

Product Highlights

HIGH POWER

1.0 GHz dual core,
increased amplifier power

HIGH SPEED

Gigabit Ethernet ports,
total wireless connection rate
up to 1900Mbps¹

IPV6 SUPPORT

All needed functions
for up-to-date networking



DIR-879

Wireless AC1900 Dual Band Gigabit Router

Wireless Interface

Using the DIR-879 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

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.

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.

Also the device is equipped with a two-position mode selector. You can leave DIR-879 in the router mode in order to connect devices to the Internet or switch it to the access point mode in order to create a new wireless network or extend the range of an existing wireless network.

Security

The wireless router DIR-879 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.

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

Easy configuration and update

You can configure the settings of the wireless router DIR-879 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 connect DIR-879 to a wired or wireless ISP (when switched to the router mode) in several simple steps or quickly set needed parameters for operation as an access point, repeater, or client (when switched to the access point mode).

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	
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/WPS
Buttons	<ul style="list-style-type: none"> POWER button to power on/power off RESET button to restore factory default settings WPS button to set up wireless connection and to enable/disable wireless network Mode selector
Antenna	<ul style="list-style-type: none"> Four external non-detachable antennas (3dBi gain for 2.4GHz and 5GHz)
MIMO	<ul style="list-style-type: none"> 3 x 4
Power connector	<ul style="list-style-type: none"> Power input connector (DC)
Software	
Operation modes	<ul style="list-style-type: none"> Router Access point
WAN connection types	<ul style="list-style-type: none"> PPPoE IPv6 PPPoE PPPoE Dual Stack Static IP / Dynamic IP Static IPv6 / Dynamic IPv6 PPPoE + Static IP PPPoE + Dynamic IP PPTP/L2TP 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 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	<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
VPN	<ul style="list-style-type: none"> IPSec/PPTP/L2TP/PPPoE pass-through IPSec tunnels
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) 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 Automatic synchronization of system time with NTP server and manual time/date setup Ping function 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"> “Client” function (router mode) WISP repeater “Client” function (access point mode) Wireless network client Wireless network repeater 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
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: from 6.5 to 1300Mbps (from MCS0 to MSC9)
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) 17dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11b (typical at room temperature 25 °C) 17dBm at 1, 2, 5.5, 11Mbps 802.11g (typical at room temperature 25 °C) 17dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n (typical at room temperature 25 °C) 2.4GHz, HT20/HT40 17dBm at MCS0~7 5GHz, HT20/HT40 17dBm at MCS0~7 802.11ac (typical at room temperature 25 °C) VHT20 17dBm at MCS0~8 VHT40 17dBm at MCS0~9 VHT80 17dBm 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

- 802.11a (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C)
 - 93dBm at 6Mbps
 - 92dBm at 9Mbps
 - 91dBm at 12Mbps
 - 89dBm at 18Mbps
 - 85dBm at 24Mbps
 - 81dBm at 36Mbps
 - 77dBm at 48Mbps
 - 76dBm at 54Mbps

- 802.11b (typical at PER = 8% (1000-byte PDUs) at room temperature 25 °C)
 - 94dBm at 1, 2, 5.5Mbps
 - 91dBm at 11Mbps

- 802.11g (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C)
 - 89dBm at 6, 9, 12Mbps
 - 88dBm at 18Mbps
 - 85dBm at 24Mbps
 - 82dBm at 36Mbps
 - 77dBm at 48Mbps
 - 76dBm at 54Mbps

- 802.11n (typical at PER = 10% (1000-byte PDUs))
 - 2.4GHz, HT20
 - 89dBm at MCS0/1/8/9
 - 88dBm at MCS2/10
 - 84dBm at MCS3/11
 - 81dBm at MCS4/12
 - 76dBm at MCS5/13
 - 74dBm at MCS6/14
 - 73dBm at MCS7/15
 - 2.4GHz, HT40
 - 87dBm at MCS0/8
 - 86dBm at MCS1/9
 - 85dBm at MCS2/10
 - 81dBm at MCS3/11
 - 78dBm at MCS4/12
 - 73dBm at MCS5/13
 - 71dBm at MCS6/14
 - 70dBm at MCS7/15
 - 5GHz, HT20
 - 93dBm at MCS0/8/16
 - 90dBm at MCS1/9/17
 - 88dBm at MCS2/10/18
 - 84dBm at MCS3/11/19
 - 80dBm at MCS4/12/20
 - 76dBm at MCS5/13/21
 - 75dBm at MCS6/14/22
 - 73dBm at MCS7/15/23
 - 5GHz, HT40
 - 90dBm at MCS0/8/16
 - 88dBm at MCS1/9/17
 - 85dBm at MCS2/10/18
 - 81dBm at MCS3/11/19
 - 78dBm at MCS4/12/20
 - 73dBm at MCS5/13/21
 - 72dBm at MCS6/14/22
 - 71dBm at MCS7/15/23

Wireless Module Parameters	
	<ul style="list-style-type: none"> · 802.11ac (typical at PER = 10% (1000-byte PDUs)) HT20 <ul style="list-style-type: none"> -93dBm at MCS0 -90dBm at MCS1 -88dBm at MCS2 -84dBm at MCS3 -80dBm at MCS4 -76dBm at MCS5 -75dBm at MCS6 -73dBm at MCS7 -69dBm at MCS8 HT40 <ul style="list-style-type: none"> -90dBm at MCS0 -88dBm at MCS1 -85dBm at MCS2 -81dBm at MCS3 -78dBm at MCS4 -73dBm at MCS5 -72dBm at MCS6 -71dBm at MCS7 -66dBm at MCS8 -64dBm at MCS9 HT80 <ul style="list-style-type: none"> -87dBm at MCS0 -84dBm at MCS1 -81dBm at MCS2 -77dBm at MCS3 -73dBm at MCS4 -70dBm at MCS5 -68dBm at MCS6 -67dBm at MCS7 -63dBm at MCS8 -60dBm at MCS9
Modulation schemes	<ul style="list-style-type: none"> · 802.11a: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11b: DQPSK, DBPSK, CCK · 802.11g: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11n: BPSK, QPSK, 16QAM, 64QAM with OFDM · 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM with OFDM

Physical Parameters	
Dimensions (L x W x H)	· 240 x 199 x 69 mm (9.45 x 7.83 x 2.72 in)
Weight	· 750 g (1.65 lb)

Operating Environment	
Power	· Output: 12V DC, 2A
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-879 · Power adapter DC 12V/2A · Ethernet cable (CAT 5E) · "Quick Installation Guide" (brochure)