

Product Highlights

HIGH SPEED

Gigabit Ethernet ports,
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



DIR-825

AC1200 Wave 2 MU-MIMO Wi-Fi EasyMesh Gigabit Router

Features

High-Speed Connectivity

- 802.11ac wireless specification delivers blazing fast wireless connectivity with increased range and reliability
- 10/100/1000 Gigabit Ethernet WAN port for fastpaced Internet access
- Four 10/100/1000 Gigabit Ethernet LAN ports give you high-speed wired connectivity

Flexible Bandwidth

- Concurrent dual-band wireless for connections up to 1200 Mbps¹
- QoS engine to prioritize important traffic and deliver uninterrupted bandwidth

Setup and Management

- Web browser-based setup and configuration
- Intuitive setup wizard to guide you through the configuration process
- Firewall and access control options to prevent attacks and restrict access to your network

Wireless Interface

Using the DIR-825 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

The EasyMesh function is D-Link implementation of mesh networks designed to quickly connect several² devices into one transport network, for example, when it's required to provide high-quality Wi-Fi coverage without dead zones in living units of complicated planning or it's needed to create a large temporary Wi-Fi network for an outdoor event. 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

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

² Up to 6 devices.

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.

Security

The wireless router DIR-825 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.

Now the schedules are also implemented; they can be applied to the rules and settings of the firewall and used to reboot the router at the specified time or every specified time period and to enable/disable the wireless network and the Wi-Fi filter. The new ad blocking function effectively blocks advertisements which appear during web surfing.

Advanced Capabilities of Wireless Network

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

The configuration wizard allows you to quickly switch DIR-825 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 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"> RTL8197FH-VG (1GHz)
RAM	<ul style="list-style-type: none"> 128MB, DDR2, built in processor
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"> RESET button to restore factory default settings WPS button to connect mesh network devices, set up wireless connection, and enable/disable wireless network
Antenna	<ul style="list-style-type: none"> Four external non-detachable antennas (5dBi gain)
MIMO	<ul style="list-style-type: none"> 2 x 2, 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"> 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
Firewall functions	<ul style="list-style-type: none"> Network Address Translation (NAT) Stateful Packet Inspection (SPI) IPv4/IPv6 filter MAC filter URL filter Ad blocking function DMZ Virtual servers Built-in Yandex.DNS web content filtering service
VPN	<ul style="list-style-type: none"> IPsec/PPTP/L2TP/PPPoE pass-through PPTP/L2TP tunnels L2TP over IPsec IPsec tunnels Transport/Tunnel mode IKEv1/IKEv2 support DES encryption NAT Traversal Support of DPD (Keep-alive for VPN tunnels)

<p>Management and monitoring</p>	<ul style="list-style-type: none"> Local and remote access to settings through SSH/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 Automatic synchronization of system time with NTP server and manual time/date setup Ping utility Traceroute utility TR-069 client Schedules for rules and settings of firewall, automatic reboot, and enabling/disabling wireless network and Wi-Fi filter
<p>Wireless Module Parameters</p>	
<p>Standards</p>	<ul style="list-style-type: none"> IEEE 802.11ac Wave 2 IEEE 802.11a/b/g/n IEEE 802.11k/v IEEE 802.11w
<p>Frequency range</p> <p><i>The frequency range depends upon the radiofrequency regulations applied in your country</i></p>	<ul style="list-style-type: none"> 2400 ~ 2483.5MHz 5150 ~ 5350MHz 5650 ~ 5850MHz
<p>Wireless connection security</p>	<ul style="list-style-type: none"> WEP WPA/WPA2 (Personal/Enterprise) WPA3 (Personal) MAC filter WPS (PBC)
<p>Advanced functions</p>	<ul style="list-style-type: none"> EasyMesh function Support of client mode WMM (Wi-Fi QoS) Information on connected Wi-Fi clients Advanced settings 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 5GHz TX Beamforming Auto negotiation of channel bandwidth in accordance with environment conditions (20/40Coexistence) Support of STBC
<p>Wireless connection rate</p>	<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/5GHz): from 6.5 to 300Mbps (MCS0–MCS15) IEEE 802.11ac (5GHz): from 6.5 to 867Mbps
<p>Transmitter output power</p> <p>The maximum value of the transmitter output power depends upon the radio frequency regulations applied in your country</p>	<ul style="list-style-type: none"> 802.11a (typical at room temperature 25 °C) 15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps 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 MCS0–7 2.4GHz, HT40 15dBm at MCS0–7 5GHz, HT20 15dBm at MCS0–7 5GHz, HT40 15dBm at MCS0–7 802.11ac (typical at room temperature 25 °C) VHT20 15dBm at MCS0–8 VHT40 15dBm at MCS0–9 VHT80 15dBm at MCS0–9

