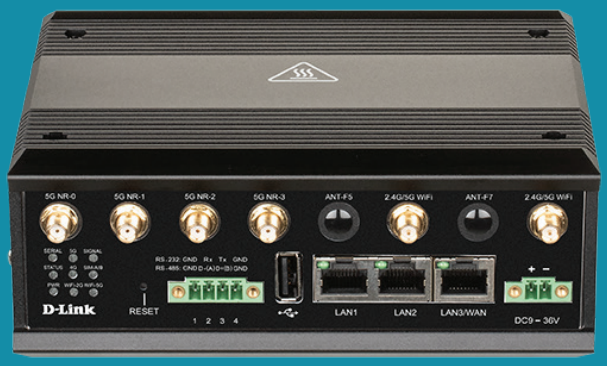
D-Link

5G NR M2M Gateway

Industrial IoT 5G NR M2M gateway for Wi-Fi and RS-232/RS-485 with digital and analog I/O

DWM-3010

- **Wireless 802.11ac/n/g/b/a**
- **5G NR/ LTE (sub-6 GHz/LTE Cat.20)**
- **WPA/WPA2/WPA-PSK/WPA2-PSK/802.1x encryption**
- **Advanced VPN: IPSec/OpenVPN/L2TP/PPTP/GRE**
- **Remote management with D-ECS (D-Link Edge Cloud Solution)**
- **Connect up to 50 devices to your Wi-Fi network**
- **Rugged design for wide-temperature operation**






1 Gbps / 150 Mbps

High-Speed 5G NR Internet

5G NR speeds up to 1 Gbps for lightning-fast downloads, lower latency and reduced congestion

Dual-Band AC1200

866 Mbps (5 GHz) + 300 Mbps (2.4 GHz) dual-band connectivity

GIG

Gigabit Ethernet Ports

High-speed Gigabit connections for wired devices

Up to 50 Devices

Connect up to 50 Wi-Fi devices in device-dense working environments

Dual SIM Slots

Dual SIM slots allows redundant connectivity to ensure uninterrupted operatoin

IPv6

Supports IPv6

Future-proof and compatible with the next generation of Internet standards

Technical Specifications

Hardware/Port	
Device Interfaces	1 x 10/100/1000 Ethernet WAN/LAN Ports, 2 x 10/100/1000 Ethernet LAN port
LED	Serial: Blue Fast Flashing: Data packets transferred via serial port Status: Blue OFF: Host disconnected Fast Flashing: WAN Ethernet or LTE connection established, obtaining IP PWR: Blue OFF: Device is powered OFF or in standby mode Steady ON: Device is powered ON Flashing once per second: Device is at "Delay OFF" mode Fast Flashing: Firmware is upgrading or device is in recovery mode Wi-Fi 2.4 GHz: Blue OFF: 2.4 GHz Wi-Fi is disabled Steady ON: 2.4 GHz Wi-Fi is enabled Fast Flashing: Data is being transmitted/received via 2.4 GHz Wi-Fi Wi-Fi 5 GHz: Blue OFF: 5 GHz Wi-Fi is disabled Steady ON: 5 GHz Wi-Fi is enabled Fast Flashing: Data is being transmitted/received via 5 GHz Wi-Fi 5G NR & 4G LTE Cellular: Blue 5G LED Steady ON: 5G NR enabled 4G LED Steady ON: 4G LTE enabled SIM-A LED Steady ON: SIM-A is inserted for 3G/4G/5G connection SIM-A LED OFF: SIM-A is not inserted or not in use SIM-B LED Steady ON: SIM-B is inserted for 3G/4G/5G connection SIM-B LED OFF: SIM-B is not inserted or not in use SIGNAL LED Steady ON: 3G/4G/5G signal strength is at high level (>60%) SIGNAL LED Flashing: 3G/4G/5G signal strength is at low level (<60%) WAN/LAN1 - 3: Green Steady ON: Ethernet LAN or WAN connection is established Flash: data packets are transferring
Power Supply	DC 9V / 2.7A ~ 36V / 0.7A
Ethernet	1 x 10/100/1000 Ethernet WAN/LAN port 2 x 10/100/1000 Ethernet LAN ports
SMA Antenna	4 x Female type jack for 5G NR/LTE 2 x Male type jack for Wi-Fi
Communication Bus	1 x RS-232 (Tx/Rx) 1 x RS-485 (D+(B), D-(A))
Digital I/O	2 x DI (Isolated, "Logic 0": 0~2V, "Logic 1": 5V ~ 30V) 2 x DO (Isolated, Non-Relayed Output, 24V/300 mA for each port)
Analog I/O	2 x AI (0~10V, 12 bit ADC, sampling rate up to 125 KHz)

