D-Link

DWM-311-GP

5G M2M PoE Modem

Key Features

5G
SA & NSA

2.5GE PoE
Port (PSE)

Dual-SIM
Failover

VPN
Security

Industrial
Grade Design

Management
Platform

Applications

- Traffic Light
- Small Shop
- Surveillance
- AMR

D-Link's DWM-311-GP 5G M2M PoE Modem offers cutting-edge 5G-NR and LTE dual-mode cellular connectivity. Equipped with a 2.5-Gigabit Ethernet port and supporting 802.3af/at PoE (PSE), this modem ensures rapid and reliable connection to any local device, providing both power and data over a single cable for streamlined deployment.

Boost Operational Efficiency with Reliable 5G Connectivity

The DWM-311-GP 5G M2M PoE Modem delivers seamless, high-speed connectivity for real-time data transfer and remote monitoring. Designed for effortless plug-and-play installation, it's perfect for powering versatile PoE applications like parking lot management. Its built-in VPN client ensures secure, encrypted communication, protecting data across networks and enhancing operational reliability.
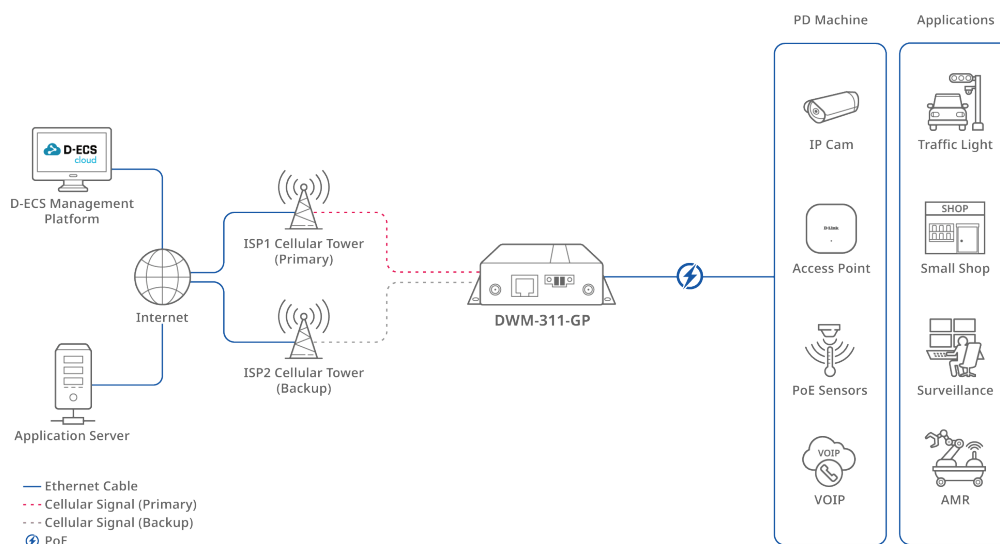
Empower Your M2M Network with PoE+

The DWM PoE Modem Series, featuring 802.3af/at Power over Ethernet (PoE+) technology, delivers both data and power through a single Ethernet cable. As a true PSE (Power Sourcing Equipment) solution, it streamlines M2M communication for IoT applications, reducing the need for separate electrical infrastructure and lowering installation costs. Ideal for powering surveillance cameras, digital signage, wireless access points, and IoT sensors, it offers flexible device placement without extra wiring. Its PD-Alive feature minimizes downtime, ensuring continuous operation, while PoE scheduling optimizes power use and cuts energy costs.

Robust Build Quality

The industrial-grade casing provides reliable high-speed connectivity in extreme conditions. The corrosion resistant zinc-plated steel case with wide operating temperature range and humidity tolerance mean that the DWM-311-GP is ready for the most demanding M2M applications in virtually any environment. Convenient wall and DIN-rail mounting options allow the DWM-311-GP to be mounted virtually anywhere to optimize signal quality. The DWM-311-GP is also engineered to safely accept wide input voltage (VDC 48-57V) fluctuations, providing more flexibility and convenience when selecting a suitable power source, making your M2M installations significantly more reliable and much easier to deploy.

Connection Diagram

Specifications

Device Interface

- Cellular: 3GPP Rel. 16, 5G (sub-6 GHz), 4G (DL Cat 19/UL Cat 18)
- SIM Slot: 2 x SIM (4FF Nano SIM) with auto failover
- Ethernet: 1 x 2.5GE PoE LAN port (PoE-PSE 802.3at)
- PoE Max Power per Port (at PSE): 30 W max
- PoE Power Budget (at PSE): 30 W
- Power Input: DC 48-57 V terminal block
- Antenna Connectors: 4 x SMA (F) cellular

Performance[1]

- Maximum Cellular Data Throughput:
  - 5G NSA: 3.4 Gbps (DL) / 550 Mbps (UL)
  - 5G SA: 2.4 Gbps (DL) / 900 Mbps (UL)
  - LTE: 1.6 Gbps (DL) / 200 Mbps (UL)

