

## Product Highlights

### FLEXIBLE MOBILE BROADBAND

3G/4G connectivity for broadband mobile connection

### IPV6 SUPPORT

All needed functions for up-to-date networking

### SECURITY

Multiple firewall functions, several security standards for wireless connection



## DWR-921

### 4G LTE Router

#### Built-in LTE Modem

The router is equipped with a built-in LTE modem which provides 3G/4G mobile connection with fast downlink speeds of up to 150Mbps and uplink speeds of up to 50Mbps.<sup>1</sup>

#### LAN/WAN Conversion, WAN Failover

You can use any Ethernet port of the router as LAN or WAN port. The new-generation firmware supports assigning several WAN ports, for example, in order to configure the primary and backup WAN connection of different ISPs. In addition, you can configure the WAN failover using the built-in LTE modem.

#### Wireless Interface

Using the DWR-921 device, you are able to quickly create a 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). The router can operate as a base station for connecting wireless devices of the standards 802.11b, 802.11g, and 802.11n (at the wireless connection rate up to 300Mbps).

#### 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

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.

<sup>1</sup> Data rates are theoretical. Data transfer rate depends on network capacity and signal strength.

### **Security**

The wireless router DWR-921 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.

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

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.

### **Easy configuration and update**

You can configure the settings of the wireless router DWR-921 via the user-friendly web-based interface (the interface is available in several languages).

The configuration wizard allows you to quickly switch DWR-921 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 DWR-921 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>MT7620N (600MHz)</li> </ul>  |
| RAM             | <ul style="list-style-type: none"> <li>64MB, DDR1 RAM</li> </ul>  |
| Flash           | <ul style="list-style-type: none"> <li>16MB, SPI</li> </ul>   |
| Built-in modem  | <ul style="list-style-type: none"> <li>BroadMobi BM806U-E1</li> </ul>   |
| Interfaces      | <ul style="list-style-type: none"> <li>Slot for SIM card (mini-SIM)</li> <li>10/100BASE-TX WAN port</li> <li>4 10/100BASE-TX LAN ports</li> </ul>   |
| LEDs            | <ul style="list-style-type: none"> <li>SIGNAL STRENGTH</li> <li>SMS</li> <li>LAN</li> <li>POWER</li> <li>2G/3G</li> <li>4G</li> <li>WLAN</li> </ul>   |
| Buttons         | <ul style="list-style-type: none"> <li>POWER ON/OFF button to power on/power off</li> <li>WPS button to set up wireless connection</li> <li>RESET button to restore factory default settings</li> </ul> |
| Antenna         | <ul style="list-style-type: none"> <li>Two detachable LTE/3G antennas (3dBi gain)</li> <li>Two internal Wi-Fi antennas (3dBi gain)</li> </ul>   |
| MIMO            | <ul style="list-style-type: none"> <li>2 x 2</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>Mobile Internet</li> <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> <li>L2TP Dual Stack</li> <li>IPIP6 in DSLite mode</li> <li>6in4</li> <li>6to4</li> <li>6rd</li> </ul>  |
| Network functions    | <ul style="list-style-type: none"> <li>DHCP server/relay</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</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>LAN/WAN conversion</li> <li>Multi-WAN support</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> <li>Port mirroring</li> </ul> |

| Software                         |   |
|----------------------------------|---|
| <b>Firewall functions</b>        | <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 SkyDNS web content filtering service</li> </ul>  |
| <b>VPN</b>                       | <ul style="list-style-type: none"> <li>• IPsec/PPTP/L2TP/PPPoE pass-through</li> <li>• PPTP/L2TP tunnels</li> <li>• L2TP over IPsec</li> <li>• GRE/EoGRE tunnels</li> <li>• IPsec tunnels<br/>Transport/Tunnel mode</li> <li>• IKEv1/IKEv2 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 SSH/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>• Schedules for rules and settings of firewall, automatic reboot, and enabling/disabling wireless network and Wi-Fi filter</li> <li>• Automatic upload of configuration file from ISP's server (Auto Provision)</li> <li>• Configuration of action for hardware buttons</li> </ul> |

