN 1-4</li> <li>WLAN 2.4G/5G</li> <li>WPS</li> <li>USB</li> </ul>
Buttons	<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>WLAN button to enable/disable wireless network</li> <li>WPS button to set up wireless connection</li> </ul>
Antenna	<ul style="list-style-type: none"> <li>Four external non-detachable antennas (5dBi gain)</li> </ul>
MIMO	<ul style="list-style-type: none"> <li>2 x 2, MU-MIMO</li> </ul>
Power connector	<ul style="list-style-type: none"> <li>Power input connector (DC)</li> </ul>

Software	
WAN connection types	<ul style="list-style-type: none"> <li>Mobile Internet</li> <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>PPTP/L2TP</li> <li>Bridge</li> </ul>
Network functions	<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>Automatic obtainment of LAN IP address (for access point/repeater/client modes)</li> <li>DNS relay</li> <li>Dynamic DNS</li> <li>Static IPv4/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 failover</li> <li>Built-in UDPXY application</li> <li>Support of ARP Proxy</li> <li>XUPNPD plug-in</li> </ul>
Firewall functions	<ul style="list-style-type: none"> <li>Network Address Translation (NAT)</li> <li>Stateful Packet Inspection (SPI)</li> <li>IPv4/IPv6 filter</li> <li>MAC filter</li> <li>URL filter</li> <li>Ad blocking function</li> <li>DMZ</li> <li>Virtual servers</li> <li>Built-in Yandex.DNS web content filtering service</li> <li>Built-in SkyDNS web content filtering service</li> </ul>

<b>Software</b>	
<b>VPN</b>	<ul style="list-style-type: none"> <li>· IPsec/PPTP/L2TP/PPPoE pass-through</li> <li>· PPTP/L2TP tunnels</li> <li>· GRE tunnels, EoGRE tunnels</li> <li>· IPsec tunnels               <ul style="list-style-type: none"> <li>Transport/Tunnel mode</li> <li>IKEv1/IKEv2 support</li> <li>DES encryption</li> <li>NAT Traversal</li> <li>Support of DPD (Keep-alive for VPN tunnels)</li> </ul> </li> </ul>
<b>USB interface functions</b>	<ul style="list-style-type: none"> <li>· USB modem               <ul style="list-style-type: none"> <li>Auto connection to available type of supported network (4G/3G/2G)</li> <li>Auto configuration of connection upon plugging in USB modem</li> <li>Enabling/disabling PIN code check, changing PIN code<sup>2</sup></li> </ul> </li> <li>· USB storage               <ul style="list-style-type: none"> <li>File browser</li> <li>Print server</li> <li>Access to storage via accounts</li> <li>Built-in Samba/FTP/DLNA server</li> <li>Built-in Transmission torrent client; uploading/downloading files from/to USB storage</li> </ul> </li> </ul>
<b>Management and monitoring</b>	<ul style="list-style-type: none"> <li>· Local and remote access to settings through SSH/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>· Notification on connection problems and auto redirect to settings</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/connected USB storage</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> <li>· Schedules for filters rules, automatic reboot, and enabling/disabling wireless network</li> <li>· Automatic upload of configuration file from ISP's server (Auto Provision)</li> </ul>

<b>Wireless Module Parameters</b>	
<b>Standards</b>	<ul style="list-style-type: none"> <li>· IEEE 802.11a/n/ac</li> <li>· IEEE 802.11b/g/n</li> </ul>
<b>Frequency range</b> <i>The frequency range depends upon the radio frequency regulations applied in your country</i>	<ul style="list-style-type: none"> <li>· 2400 ~ 2483.5MHz</li> <li>· 5150 ~ 5350MHz</li> <li>· 5650 ~ 5850MHz</li> </ul>
<b>Wireless connection security</b>	<ul style="list-style-type: none"> <li>· WEP</li> <li>· WPA/WPA2 (Personal/Enterprise)</li> <li>· Latest SAE with 128-bit AES encryption</li> <li>· MAC filter</li> <li>· WPS (PBC/PIN)</li> </ul>
<b>Advanced functions</b>	<ul style="list-style-type: none"> <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>· Guest Wi-Fi / support of MBSSID</li> <li>· Rate limitation for wireless network</li> <li>· Periodic scan of channels, automatic switch to least loaded channel</li> <li>· Support of 802.11ac (5GHz) and 802.11n (2.4GHz) TX Beamforming</li> <li>· Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence)</li> <li>· Support of STBC</li> </ul>
<b>Wireless connection rate</b>	<ul style="list-style-type: none"> <li>· IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54Mbps</li> <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 (2.4GHz/5GHz): from 6.5 to 300Mbps (from MCS0 to MCS15)</li> <li>· IEEE 802.11ac (5GHz): from 6.5 to 867Mbps (from MCS0 to MCS9)</li> </ul>

