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DWM-312W

4G LTE M2M Router

Features

Connectivity

• Blazing fast LTE speeds of up to 150 Mbps[1]
• Fast Ethernet for broad compatibility
• Dual-SIM for high reliability

Simplicity

• Plug-and-play with Ethernet interface
• Easy-to-use web interface for advanced cases

Advanced VPN and Management Features

• Support for IPSec and GRE tunneling

Sturdy and Flexible

• Wide operating temperature and humidity tolerance
• Wall mounts allow optimal placement

The D-Link DWM-312W 4G LTE M2M Router is an easy-to-deploy, high performance 3G/4G router. It features a dedicated fast Ethernet port and dual-SIM 4G LTE mobile broadband for maximum redundancy and flexibility for intense machine to machine applications. Powerful VPN tools and advanced remote management combined with ease of use makes the DWM-312W ideal for both large-scale and individual deployments.

Connectivity Where You Need It Most

Easily connect to your high-speed 3G/4G LTE mobile connection with the DWM-312W, and enjoy fast downlink speeds of up to 150 Mbps[1] and uplink speeds up to 50 Mbps[1], giving you the speed you need for fast, responsive Internet access. Deploy it in a strategic location to access IP cameras and systems remotely. The blazing fast LTE connection allows multiple users to access e-mail, stream music and watch videos on the go. Configurable dual-SIM fallback provides reliability and flexibility in mixed network environments.
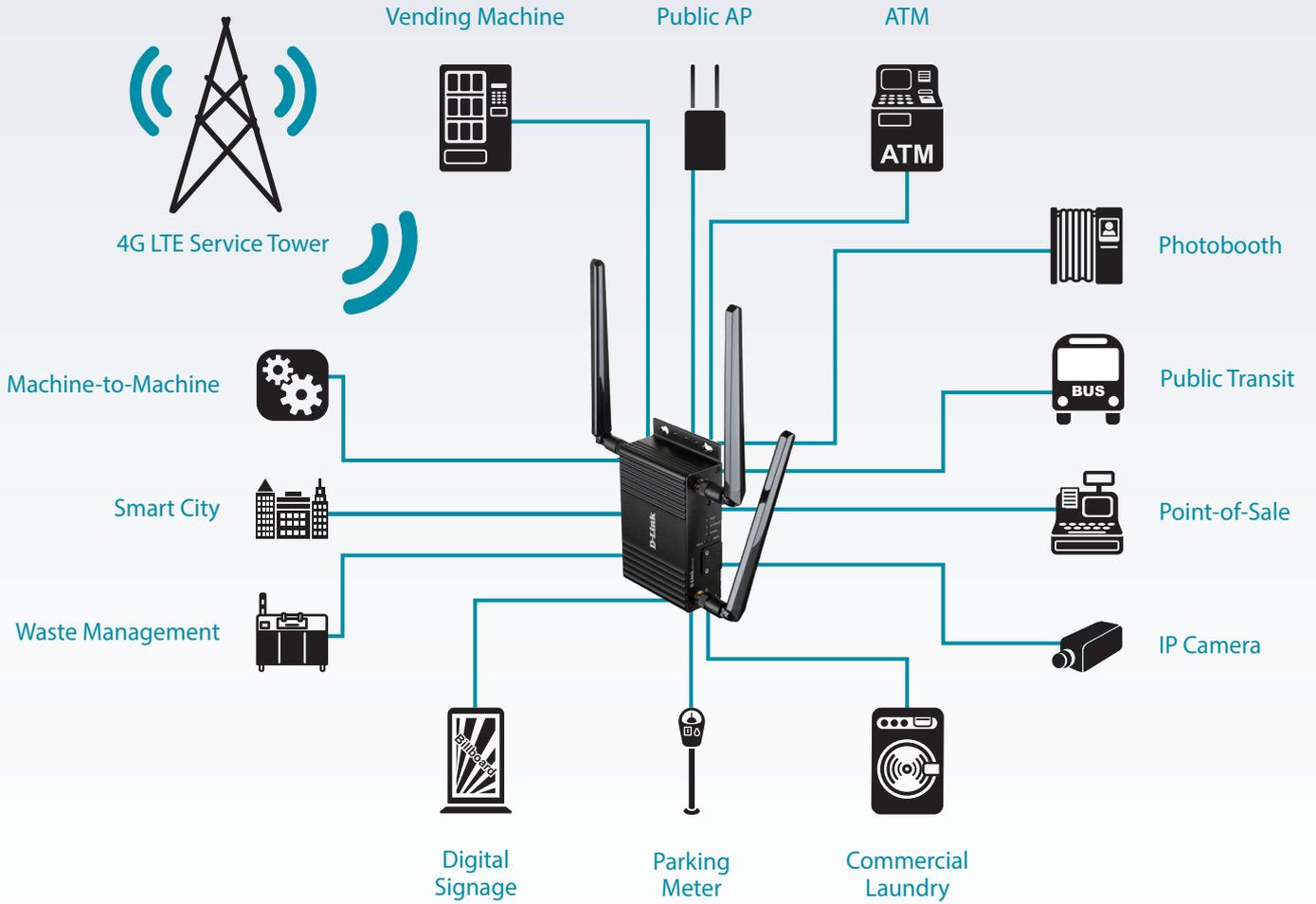
Reliable High Speed Virtual Private Networks