| LTE Module Parameters                    |   |
|--|---|
| <b>LTE connection rate<sup>2</sup></b>   | <ul style="list-style-type: none"> <li>• Downlink: up to 150Mbps</li> <li>• Uplink: up to 50Mbps</li> </ul>   |
| <b>Supported frequencies<sup>3</sup></b> | <ul style="list-style-type: none"> <li>• Power Class 3</li> <li>• LTE<br/>Band: TX / RX<br/>B1: 1920~1980MHz / 2110~2170MHz<br/>B2: 1850~1910MHz / 1930~1990MHz<br/>B3: 1710~1785MHz / 1805~1880MHz<br/>B5: 824~849MHz / 869~894MHz<br/>B7: 2500~2570MHz / 2620~2690MHz<br/>B8: 880~915MHz / 925~960MHz<br/>B20: 832~862MHz / 791~821MHz<br/>B38: 2570~2620MHz / 2570~2620MHz<br/>B40: 2300~2400MHz / 2300~2400MHz</li> <li>• UMTS<br/>B1/2/3/5/8 (2100/1900/1800/850/900MHz)</li> <li>• GSM/GPRS<br/>850/900/1800/1900MHz</li> </ul>     |
| <b>Functions</b>                         | <ul style="list-style-type: none"> <li>• Auto connection to available type of supported network (4G/3G/2G)</li> <li>• Auto configuration of connection upon plugging in SIM card</li> <li>• Enabling/disabling PIN code check, changing PIN code</li> <li>• Sending/receiving/reading/removing SMS messages</li> <li>• Support of USSD requests (For DWR-921 with the built-in modem FW version M1.4.4_E1.0.3_A1.1.8. See the data on the modem FW version in the web-based interface of the router, on the "LTE Modem" page.)</li> </ul> |

<sup>2</sup> Data rates are theoretical. Data transfer rate depends on network capacity and signal strength.

<sup>3</sup> Supported frequency bands are dependent on regional variants.

| Wireless Module Parameters   |   |
|--|---|
| <b>Standards</b>   | <ul style="list-style-type: none"> <li>IEEE 802.11b/g/n</li> </ul>  |
| <b>Frequency range</b>   | <ul style="list-style-type: none"> <li>2400 ~ 2483.5MHz</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>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> <li>Support of STBC</li> </ul> |
| <b>Wireless connection rate</b>  | <ul style="list-style-type: none"> <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: from 6.5 to 300Mbps (from MCS0 to MCS15)</li> </ul>   |
| <b>Transmitter output power</b><br><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"> <li>15dBm</li> </ul>   |
| <b>Receiver sensitivity</b>  | <ul style="list-style-type: none"> <li>802.11b<br/>-86dBm at 11Mbps</li> <li>802.11g<br/>-81dBm at 54Mbps</li> <li>802.11n<br/>HT20<br/>-71dBm at MCS7/15<br/>HT40<br/>-67dBm at MCS7/15</li> </ul>   |
| <b>Modulation schemes</b>  | <ul style="list-style-type: none"> <li>802.11b: DSSS, BPSK, QPSK, CCK</li> <li>802.11g: OFDM</li> <li>802.11n: OFDM</li> </ul>  |

| Physical Parameters           |  |
|-------------------------------|--|
| <b>Dimensions (L x W x H)</b> | <ul style="list-style-type: none"> <li>190 x 112 x 22 mm (7.5 x 4.4 x 0.9 in)</li> </ul> |
| <b>Weight</b>                 | <ul style="list-style-type: none"> <li>295 g (0.7 lb)</li> </ul>                         |

| Operating Environment |   |
|-----------------------|---|
| <b>Power</b>          | <ul style="list-style-type: none"> <li>Output: 12V DC, 1A</li> </ul>  |
| <b>Temperature</b>    | <ul style="list-style-type: none"> <li>Operating: from 0 to 40 °C</li> <li>Storage: from -10 to 70 °C</li> </ul>                                |
| <b>Humidity</b>       | <ul style="list-style-type: none"> <li>Operating: from 10% to 90% (non-condensing)</li> <li>Storage: from 0% to 95% (non-condensing)</li> </ul> |

| Delivery Package   |  |
|--|--|
| <ul style="list-style-type: none"> <li>Router DWR-921</li> <li>Power adapter DC 12V/1A</li> <li>Ethernet cable (CAT 5)</li> <li>Two detachable LTE/3G antennas</li> <li>"Quick Installation Guide" (brochure)</li> </ul> |  |