OPTION

CloudGate NXS

5G REDCAP

NEW

Industrial grade, highly customizable secure cellular gateway

- 5G RedCap gateway with worldwide coverage
- Active/passive GNSS
- Easily programmable with LuvitRED
- Expandable with existing CloudGate front expansion cards for ex. Modbus, GPIO, I2C, Mbus, USB, 4-port ethernet, etc.
- Support for open market mPCIe and M.2 modules
- Optional battery card

OPTION

Highly customizable & flexible to integrate and deploy

The CloudGate NXS gateway provides unique flexibility that allows customers and system integrators to tailor the product to their solution or even site specific requirements. It incorporates several hardware expansion slots that allow the CloudGate NXS to be enhanced with additional radio and/or wired interfaces. The expansion cards are simple and quick to install, allowing the field upgrade of the device when new functionality is required.

There is an emerging trend of connecting, monitoring and controlling machines and other 'things' in our environment but using wires to do so is often not desirable or even possible. The optional LoRaWAN expansion card allows the CloudGate gateway to connect to all LoRaWAN wireless sensors.

CloudGate NXS as secure gateway

The CloudGate NXS features an Infineon SLM 9670 TPM2.0 module for:

- Safe key storage (eg to make TLS connection)
- Unique and reliable device authentication towards Cloud
- Secure boot (checking if firmware is authentic)
- Data encryption
- Regulatory and certification compliance (NIST)

And an ARM i.MX9 application processor with integrated security capabilities:

- EdgeLock® secure enclave
- Trusted Resource Domain Controller (TRDC)
- On-chip RAM (OCRAM) secure region protection using OCRAM controller
- Battery-Backed Security Module (BBSM) for robust key storage and system integrity.
- ARM(R) Trustzone(R) architecture, including both Trustzone-A and Trustzone-M

Why choose our CloudGate NXS

- **Trustworthy:** 2 Years warranty
- **Rebranding:** All devices available for OEM (highly customisable)
- **Experience:** 40 Years of wireless connectivity experience with many industry firsts.
- **Proven:** >100.000 4G Gateways deployed in the field, many of them +10years, and counting
- **Future proof:** Building on NXP's latest architecture with support until min. April 2038
- **Highly Configurable Software:** The only gateway on the market with the free award-winning graphical programming tool LuvitRED, exceeding Node-RED (or similar platforms) in every way
- **Highly Configurable Hardware:** Wide range of expansion cards available, adding multiple interfaces and protocols whilst maintaining the same gateway. This offers customers with different setups massive flexibility
- **(Optional) expandable AI/ML ready:** CloudGate NXS is the first IoT gateway on the market with an optional AI coprocessor

Technical Specifications		
Modem	Model	Telit FE910C04-WWD
	Supported 5G bands	n1, n2, n3, n5, n7, n8, n12, n13, n14, n18, n20, n25, n26, n28, n30, n38, n40, n41, n48, n66, n70, n71, n77, n78, n79
	Supported 4G bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B30, B34, B38, B39, B40, B41, B42, B43,B48, B66, B70,B71, B106
	Max. Connectivity speeds	• 5G Sub.6 FDD and TDD operation in 5G NR Standalone - DL: 223 Mbps - UL: 123 Mbps • LTE Cat 4 - DL: 200 Mbps - UL: 105 Mbps
	Antenna	GNSS antenna pad
	SIM	Optional eSIM
	GNSS	L1 + L5
MPU	NXP i.MX93	• OSM 1.1 module based on NXP i.MX 9332 • Dual Core Cortex-A55 processor at 1.7GHz • Optional NPU • 2GB LPDDR4 • 4 GB eMMC PSLC • 2x GbE (RGMII)
Ethernet	Gigabit Ethernet (RJ45)	2 ports (LAN or WAN configurable)
microSD 3.0 card holder		• On the mainboard • Max transfer speed: 104 Mbps • Max size: 2 TB
Power control	Timed wakeup	✓
	Ignition sensing	✓
Security		• NXP EdgeLock(R) secure enclave for platform security and cryptographic services • Infineon TPM2.0 module for unique and reliable device authentication
Battery		Li-Ion battery: optional card for last gasp function (up to 1h with limited functionality)
Power input	9-50V DC	Connector: Micro-Fit 3,0TM, Dual row, 4-position: DC, GND and sensing input
Front expansion cards		• Smart Metering card (Serial, Modbus, M-Bus master, 5-port GPIO and USB) • (Industrial) Serial card (Serial, Modbus) • Ethernet Switch card (4-port RJ-45 switch)
USB		Supported with smart metering card
Internal card slots	mPCIe card slot:	• For standard double-sided mPCie cards: 2.4mm top side; 1.35mm bottom side • Intended for LoRaWAN concentrator card • 1x RP-SMA connector @bottom backplate
	M.2 card slot (E-key):	• For standard double-sided M.2 (E-Key 2230) cards: • Max. card dimensions: 22mm wide and 30mm length • Max. card thickness: 1.5mm top side and 1.35mm bottom side • Intended for ex. wireless protocols like WiFi and/or BLE • 3x RP-SMA connector available on rear-expansion card
Aluminium Case	Dimensions	115 × 106 × 45 mm 4.52 × 4.17 × 1.77 in
	Weight	330 g
	Mounting	• Bulkhead, 6xM4 holes • DINrail with adapter • Optional magnetic fixation
	LEDs	System state, WWAN state, WWAN signal
Environ-mentals	Operating temperature	-25°C to +75°C
	Storage temperature	-40°C to +85°C
	Humidity	5% - 95%
Certifications		CE (RED-DA), FCC, PTCRB, ISED and major US carriers

Product	PN	EAN
CloudGate NXS 5G RedCap	CN0134-12275	5414140068649