The DWM-312W 4G LTE M2M Router's integrated VPN client and server is compatible with almost any VPN policy. The router's hardware engine can support and manage multiple VPN configurations. It supports IPSec and GRE protocols, and handles pass-through traffic as well. Advanced VPN configuration settings include multiple encryption options, key management, negotiation modes, and VPN authentication using an internal user database.
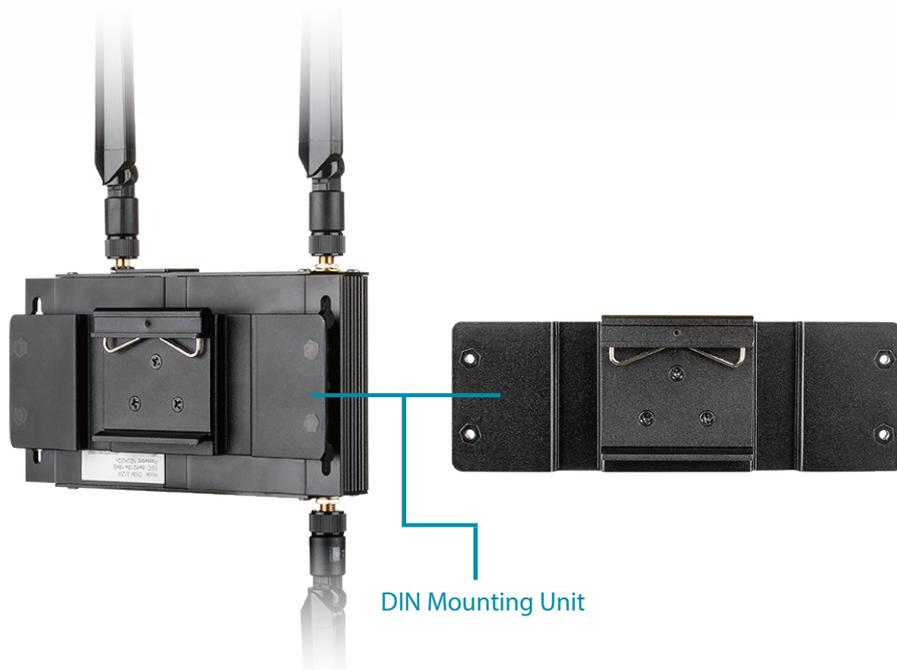
Robust

