

## Product Highlights

### HIGH SPEED

Total wireless connection rate up to 750Mbps<sup>1</sup>

### DUAL BAND

Simultaneous operation in 5GHz band and 2.4GHz band, 802.11a/b/g/n/ac compatible

### IPV6 SUPPORT

All needed functions for up-to-date networking



## DIR-806A

### AC750 Wi-Fi Router

#### Wireless Interface

Using the DIR-806A 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 733Mbps<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.

#### 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 DIR-806A 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.

In addition, the router supports IPsec and allows to create secure VPN tunnels.

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

<sup>1</sup> Up to 300Mbps for 2.4GHz and up to 433Mbps for 5GHz.

**Easy configuration and update**

You can configure the settings of the wireless router DIR-806A via the user-friendly web-based interface (the interface is available in several languages).

The configuration wizard allows you to quickly switch DIR-806A 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-806A 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>MT7620A (580MHz)</li> </ul>
RAM	<ul style="list-style-type: none"> <li>64MB, DDR2</li> </ul>
Flash	<ul style="list-style-type: none"> <li>8MB, SPI</li> </ul>
Interfaces	<ul style="list-style-type: none"> <li>10/100BASE-TX WAN port</li> <li>4 10/100BASE-TX LAN ports</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>Power</li> <li>2.4G WLAN</li> <li>5G WLAN</li> <li>Internet</li> <li>WPS</li> </ul>
Buttons	<ul style="list-style-type: none"> <li>ON/OFF button to power on/power off</li> <li>WPS/RESET button to restore factory default settings and set up wireless connection</li> </ul>
Antenna	<ul style="list-style-type: none"> <li>Three external non-detachable antennas (5dBi gain)</li> </ul>
MIMO	<ul style="list-style-type: none"> <li>2 x 2 (for 2.4GHz)</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>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 style="list-style-type: none"> <li>Support of IEEE 802.1X for Internet connection</li> <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>Autonegotiation of speed, duplex mode, and flow control / Manual speed and duplex mode setup for each Ethernet port</li> <li>Built-in UDPXY application</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>DMZ</li> <li>Virtual servers</li> <li>Built-in Yandex.DNS 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>· IPsec tunnels</li> <li>· IKEv1 support</li> <li>· DES encryption</li> <li>· NAT Traversal</li> <li>· Support of DPD (Keep-alive for VPN tunnels)</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>· 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</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>· SNMP agent</li> <li>· Automatic reboot on schedule</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>· 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>· Smart adjustment of Wi-Fi clients</li> <li>· Guest Wi-Fi / support of MBSSID</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>
<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 433Mbps (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 MCS0~15 5GHz, HT20/HT40 15dBm at MCS0~15</li> <li>· 802.11ac (typical at room temperature 25 °C) VHT20 15dBm at MCS0~7 14.5dBm at MCS8 VHT40 15dBm at MCS0~7 14.5dBm at MCS8~9 VHT80 15dBm at MCS0~7 14.5dBm at MCS8~9</li> </ul>
<p><b>Receiver sensitivity</b></p>	<ul style="list-style-type: none"> <li>· 802.11a (typical at PER &lt; 10% (1000-byte PDUs) 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% (1000-byte PDUs) at room temperature 25 °C) -79dBm at 1, 2, 5.5, 11Mbps</li> <li>· 802.11g (typical at PER = 10% (1000-byte PDUs) 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% (1000-byte PDUs)) HT20 -82dBm at MCS0 -79dBm at MCS1 -77dBm at MCS2 -74dBm at MCS3 -70dBm at MCS4 -66dBm at MCS5 -65dBm at MCS6 -64dBm at MCS7 HT40 -79dBm at MCS0 -76dBm at MCS1 -74dBm at MCS2 -71dBm at MCS3 -67dBm at MCS4 -63dBm at MCS5 -62dBm at MCS6 -61dBm at MCS7</li> </ul>

Wireless Module Parameters	
	<ul style="list-style-type: none"> <li>802.11ac (typical at PER = 10% (1000-byte PDUs))               <ul style="list-style-type: none"> <li>VHT20                   <ul style="list-style-type: none"> <li>-82dBm at MCS0</li> <li>-79dBm at MCS1</li> <li>-77dBm at MCS2</li> <li>-74dBm at MCS3</li> <li>-70dBm at MCS4</li> <li>-66dBm at MCS5</li> <li>-65dBm at MCS6</li> <li>-64dBm at MCS7</li> <li>-59dBm at MCS8</li> </ul> </li> <li>VHT40                   <ul style="list-style-type: none"> <li>-79dBm at MCS0</li> <li>-76dBm at MCS1</li> <li>-74dBm at MCS2</li> <li>-71dBm at MCS3</li> <li>-67dBm at MCS4</li> <li>-63dBm at MCS5</li> <li>-62dBm at MCS6</li> <li>-61dBm at MCS7</li> <li>-56dBm at MCS8</li> <li>-54dBm at MCS9</li> </ul> </li> <li>VHT80                   <ul style="list-style-type: none"> <li>-76dBm at MCS0</li> <li>-73dBm at MCS1</li> <li>-71dBm at MCS2</li> <li>-68dBm at MCS3</li> <li>-64dBm at MCS4</li> <li>-60dBm at MCS5</li> <li>-59dBm at MCS6</li> <li>-58dBm at MCS7</li> <li>-53dBm at MCS8</li> <li>-51dBm at MCS9</li> </ul> </li> </ul> </li> </ul>
<b>Modulation schemes</b>	<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	
<b>Dimensions (L x W x H)</b>	<ul style="list-style-type: none"> <li>192 x 108 x 30 mm (7.56 x 4.25 x 1.18 in)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>240 g (0.53 lb)</li> </ul>

Operating Environment	
<b>Power</b>	<ul style="list-style-type: none"> <li>Output: 12V DC, 0.5A</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Operating: from 0 to 40 °C</li> <li>Storage: from -20 to 65 °C</li> </ul>
<b>Humidity</b>	<ul style="list-style-type: none"> <li>Operating: from 10% to 90% (non-condensing)</li> <li>Storage: from 5% to 95% (non-condensing)</li> </ul>

Delivery Package	
	<ul style="list-style-type: none"> <li>Router DIR-806A</li> <li>Power adapter DC 12V/0.5A</li> <li>Ethernet cable</li> <li>"Quick Installation Guide" (brochure)</li> </ul>