

Product Highlights

HIGH SPEED Total wireless connection rate up to 1200Mbps¹

EXTREME WI-FI PERFORMANCE MU-MIMO for best rates, 2 data streams for increased throughput

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-815

AC1200 Wave 2 MU-MIMO Wi-Fi Router with 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.

In order to use the multifunction USB port effectively, the router supports simultaneous operation of several USB devices. For example, you can access multimedia content of the connected HDD storage and at the same time share a USB printer.²

Wireless Interface

Using the DIR-815 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 1167Mbps¹).

Secure Wireless Connection

The router supports multiple functions for the wireless interface: several security standards (WEP, WPA/WPA2/WPA3), 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 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.

¹ Up to 300Mbps for 2.4GHz and up to 867Mbps for 5GHz.

² When using a USB hub with external power supply.



Security

The wireless router DIR-815 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.

Easy configuration and update

You can configure the settings of the wireless router DIR-815 via the user-friendly web-based interface (the interface is available in several languages).

The configuration wizard allows you to quickly switch DIR-815 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-815 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	· RTL8197FN (1GHz)
RAM	64MB, DDR2, built in processor
Flash	· 16MB, SPI
Interfaces	 10/100BASE-TX WAN port 4 10/100BASE-TX LAN ports USB 2.0 port
LEDs	 Power Internet 4 LAN LEDs 2.4G WLAN 5G WLAN WPS USB
Buttons	 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	Four external non-detachable antennas (5dBi gain)
МІМО	· 2 x 2, MU-MIMO
Power connector	Power input connector (DC)

Software	
WAN connection types	 LTE (via supported USB modem) 3G (via supported USB modem) 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	 Support of IEEE 802.1X for Internet connection DHCP server/relay Advanced configuration of built-in DHCP server 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 IPv4/IPv6 routing IGMP/MLD Proxy RIP Support of UPnP IGD Support of VLAN WAN ping respond Support of SIP ALG Support of RTSP WAN failover 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 XUPNPD plug-in



Software		
Firewall functions	 Network Address Translation (NAT) Stateful Packet Inspection (SPI) IPv4/IPv6 filter MAC filter URL filter DMZ Prevention of ARP and DDoS attacks Virtual servers 	
VPN	 IPsec/PPTP/L2TP/PPPoE pass-through IPsec tunnels IKEv1 support DES encryption NAT Traversal Support of DPD (Keep-alive for VPN tunnels) 	
USB interface functions	 USB modem Auto connection to available type of supported network (4G/3G/2G) Auto configuration of connection upon plugging in USB modem 	
Management and monitoring	 Local and remote access to settings through TELNET/WEB (HTTP/HTTPS) Multilingual web-based interface for configuration and management Support of D-Link Assistant application for Android and iPhone 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/connected USB storage Automatic synchronization of system time with NTP server and manual time/date setup Ping utility Traceroute utility TR-069 client Automatic reboot on schedule 	

Wireless Module Parameters	
Standards	 IEEE 802.11ac Wave 2 IEEE 802.11a/b/g/n
Frequency range The frequency range depends upon the radio frequency regulations applied in your country	 2400 ~ 2483.5MHz 5150 ~ 5350MHz 5650 ~ 5850 MHz
Wireless connection security	 WEP WPA/WPA2 (Personal/Enterprise) WPA3 (Personal) MAC filter WPS (PBC/PIN)



Wireless Module Parameters	
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 Rate limitation for wireless network/separate MAC addresses Periodic scan of channels, automatic switch to least loaded channel Support of 2.4GHz/5GHz TX Beamforming Autonegotiation of channel bandwidth in accordance with environment conditions (20/40 Coexistence) Support of STBC
Wireless connection rate	 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): from 6.5 to 300Mbps (MCS0–MCS15) IEEE 802.11n (5GHz): from 6.5 to 300Mbps (from MCS0 to MCS15) IEEE 802.11ac (5GHz): from 6.5 to 867Mbps (from MCS0 to MCS9)
Transmitter output power The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country	 802.11a (typical at room temperature 25 °C) 14dBm at 6, 9, 12, 18, 24Mbps 13dBm at 36Mbps 12.5dBm at 48Mbps 802.11b (typical at room temperature 25 °C) 15dBm at 1, 2, 5.5, 11Mbps 802.11g (typical at room temperature 25 °C) 15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n (typical at room temperature 25 °C) 2.4GHz, HT20 15dBm at MCS0/8~7/15 2.4GHz, HT20 15dBm at MCS0/8~7/15 5.GHz, HT20 14dBm at MCS0/8~7/15 5.GHz, HT20 14dBm at MCS0/8~7/15 5.GHz, HT40 14dBm at MCS0/8~7/15 5.GHz, HT40 14dBm at MCS0/8~2/10 13dBm at MCS5/13~6/14 12dBm at MCS5/13~6/14 12dBm at MCS5/13~6/14 12dBm at MCS5/15 802.11ac (typical at room temperature 25 °C) VHT20 14dBm at MCS0/8~2/10 13dBm at MCS5/15 2.2dBm at MCS5/13~6/14 12dBm at MCS7/15 802.11ac (typical at room temperature 25 °C) VHT20 14dBm at MCS0~4 13dBm at MCS6 12dBm at MCS3~4 12dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7/8 VHT40 14dBm at MCS7 11dBm at MCS7/8