The industrial grade casing means the DWM-312W provides reliable high-speed connectivity in extreme conditions. The corrosion-resistant case, wide operating temperature and humidity tolerance means that the DWM-312W is ready for the most demanding M2M applications in virtually any environment. Equipped with wall and DIN rail mounting configurations, the DWM-312W can be installed practically anywhere for optimal connectivity. Flexible power input allows the router to operate under any convenient power source.
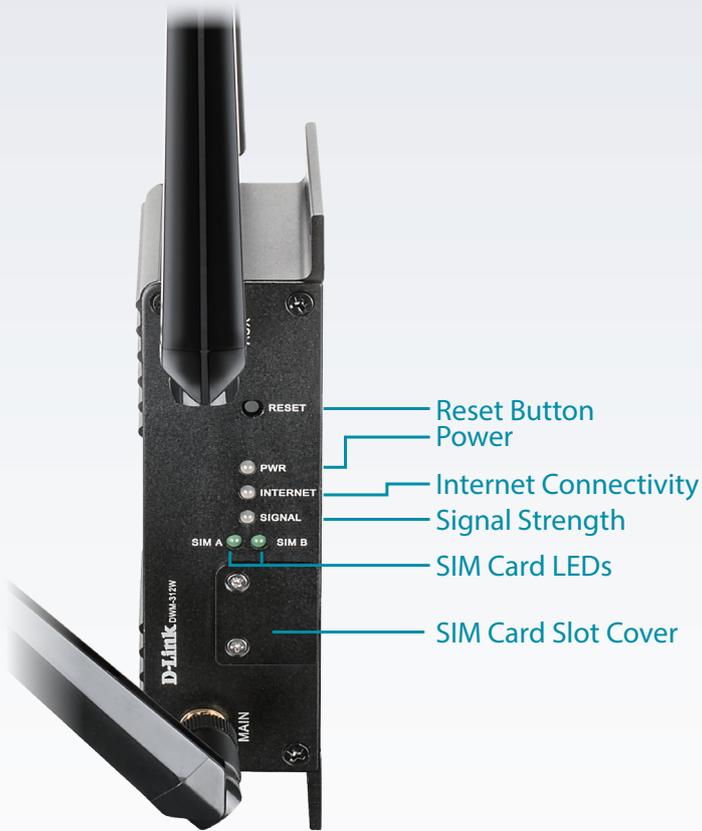
Sample Applications

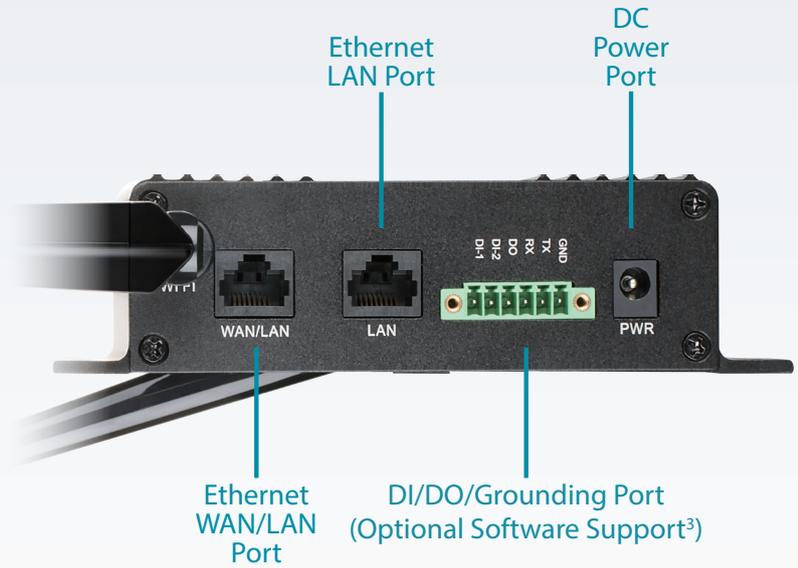Vending Machine

Public AP

ATM

4G LTE Service Tower

Photobooth

Machine-to-Machine

Public Transit

BUS

Smart City

Point-of-Sale

Waste Management

IP Camera

Digital Signage

Parking Meter

Commercial Laundry

DIN Mounting

DIN Mounting Unit

Right Panel

- RESET — Reset Button
- PWR — Power
- INTERNET — Internet Connectivity
- SIGNAL — Signal Strength
- SIM A / SIM B — SIM Card LEDs
- SIM Card Slot Cover

Left Panel

- Ethernet LAN Port
- DC Power Port
- Ethernet WAN/LAN Port
- DI/DO/Grounding Port (Optional Software Support[3])