Wireless Module Parameters	
<p><b>Transmitter output power</b></p> <p><i>The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country</i></p>	<ul style="list-style-type: none"> <li>• 802.11a (typical at room temperature 25 °C) 15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps</li> <li>• 802.11b (typical at room temperature 25 °C) 15dBm at 1, 2, 5.5, 11Mbps</li> <li>• 802.11g (typical at room temperature 25 °C) 15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps</li> <li>• 802.11n (typical at room temperature 25 °C) 2.4GHz, HT20/HT40 15dBm at MCS0~7 5GHz, HT20/HT40 15dBm at MCS0~7</li> <li>• 802.11ac (typical at room temperature 25 °C) VHT20/VHT40/VHT80 15dBm at MCS0~9</li> </ul>
<p><b>Receiver sensitivity</b></p>	<ul style="list-style-type: none"> <li>• 802.11a (typical at PER &lt; 10% at room temperature 25 °C) -82dBm at 6Mbps -81dBm at 9Mbps -79dBm at 12Mbps -77dBm at 18Mbps -74dBm at 24Mbps -70dBm at 36Mbps -66dBm at 48Mbps -65dBm at 54Mbps</li> <li>• 802.11b (typical at PER = 8% at room temperature 25 °C) -82dBm at 1Mbps -80dBm at 2Mbps -78dBm at 5.5Mbps -76dBm at 11Mbps</li> <li>• 802.11g (typical at PER &lt; 10% at room temperature 25 °C) -82dBm at 6Mbps -81dBm at 9Mbps -79dBm at 12Mbps -77dBm at 18Mbps -74dBm at 24Mbps -70dBm at 36Mbps -66dBm at 48Mbps -65dBm at 54Mbps</li> <li>• 802.11n (typical at PER = 10% at room temperature 25 °C) 2.4GHz/5GHz, HT20 2.4GHz/5GHz, HT40 -82dBm at MCS0 -79dBm at MCS0 -79dBm at MCS1 -76dBm at MCS1 -77dBm at MCS2 -74dBm at MCS2 -74dBm at MCS3 -71dBm at MCS3 -70dBm at MCS4 -67dBm at MCS4 -66dBm at MCS5 -63dBm at MCS5 -65dBm at MCS6 -62dBm at MCS6 -64dBm at MCS7 -61dBm at MCS7 -56dBm at MCS8 -54dBm at MCS9</li> <li>• 802.11ac (typical at PER = 10% at room temperature 25 °C) VHT20 VHT40 VHT80 -82dBm at MCS0 -79dBm at MCS0 -76dBm at MCS0 -79dBm at MCS1 -76dBm at MCS1 -73dBm at MCS1 -77dBm at MCS2 -74dBm at MCS2 -71dBm at MCS2 -74dBm at MCS3 -71dBm at MCS3 -68dBm at MCS3 -70dBm at MCS4 -67dBm at MCS4 -64dBm at MCS4 -66dBm at MCS5 -63dBm at MCS5 -60dBm at MCS5 -65dBm at MCS6 -62dBm at MCS6 -59dBm at MCS6 -64dBm at MCS7 -61dBm at MCS7 -58dBm at MCS7 -56dBm at MCS8 -53dBm at MCS8 -54dBm at MCS9 -51dBm at MCS9</li> </ul>
<p><b>Modulation schemes</b></p>	<ul style="list-style-type: none"> <li>• 802.11a: BPSK, QPSK, 16QAM, 64QAM with OFDM</li> <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> <li>• 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM</li> </ul>

Physical Parameters	
Dimensions (L x W x H)	· 206 x 123 x 32 mm (8.1 x 4.8 x 1.3 in)
Weight	· 330 g (0.73 lb)

Operating Environment	
Power	· Output: 12V DC, 1.5A
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	
<ul style="list-style-type: none"> <li>· Router DIR-825/GF</li> <li>· Power adapter DC 12V/1.5A</li> <li>· Ethernet cable</li> <li>· "Quick Installation Guide" (brochure)</li> </ul>	

Supported USB modems <sup>3</sup>	
GSM	<ul style="list-style-type: none"> <li>· Alcatel X500</li> <li>· D-Link DWM-152C1</li> <li>· D-Link DWM-156A6</li> <li>· D-Link DWM-156A7</li> <li>· D-Link DWM 156A8</li> <li>· D-Link DWM-156C1</li> <li>· D-Link DWM-157B1</li> <li>· D-Link DWM-157B1 (Velcom)</li> <li>· D-Link DWM-158D1</li> <li>· D-Link DWR-710</li> <li>· Huawei E150</li> <li>· Huawei E1550</li> <li>· Huawei E156G</li> <li>· Huawei E160G</li> <li>· Huawei E169G</li> <li>· Huawei E171</li> <li>· Huawei E173 (Megafon)</li> <li>· Huawei E220</li> <li>· Huawei E3131 (MTS 420S)</li> <li>· Huawei E352 (Megafon)</li> <li>· Prolink PHS600</li> <li>· Prolink PHS901</li> <li>· ZTE MF112</li> <li>· ZTE MF192</li> <li>· ZTE MF626</li> <li>· ZTE MF627</li> <li>· ZTE MF652</li> <li>· ZTE MF667</li> <li>· ZTE MF668</li> <li>· ZTE MF752</li> </ul>

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

Supported USB modems	
LTE	<ul style="list-style-type: none"><li>· Alcatel IK40V</li><li>· D-Link DWM-222</li><li>· Huawei E3131</li><li>· Huawei E3272</li><li>· Huawei E3351</li><li>· Huawei E3372s/E3372h-153</li><li>· Huawei E367</li><li>· Huawei E392</li><li>· Megafon M100-1</li><li>· Megafon M100-2</li><li>· Megafon M100-3</li><li>· Megafon M100-4</li><li>· Megafon M150-1</li><li>· Megafon M150-2</li><li>· Quanta 1K6E (Beeline 1K6E)</li><li>· MTS 824F</li><li>· MTS 827F</li><li>· Yota LU-150</li><li>· Yota WLTUBA-107</li><li>· ZTE MF823</li><li>· ZTE MF827</li></ul>
Smartphones in USB tethering mode	<ul style="list-style-type: none"><li>· Some models of Android smartphones</li></ul>