5G NR/4G LTE Modem	
5G NR	5G NR, Sub-6 GHz, 100 MHz (BW)
4G LTE	LTE support up to Cat.16
Operating Bands[2]	5G NR, CE: SA mode: n1/n3/n7/n8/n20/n38/n40/n41/n77/n78; NSA mode: n28/n41/n77/n78 5G NR, NCC: NSA mode: n1/n3/n7/n8/n28/n38/n41/n78; SA mode: n41/n78 LTE CE: B1/B3/B7/B8/B20/B28/B32/B34/B38/B40/B42/B43/B46 LTE NCC: B1/B3/B7/B8/B28/B38/B41 WCDMA CE: B1/B3/B8
Maximum Cellular[1] Data Throughput	5G NR: 900 Mbps (DL, Ethernet) / 150 Mbps (UL, Ethernet)
Interface	USB 3.0 miniPCIe
Dual SIM Slots	3V/1.8V 6-pin standard (3FF Micro SIM)

Wi-Fi (802.11)

Software Specifications

Standards	IEEE 802.11 ac/n/g/b/a, 2.4 GHz/5 GHz
Wi-Fi Data Rates	Up to 866 Mbps with 802.11ac clients Up to 300 Mbps with 802.11n clients

Web UI	
Web Management	English (default)
LAN Default IP Address	192.168.0.1
Default Subnet Mask	255.255.255.0

Wireless WAN	
5G NR/4G LTE	5G NR/4G LTE modem to connect to Internet

WAN Control	
WAN	Cellular & Config Ether-WAN; Failover
Cellular	3GPP, 5G NR/4G LTE, IPv4/v6
Ether-WAN	Dynamic IP, Static IP, PPPoP, PPTP, L2TP
Network Monitor	ICMP/DNS Query
Dual SIM slots for CELL	SIM A, SIM B failover

Wi-Fi	
Standard	802.11 ac/n/g/b
Mode	AP router, WDS, WDS hybrid modes
Functions	Multi-SSID, WMM
Security	WEP, WPA, WPA2, WPA-PSK, WPA2-PSK, 802.1x
Captive Portal	External web portal
2.4 GHz SSID	DWM-3010-XXXX (XXXX is last four random digits based on MAC address)
5 GHz SSID	DWM-3010-5G-XXXX (XXXX is last four random digits based on MAC address)
Auto Channel Scan	Enabled
Pre-shared Key	Random 8-character key (alphanumeric case sensitive)

Protocol	
LAN & VLAN	DHCP server/relay, port/tag based VLAN
IPv6	Dual stack, IPv4/IPv6
Port Forwarding	NAT 1-1, 1-many, transversal, DMZ, Virtual Server & Computer, VPN passthrough
Routing	Static, Dynamic - RIP1/RIP2, OSPF, BGP
QoS	Policy-based, 802.1q and TOS for priority queues

Service	
Cellular Toolkit	Data usage, SMS, SIM PIN, USSD, Network Scan
Event Handling	User-defined mgmt/notify event; action & trigger by SMS, mail, syslog, SNMP trap, Modbus, I/O
D-ECS (D-Link Edge Cloud Solution)[3]	Remote Management of Devices, Zero Touch Deployment

Software Specifications

Security	
VPN Tunneling	IPSec, OpenVPN, PPTP, L2TP, GRE
Scenario	Site/host to site/host; dynamic VPN
VPN Capability	IPSec up to 16 tunnels
Firewall	SPI firewall iwth stealth mode, IPS
Access Control	Packet filter, URL blocking, MAC filter

Field Com	
Virtual COM	RFC2217, TCP client, TCP server, UDP
Modbus	Gateway for Modbus TCP/RTU/ASCII Master/Slave Access; Slave for Device Status/Information Access

Administration	
Configuration	Web UI, CLI, Command Script, D-ECS (D-Link Edge Cloud Solution)
Management	SNMPv3 Std. & D-ECS (D-Link Edge Cloud Solution)
System	Upgrade, backup & restore, reboot & reset, Syslog
Diagnostics	Packet analyzer, diagnostic tools

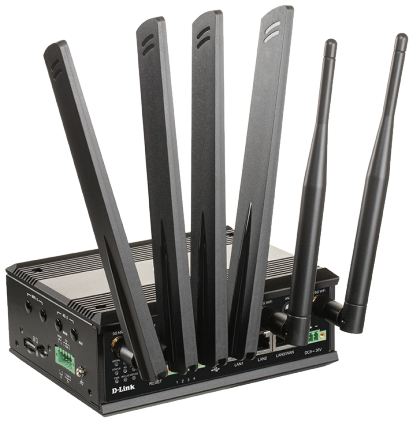
Electrical Characteristics

Power	
Power Input	DC 9V/2A - 36V/0.7A +/- 5%

Environmental Requirements

Temperature	
Operating Temp./Humidity	Temperature: -30°C ~ 60°C, Humidity: 10%~95% non-condensing
Storage Temp.	Temperature: -40°C ~ 85°C, Humidity: 0%~95% non-condensing
RoHS	RoHS compliant

ID/Mechanical



Dimensions	62 x 125 x 160 mm (w/o mounting kit)
Weight	1.15 kg

Order Information

DWM-3010	5G NR M2M Gateway

[1] Data rates are theoretical. Data transfer rate depends on network capacity and signal strength.
[2] Supported frequency band is dependent upon hardware SKU.
[3] D-ECS (D-Link Edge Cloud Solution) need do license charge.