

### **Product Highlights**

FLEXIBLE MOBILE BROADBAND

**3G/4G connectivity for broadband mobile connection** 

#### **ROBUST DESIGN**

Zinc-plated steel case, wide range of operating temperatures

IPV6 SUPPORT

All needed functions for up-to-date networking

SECURITY

Multiple firewall functions, PPTP/L2TP/L2TPv3/GRE/EoIP/IPsec tunnels



# **DWM-312W**

## 4G LTE Wireless M2M Router with one module for two SIM cards

#### **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 DWM-312W device, you are able to quickly create a wireless network, 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 rate up to 150Mbps).

#### **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 router DWM-312W 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.

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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 router DWM-312W via the user-friendly web-based interface (the interface is available in several languages).

The fast and easy configuration wizard allows you to specify all needed parameters in several simple steps.

Also DWM-312W 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	· MT7620A (580MHz)
RAM	· 128MB, SDRAM DDR2
Flash	· 32MB, SPI
Built-in modem	· Quectel EC25-E
Interfaces	<ul> <li>10/100BASE-TX WAN/LAN port</li> <li>10/100BASE-TX LAN port</li> <li>2 slots for SIM card (mini-SIM)</li> <li>Terminal block with DI-1, DI-2, DO, Rx, Tx, GND pins</li> </ul>
LEDs	PWR     INTERNET     SIGNAL     SIM A / SIM B
Buttons	RESET button to restore factory default settings
Antenna	<ul> <li>Two detachable LTE/3G antennas (3dBi gain)</li> <li>One detachable Wi-Fi antenna (5dBi gain)</li> <li>Two SMA Female connectors for LTE/3G antennas</li> <li>One SMA Male connector for Wi-Fi antenna</li> </ul>
Power connector	· Power input connector (DC)
Mounting	Desktop     Wall     DIN rail
Housing	· Metal
Software	
WAN connection types	<ul> <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> </ul>

- PPPoE + Dynamic IP (PPPoE Dual Access)
- PPTP/L2TP + Static IP
- PPTP/L2TP + Dynamic IP
   IPIP6 in DSLite mode
  - · 6in4
- · 6to4

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## **DWM-312W**

Software		
Network functions	<ul> <li>DHCP server/relay</li> <li>Advanced configuration of built-in DHCP server</li> <li>Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation</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>Equal load distribution while using several WAN connections (traffic balancing)</li> <li>Port mirroring</li> <li>Wake-on-LAN support</li> </ul>	
Firewall functions	Network Address Translation (NAT)     Stateful Packet Inspection (SPI)     IPv4/IPv6 filter     MAC filter     URL filter     DMZ     Virtual servers     Built-in SkyDNS web content filtering service	
VPN	<ul> <li>IPsec/PPTP/L2TP/PPPoE pass-through</li> <li>PPTP/L2TP servers</li> <li>PPTP/L2TP tunnels</li> <li>L2TP over IPsec client</li> <li>GRE/EoGRE/EoIP/L2TPv3 tunnels</li> <li>IPsec tunnels</li> <li>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>	
Management and monitoring	<ul> <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	
LTE connection rate <sup>2</sup>	<ul> <li>Downlink: up to 150Mbps</li> <li>Uplink: up to 50Mbps</li> </ul>
Supported frequencies <sup>3</sup>	<ul> <li>LTE Cat. 4: 1/3/5/7/8/20/38/40/41</li> <li>UMTS/HSPA: 1/5/8, 850/900/2100MHz</li> <li>GSM/GPRS/EDGE: 900/1800MHz</li> </ul>
Functions	<ul> <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</li> </ul>

Wireless Module Parameters	
Standards	· IEEE 802.11b/g/n
<b>Frequency range</b> The frequency range depends upon the radio frequency regulations applied in your country	· 2400 ~ 2483.5MHz
Wireless connection security	<ul> <li>WEP</li> <li>WPA/WPA2 (Personal/Enterprise)</li> <li>MAC filter</li> <li>WPS (PBC/PIN)</li> </ul>
Advanced functions	<ul> <li>"Client" function</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> </ul>
Wireless connection rate	<ul> <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: 6.5–150Mbps (MCS0–MCS7)</li> </ul>

Physical Parameters	
Dimensions (L x W x H)	· 134 x 76 x 32 mm (5.28 x 2.99 x 1.26 in)
Weight	· 500 g (1.1 lb)

Operating Environment	
Power	· Output: from 9V / 2A to 36V / 0.7A DC
Temperature	<ul> <li>Operating: from -20 to 60 °C</li> <li>Storage: from -30 to 80 °C</li> </ul>
Humidity	<ul> <li>Operating: from 10% to 90% (non-condensing)</li> <li>Storage: from 5% to 95% (non-condensing)</li> </ul>

#### **Delivery Package**

- Router DWM-312W .
- Two detachable LTE/3G antennas
- One detachable Wi-Fi antenna .
- Power adapter DC 12V/1A .
- "Quick Installation Guide" (brochure) .
- Mounting kit (optional) .

Data rates are theoretical. Data transfer rate depends on network capacity and signal strength. Supported frequency bands are dependent on regional variants. 2 3



## **DWM-312W**

4G LTE Wireless M2M Router with one module for two SIM cards

Compatible Equipment	
ANT24-0800	Outdoor omni-directional antenna 2,4GHz, 8dBi, N Plug
ANT24-0801	Outdoor directional antenna 2,4GHz, 8dBi, N Plug
ANT24-0802C	Omni-directional antenna 2,4GHz, 8dBi, RP-SMA
ANT24-1201	Outdoor directional antenna 2,4GHz, 12dBi, N Plug
ANT24-2100	Outdoor directional antenna 2,4GHz, 21dBi, N Plug
ANT70-0800	Outdoor omni-directional antenna 2,4GHz, 8/10dBi, N Plug
ANT70-1400N	Triple polarization outdoor directional antenna 2,4/5GHz, 11/12dBi, 3xN Jack
ANT70-1800	Outdoor directional antenna 2,4/5GHz, 14/18dBi, N Plug
ANT24-CB01N⁴	0.5 m conversion cable with N Jack and RP-SMA Plug for antenna
ANT24-CB03N⁴	3 m extension cable with N Plug and N Jack for antenna
ANT24-CB06N⁴	6 m extension cable with N Plug and N Jack for antenna
ANT24-CB09N⁴	9 m extension cable with N Plug and N Jack for antenna
ANT-SP⁴	Lightning surge protector for ANT24/ANT50/ANT70 antennas, N Plug/ N Jack

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