WAN

- WAN Interface: Cellular
- Cellular: NAT, bridge
- Connection Monitoring: Ping query reboot

Network

- LAN: DHCP server
- Routing: Static
- DDNS: DynDNS, No-IP, dynamic DO
- PoE Functions: PD failure check, PoE scheduling

Services

- Event Management: SMS

VPN

- VPN Tunnel: OpenVPN, WireGuard

Security

- Firewall: IPS, port forward
- Access Control: MAC/IP filter, URL blocking

Administration

- Management: D-Link D-ECS[2]
- Maintenance: Web UI
- System: FW upgrade, reboot and reset

Monitoring

- Device Status: Connection information
- Cellular Status: Cellular information/status, cellular signal quality
- Security: VPN status

Operating Environment

- Operating Temperature: -30 to 70°C (-22°F to 158°F)
- Storage Temperature: -40 to 85°C (-40°F to 185°F)
- Operating Humidity: 10% to 95% non-condensing
- Storage Humidity: 0 to 95% non-condensing
- Dimensions: 93 x 90 x 27 mm

Certifications and Approvals

- Certifications: CE, UKCA
- Cyber Security: EN 18031-1, EN 18031-2

Package Contents (Standard)

- 4 x Cellular SMA Antennas
- 1 x RJ-45 Cable
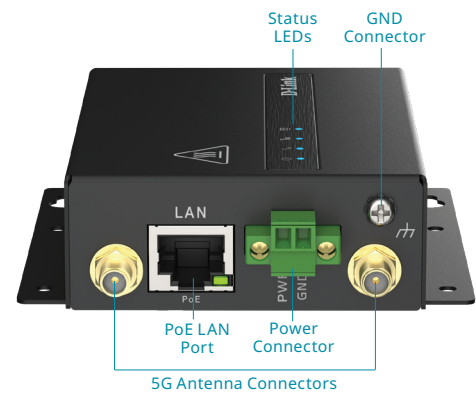- 1 x Power Adapter
- 1 x Terminal Block (2-pin)
- 1 x DIN-Rail Kit

Available Versions

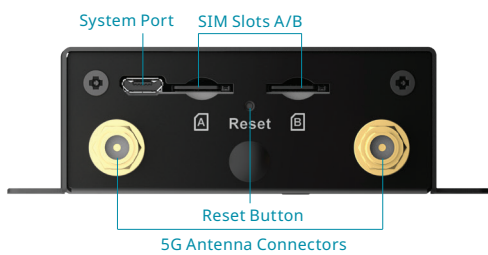| EU SKU (HW: A1)	
5G NR	n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n71/n75/n76/n77/n78
4G LTE	FDD: B1/B3/B5/B7/B8/B20/B28/B32/B71
	TDD: B38/B40/B41/B42/B43
US SKU (HW: A2)	
5G NR	n1/n2/n3/n5/n7/n8/n12/n13/n14/n18/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n70/n71/n75/n76/n77/n78/n79
4G LTE	FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71
	TDD: B34/B38/B39/B40/B41/B42/B43/B46(LAA)/B48

1 Data rates are theoretical. Data transfer rate depends on network capacity and signal strength.

2 You only have to pay a M2M device license fee when applying for D-ECS license.
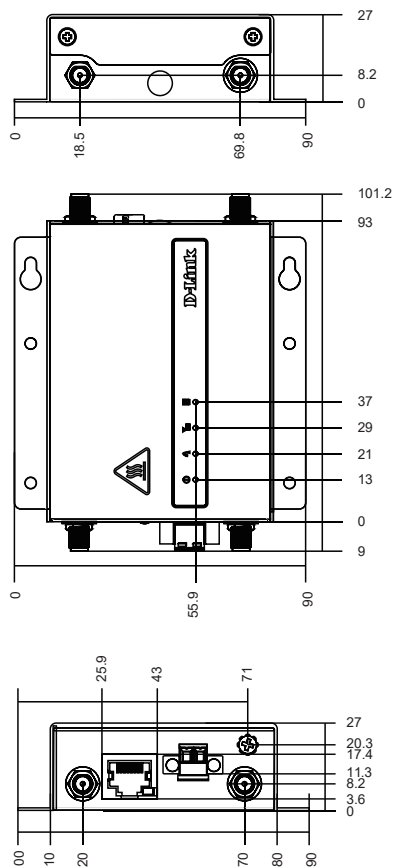
Hardware

Front View

Status LEDs
GND Connector
LAN
PoE LAN Port
Power Connector
5G Antenna Connectors

Back View

System Port
SIM Slots A/B
Reset
Reset Button
5G Antenna Connectors

Spatial Measurement

The following diagrams provide the product's physical dimensions measured from top, front, left, and right views for installation and integration reference.

Unit: mm

Mounting Space Requirements