Wireless Module Parameters		
Receiver sensitivity	 802.11a (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 -65dBm at 54Mbps 802.11b (typical at PER = 8% (1000-byte PDUs) at room temperature 25 °C) 	
	-80dBm at 1Mbps -80dBm at 2Mbps -76dBm at 5.5Mbps -76dBm at 11Mbps	
	 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 	
	 802.11n (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C) 2.4GHz, HT20 -82dBm at MCS0/8 -79dBm at MCS1/9 -77dBm at MCS2/10 -74dBm at MCS3/11 -70dBm at MCS4/12 -66dBm at MCS5/13 -65dBm at MCS6/14 -64dBm at MCS7/15 2.4GHz, HT40 -79dBm at MCS0/8 -76dBm at MCS1/9 -74dBm at MCS3/11 -64Bm at MCS1/9 -74dBm at MCS3/11 	
	-63dBm at MCS5/13 -62dBm at MCS6/14 -61dBm at MCS7/15 5GHz, HT20 -82dBm at MCS0/8 -79dBm at MCS1/9 -77dBm at MCS2/10 -74dBm at MCS2/10 -74dBm at MCS3/11 -70dBm at MCS4/12 -66dBm at MCS4/13 -65dBm at MCS6/14 -64dBm at MCS7/15 5GHz, HT40	
	-79dBm at MCS0/8 -76dBm at MCS1/9 -74dBm at MCS2/10 -71dBm at MCS3/11 -67dBm at MCS4/12 -63dBm at MCS5/13 -62dBm at MCS6/14 -61dBm at MCS7/15	



Wireless Module Parameters	
	 802.11ac (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C) HT20 82dBm at MCS0 -79dBm at MCS1 -77dBm at MCS2 -74dBm at MCS3 -70dBm at MCS4 -66dBm at MCS6 -64dBm at MCS7 -56dBm at MCS0 -76dBm at MCS1 -74dBm at MCS2 -71dBm at MCS2 -71dBm at MCS3 -67dBm at MCS5 -65dBm at MCS5 -62dBm at MCS5 -62dBm at MCS3 -76dBm at MCS1 -74dBm at MCS3 -67dBm at MCS5 -62dBm at MCS5 -62dBm at MCS5 -62dBm at MCS5 -62dBm at MCS6 -61dBm at MCS7 -56dBm at MCS1 -76dBm at MCS2 -71dBm at MCS2 -76dBm at MCS3 -62dBm at MCS4 -63dBm at MCS5 -62dBm at MCS4 -63dBm at MCS5 -62dBm at MCS6 -61dBm at MCS3 -64dBm at MCS4 -600Bm at MCS4 -60dBm at
Modulation schemes	 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 with OFDM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM

Physical Parameters	

Operating Environment	
Power	Output: 12V DC, 1A
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)

Delive	Delivery Package		
	Router DIR-815		
	Power adapter DC 12V/1A		
	Ethernet cable		
	"Quick Installation Guide" (brochure)		



Supported USB modems	
GSM	· Alcatel X500
	D-Link DWM-152C1
	D-Link DWM-156A6
	D-Link DWM-156A7
	D-Link DWM 156A8
	D-Link DWM-156C1
	D-Link DWM-157B1
	D-Link DWM-157B1 (Velcom)
	· D-Link DWM-158D1
	D-Link DWR-710
	· Huawei E150
	· Huawei E1550
	· Huawei E156G
	· Huawei E160G
	· Huawei E169G
	· Huawei E171
	· Huawei E173 (Megafon)
	· Huawei E220
	 Huawei E3131 (MTS 420S)
	Huawei E352 (Megafon)
	· Huawei E3531
	Prolink PHS600
	Prolink PHS901
	· ZTE MF112
	· ZTE MF192
	· ZTE MF626
	· ZTE MF627
	· ZTE MF652
	· ZTE MF667
	· ZTE MF668
	· ZTE MF752

⁴ The manufacturer does not guarantee proper operation of the router with every modification of the firmware of USB modems.



Supported USB modems	
Supported USB modems LTE	 Alcatel IK40V D-Link DWM-222 Huawei E3131 Huawei E3272 Huawei E3351 Huawei E3372s Huawei E3372h-153 Huawei E3372h-320 Huawei E367 Huawei E367 Huawei E392 Megafon M100-1 Megafon M100-1 Megafon M100-2 Megafon M100-3 Megafon M100-4 Megafon M150-1 Megafon M150-1 Megafon M150-2 Megafon M150-3 Quanta 1K6E (Beeline 1K6E) MTS 824F MTS 827F Yota ULU50 Yota WLTUBA-107 ZTE MF823 ZTE MF827
Smartphones in USB tethering mode	ZTE MF833T ZTE MF833V Some models of Android smartphones