Dual-SIM Slots

- SIM A
- SIM B

Technical Specifications

General

Mobile Network Support[2]	• LTE Cat. 4 Bands 1/3/5/7/8/20/38/40/41 • UMTS/HSPA 1/5/8, 850/900/2100 Mhz	• GSM/GPRS/EDGE: 900/1800 MHz
Data Throughput[1]	• LTE Throughput • Up to 150 Mbps down / 50 Mbps up	• HSPDA-DC up to 42 Mbps down / 5.76 Mbps up • EDGE up to 236.8 Kbps
Device Interfaces	• 1 x 10/100 Fast Ethernet WAN/LAN port • 1 x 10/100 Fast Ethernet LAN port • 1 x 5.5 mm DC input	• 3 x SMA antenna connectors: 2 LTE+1 Wi-Fi • Dual standard 2FF SIM slot • DI/DO/Grounding ports
Wi-Fi	• 802.11n/g/b • 1x1	• Operates on the 2.4 GHz band
Standards	• IEEE 802.3i	• IEEE 802.3u
Advanced Features	• IPSec VPN Client/Server modes • Firmware upgrades via FOTA	• Web-based UI

Software

WAN Connection Types	• Mobile Internet • 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	• DHCP server/relay • Advanced configuration of built-in DHCP server • Stateful/Stateless mode for IPv6 address assignment, IPv6 prefix delegation • DNS relay • Dynamic DNS • Static IPv4/IPv6 routing • Dynamic routing via OSPFv2	• Support of BGP (multiple instances, RouteMap, AccessList, PrefixList) • Support of UPnP IGD • 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
Wireless Security	• 802.11 128-bit AES encryption • MAC filter	• WPS (PBC/PIN)
Firewall Functions	• Network Address Translation (NAT) • Stateful Packet Inspection (SPI) • IP filter • IPv6 filter	• MAC filter • URL filter • DMZ • Virtual servers
VPN	• IPsec/PPTP/L2TP/PPPoE passthrough • L2TP over IPSec • PPTP/L2TP servers • PPTP/L2TP/GRE tunnels • IPsec tunnels	• Transport/Tunnel mode • IKEv1/IKEv2 support • DES encryption • NAT Traversal • Support of DPD (Keep-alive for VPN tunnels)

QoS	• SW QoS
	• Classifications
		• Algorithms:
		  • Traffic marking (DSMARK)
		  • Weighted queues (HTB or WFQ)
		  • Ordinary queues (PRIO)
		  • Shaper (TBF)

Advanced Wireless Functions	• Client functionality • WMM (Wi-Fi QoS) • Information on connected Wi-Fi clients • Advanced settings • Guest Wi-Fi / MBSSID support	• Periodic scanning of channels, automatic switching to least-loaded channel • Auto negotiation of channel bandwidth in accordance with environment conditions (20/40 coexistence)

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LTE Module Functions	• Auto connection to available supported networks (4G/3G) • Auto configuration upon plugging in a SIM card • Enabling/disabling PIN code check	• Support for changing PIN code • Sending/receiving/reading/deleting SMS messages • Support of USSD requests
Management and Monitoring	• Local and remote access to settings through SSH/TELNET/WEB (HTTP/HTTPS) • 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 • SNMP agent (SNMPv2/v3) • FOTA • Automatic upload of configuration file from ISP's server (Auto Provision)

Physical

LED Status Indicators	• Power • Internet Connectivity	• SIM Status • Signal Strength
Power	• 12 V / 1 A adapter	• Flexible input: DC 9V / 2A ~ 36V / 0.7A
Enclosure	• Corrosion-resistant zinc-plated steel	
Dimensions	• 134 x 76 x 32 mm (5.28 x 2.99 x 1.26 in)	• DIN Mount: 149 x 50 x 15 mm (5.87 x 1.97 x 0.55in)
Weight	• 500 g (17.64 oz)	
Temperature	• Operating: -20 to 60 ˚C (-4 to 140 ˚F)	• Storage : -30 to 80 ˚C (-22 to 176 ˚F)
Humidity	• Operating: 10% to 90% non-condensing	• Storage: 5% to 95% non-condensing
Certifications	• RoHS	• CE

Order Information

Part Number	Description
DWM-312W	4G LTE M2M Router

[1] Data rates are theoretical. Data transfer rate depends on network capacity, signal strength, and environmental factors.
[2] Available frequencies and speeds vary and may not be available in all regions.
[3] This feature will only be supported for projects.
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