

Product Highlights

HIGH POWER AND SPEED

New dual core (880MHz), Gigabit Ethernet ports, total wireless connection rate up to 1900Mbps¹

EXTREME WI-FI PERFORMANCE

MU-MIMO for best rates, 3 data streams for increased throughput

IPV6 SUPPORT

All needed functions for up-to-date networking



DIR-878

AC1900 MU-MIMO Wi-Fi Gigabit Router

Wireless Interface

Using the DIR-878 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 1900Mbps¹).

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.

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. 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.

¹ Up to 600Mbps for 2.4GHz and up to 1300Mbps for 5GHz.

Security

The wireless router DIR-878 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.

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

Easy configuration and update

You can configure the settings of the wireless router DIR-878 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-878 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-878 supports configuration and management via D-Link Click'n'Connect mobile application for Android 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"> MT7621A (880MHz, dual core) |
| RAM | <ul style="list-style-type: none"> 128MB, DDR3 |
| Flash | <ul style="list-style-type: none"> 16MB, SPI |
| Interfaces | <ul style="list-style-type: none"> 10/100/1000BASE-T WAN port 4 10/100/1000BASE-T LAN ports |
| LEDs | <ul style="list-style-type: none"> POWER INTERNET WLAN 2.4G WLAN 5G |
| Buttons | <ul style="list-style-type: none"> POWER button to power on/power off WiFi button to enable/disable wireless network WPS button to set up wireless connection RESET button to restore factory default settings |
| Antenna | <ul style="list-style-type: none"> Four external non-detachable antennas 5dBi gain |
| MIMO | <ul style="list-style-type: none"> 3 x 3, MU-MIMO |
| Power connector | <ul style="list-style-type: none"> Power input connector (DC) |
| Software | |
| WAN connection types | <ul style="list-style-type: none"> 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 |
| Network functions | <ul style="list-style-type: none"> Support of IEEE 802.1X for Internet connection DHCP server/relay Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation Automatic obtainment of LAN IP address (for access point/repeater/client modes) DNS relay 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 WAN reservation Built-in UDPXY application |
| Firewall functions | <ul style="list-style-type: none"> 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 Built-in SafeDNS web content filtering service |
| VPN | <ul style="list-style-type: none"> IPsec/PPTP/L2TP/PPPoE pass-through IPsec tunnels |

| Software | |
|-------------------|---|
| Management | <ul style="list-style-type: none"> · Local and remote access to settings through TELNET/WEB (HTTP/HTTPS) · Bilingual web-based interface for configuration and management (Russian/English) · 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 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 | <ul style="list-style-type: none"> · IEEE 802.11a/n/ac · IEEE 802.11b/g/n |
| Frequency range | <ul style="list-style-type: none"> · 2400 ~ 2483.5MHz · 5150 ~ 5350MHz · 5650 ~ 5725MHz |
| Wireless connection security | <ul style="list-style-type: none"> · WEP · WPA/WPA2 (Personal/Enterprise) · MAC filter · WPS (PBC/PIN) |
| Advanced functions | <ul style="list-style-type: none"> · 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 · Periodic scan of channels, automatic switch to least loaded channel · Support of 802.11ac (5GHz) and 802.11n (2.4GHz) TX Beamforming |
| Wireless connection rate² | <ul style="list-style-type: none"> · IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54Mbps · IEEE 802.11b: 1, 2, 5.5, and 11Mbps · IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps · IEEE 802.11n (2.4GHz): 6.5–450Mbps (MCS0–MCS23) to 600Mbps (QAM256) · IEEE 802.11n (5GHz): from 6.5 to 450Mbps (from MCS0 to MCS23) · IEEE 802.11ac (5GHz): from 6.5 to 1300Mbps (from MCS0 to MCS9) |
| Transmitter output power <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"> · 802.11a (typical at room temperature 25 °C) 15dBm at 6, 54Mbps · 802.11b (typical at room temperature 25 °C) 15dBm at 1, 11Mbps · 802.11g (typical at room temperature 25 °C) 15dBm at 6, 54Mbps · 802.11n (typical at room temperature 25 °C) 2.4GHz 15dBm at MCS0, 7 5GHz 15dBm at MCS0, 7 · 802.11ac (typical at room temperature 25 °C) 15dBm at MCS0, 9 |

² Maximum wireless signal rate is derived from IEEE standard 802.11ac and 802.11n specifications. In order to get the rate of 600Mbps in the 2.4GHz band, a Wi-Fi client should support MIMO 3x3 and QAM256 modulation scheme. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

| Wireless Module Parameters | |
|-----------------------------|---|
| Receiver sensitivity | <ul style="list-style-type: none"> · 802.11a -96dBm at 6Mbps -78dBm at 54Mbps · 802.11b -96dBm at 1Mbps -90dBm at 11Mbps · 802.11g -95dBm at 6Mbps -76dBm at 54Mbps · 802.11n 2.4GHz, HT20 -95dBm at MCS0 -76dBm at MCS7 2.4GHz, HT40 -92dBm at MCS0 -72dBm at MCS7 5GHz, HT20 -95dBm at MCS0 -76dBm at MCS7 5GHz, HT40 -93dBm at MCS0 -73dBm at MCS7 · 802.11ac VHT20 -96dBm at MCS0 -73dBm at MCS8 VHT40 -92dBm at MCS0 -68dBm at MCS9 VHT80 -88dBm at MCS0 -64dBm at MCS9 |
| Modulation schemes | <ul style="list-style-type: none"> · 802.11a: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11b: DQPSK, DBPSK, DSSS, CCK · 802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11n: BPSK, QPSK, 16QAM, 64QAM, 256QAM with OFDM · 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM |

| Physical Parameters | |
|-------------------------------|---|
| Dimensions (L x W x H) | · 259 x 184 x 46 mm (10.8 x 7.24 x 1.81 in) |
| Weight | · 565 g (1.25 lb) |

| Operating Environment | |
|-----------------------|---|
| Power | · Output: 12V DC, 1.5A |
| Temperature | <ul style="list-style-type: none"> · Operating: from 0 to 40 °C · Storage: from -20 to 65 °C |
| Humidity | <ul style="list-style-type: none"> · Operating: from 10% to 90% (non-condensing) · Storage: from 5% to 95% (non-condensing) |

| Delivery Package | |
|---|--|
| <ul style="list-style-type: none"> · Router DIR-878 · Power adapter DC 12V/1.5A · Ethernet cable (CAT 5E) · "Quick Installation Guide" (brochure) | |