<p>Receiver sensitivity</p>	<ul style="list-style-type: none"> • 802.11a (typical at PER < 10% (1000-byte PDUs) at room temperature 25 °C) <ul style="list-style-type: none"> -95dBm at 6Mbps -93dBm at 9Mbps -92dBm at 12Mbps -90dBm at 18Mbps -87dBm at 24Mbps -84dBm at 36Mbps -80dBm at 48Mbps -78dBm at 54Mbps • 802.11b (typical at PER = 8% (1000-byte PDUs) at room temperature 25 °C) <ul style="list-style-type: none"> -90dBm at 1Mbps -92dBm at 2Mbps -93dBm at 5.5Mbps -96dBm at 11Mbps • 802.11g (typical at PER < 10% (1000-byte PDUs) at room temperature 25 °C) <ul style="list-style-type: none"> -94dBm at 6Mbps -92dBm at 9Mbps -90dBm at 12Mbps -89dBm at 18Mbps -87dBm at 24Mbps -84dBm at 36Mbps -80dBm at 48Mbps -77dBm at 54Mbps • 802.11n (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C) <ul style="list-style-type: none"> 2.4GHz, HT20 <ul style="list-style-type: none"> -95dBm at MCS0 -91dBm at MCS1 -88dBm at MCS2 -86dBm at MCS3 -82dBm at MCS4 -79dBm at MCS5 -77dBm at MCS6 -75dBm at MCS7 2.4GHz, HT40 <ul style="list-style-type: none"> -92dBm at MCS0 -89dBm at MCS1 -86dBm at MCS2 -83dBm at MCS3 -80dBm at MCS4 -77dBm at MCS5 -74dBm at MCS6 -72dBm at MCS7 5GHz, HT20 <ul style="list-style-type: none"> -95dBm at MCS0 -93dBm at MCS1 -90dBm at MCS2 -87dBm at MCS3 -83dBm at MCS4 -79dBm at MCS5 -77dBm at MCS6 -75dBm at MCS7 5GHz, HT40 <ul style="list-style-type: none"> -92dBm at MCS0 -89dBm at MCS1 -86dBm at MCS2 -83dBm at MCS3 -80dBm at MCS4 -76dBm at MCS5 -74dBm at MCS6 -72dBm at MCS7
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	<ul style="list-style-type: none"> 802.11ac (typical at PER = 10% (1000-byte PDUs) at room temperature 25 °C) VHT20 -95dBm at MCS0 -92dBm at MCS1 -90dBm at MCS2 -86dBm at MCS3 -83dBm at MCS4 -79dBm at MCS5 -77dBm at MCS6 -75dBm at MCS7 -71dBm at MCS8 VHT40 -92dBm at MCS0 -89dBm at MCS1 -87dBm at MCS2 -84dBm at MCS3 -80dBm at MCS4 -76dBm at MCS5 -74dBm at MCS6 -72dBm at MCS7 -68dBm at MCS8 -66dBm at MCS9 VHT80 -89dBm at MCS0 -86dBm at MCS1 -83dBm at MCS2 -80dBm at MCS3 -77dBm at MCS4 -73dBm at MCS5 -71dBm at MCS6 -69dBm at MCS7 -66dBm at MCS8 -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 with OFDM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM
Physical Parameters	
Dimensions (L x W x H)	<ul style="list-style-type: none"> 177 x 139 x 50 mm (6.97 x 5.47 x 1.97 in)
Operating Environment	
Power	<ul style="list-style-type: none"> Output: 12V DC, 1A
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-825 Power adapter DC 12V/1A Ethernet cable "Quick Installation Guide" (brochure) 	