

5G Dongle

UF31

Milesight



UF31 is a high-performance 5G modem for 5G wireless networking applications. It supports 5G NSA&SA, 4G LTE and 3G networks from telecom service providers of most countries in the world. The USB type-C port and Ethernet port are adopted to provide high-speed internet access for field devices.

With a compact size and industrial design, UF31 is easy to carry out or embed to any equipment, which is particularly suitable for smart offices, video surveillance, digital media implementations, industrial automation, traffic applications, robots and so on.

◆ Features

- Support global 5G NSA&SA/4G LTE/WCDMA network, enables up to 2.5 Gbps download speeds
- Plug and play, provide lightning transmission via Gigabit Ethernet port or USB 3.0
- Embeds hardware watchdog to automatically recover from various failure, ensure highest level of availability
- Wide operating temperature range from -20°C to 50°C and industrial design for harsh environment
- USB or DC power supply optional
- Easy to deploy anywhere with compact size, suit for embedded installation

- Iptables firewall and VPN tunnels to ensure security data transmission
- WEB GUI and CLI enable the admin to achieve simple management and quick configuration among a large quantity of devices
- DeviceHub provides remote monitoring, bulk configuration, and centralized management

◆ Specifications

Hardware System	
CPU	Quad-core ARM Cortex-A55, 2 GHz
Memory	1 GB LPDDR4X RAM and 1 GB NAND Flash
Cellular Interface	
Network	5G NR SA&NSA/4G LTE/WCDMA
Frequency	5G Sub-6: N1/N3/N5/N7/N8/N20/N28/N38/N40/N41/N77/N78/N79
	LTE FDD: B1/B3/B5/B7/B8/B18/B19/B20/B28/B32
	LTE TDD: B38/B40/B41/B42/B43/B46
	WCDMA: B1/B5/B8
Antenna Connector	4 × 50 Ω SMA Connectors (Center PIN: SMA Female)
SIM Slot	1 (Micro SIM-3FF)
Ethernet Interface	
Numbers	1 × 10/100/1000 Mbps LAN Port
Mode	Full or Half Duplex (Auto-Sensing)
GNSS	
Antenna Connector	1 × 50 Ω SMA Connector (Center PIN: SMA Female)
Technology	GPS/GLONASS/Beidou/Galileo/QZSS
Others	
USB	1 × USB 3.0 (Type-C) for Power Supply, Network Supply and Debug
Reset Button	1 × RESET (Internal)
LED Indicators	1 × STATUS, 1 × Cellular Network
Built-in	Watchdog, Timer
Software	
Network Protocols	IPv4/IPv6, TCP, UDP, DHCPv4/DHCPv6, HTTP, HTTPS, DNS, ARP, Telnet, SSH, etc.
Security ¹	Access Control, Port Mapping, Custom Rules

¹ Under development

Management	Web, CLI, DeviceHub
Power Supply	
Power Input	1. 5-24 VDC, with Surge-Protection and Reverse Polarity Protection 2. 5V/3A by USB Type-C Port
Power Connector	2-pin 3.5 mm Terminal Block
Physical Characteristics	
Ingress Protection	IP30
Housing & Color	Metal, Black
Dimension	90 x 72 x 15 mm (3.54 x 2.83 x 0.59 in)
Installation	Desktop, Wall Mounting, DIN Rail Mounting
Environmental	
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (Non-condensing) at 25°C/77°F