

OPTION

CloudGate secure



Industrial grade, highly configurable
cellular LTE connectivity LoRaWAN Gateway



Industry proven hardware



+7 years LoRaWAN expertise



External antenna connector
for miles of superior
LoRaWAN coverage



Ruggedized low power design



Ethernet & cellular LTE
connectivity



Secure Element inside

OPTION

Highly configurable & flexible to integrate and deploy

Benefits

- Worldwide LTE Cat 4
- 20 LTE bands (EMEA, Americas, Asia) including TDD bands (China)
- LoRa multiregion 868 MHz & 9xx MHz
- Industrial ruggedized design
- External antenna connector
- Superior wireless coverage
- Fully configurable software
- Highly secure with ECC608 secure element inside

World Class Security

The integrated ECC608 Secure Element provides state-of-the-art communications security. Housed in a tamper-resistant hardware security module, the Secure Element offers enhanced protection for sensitive cryptographic operations and key management. Securely storing and managing encryption keys, certificates, and authentication credentials, the ECC608 Secure Element ensures that communication between the Gateway and the Cloud remains highly secure, blocking potential threats such as unauthorized access, data breaches, and malicious tampering. This added security layer instills trust and confidence in data transmission, making the CloudGate Secure a reliable choice for all your industrial IoT applications.

Seamless Integration with Major Cloud Platforms

Unlocking great value with CloudGate Secure is easy. It seamlessly integrates with industry-leading cloud platforms such as AWS, Azure, Google, and many more, enhancing its value proposition. Leveraging this integration, users can effortlessly link their CloudGate Secure devices to their preferred cloud ecosystem, streamlining data transmission, storage, and analysis. This can be accomplished by using the LuvitRED™ "drag-and-drop" visual data-flow editor to transform the CloudGate Secure into a fully standalone LoRaWAN Network Server, a Packet Forwarder or users can use any other Packet Forwarder like BasicsStation, Semtech's UDP Packet Forwarder, or any other.

Additionally, with the integration of CloudGate Universe, an advanced device provisioning platform, users can efficiently manage and monitor their IoT deployments, optimizing performance and ensuring a cohesive and robust IoT ecosystem.

LORAWAN FUNCTIONALITY	
Feature	Description
Radio protocol	• LoRaWAN versions 1.0x, 1.1
Baseband processor	• Semtech SX 1302 second-generation LoRa Core™ Digital Baseband Chip
Transceiver	• Dual SX1250 Tx/Rx front-end, providing a channel range up to 2MHz and up to -141 dBm sensitivity, output power up to +27dBm
Number of Tx/Rx channels	• 125 kHz LoRa reception with 8 x 8 channels LoRa® packet detectors, 8 x SF5-SF12 LoRa® demodulators and 8 x SF5-SF10 LoRa® demodulators
Regional variants	• For use in 868MHz or 902-928MHz mode.
LoRaWAN Channel Plans	• EU868, US915
Security	• 128-bit AES encryption (send/receive)
Antenna connector	• SMA RP (female)

Technical Specifications		
WWAN Modem LTE	Supported frequency bands	• LTE FDD: B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B26, B28 • TDD: 3B/39/40/41
	Max. connectivity speeds	• LTE DL 150 Mbps, UL50 Mbps
WWAN Antenna	External antenna connectors	• 1 x SMA: WWAN Main • 1 x SMA: WWAN MIMO/Div/GPS
SIM	USIM/SIM connection – Class B and Class C	Micro-SIM (3FF)
CPU		i.MX280 (ARM926EJ-S @ 450 MHz) Memory available for customer apps 512 MB Flash (20 MB for data, 30 MB for application, 372 MB extra data partition)
Ethernet (IEEE 802.3)	10/100Mb/s RJ45 Connector	2 (LAN/WAN or LAN/LAN)
Realtime clock	Up to 7 days	
Power input	9-33V DC	• DC input voltage: 9-33 V DC • Connector: Micro-Fit 3.0TM, Dual row, 4-position; DC, GND sensing input
Power consumption	Max. 4W	
Aluminium Case	Dimensions	102 x 97 x 26 mm 4 x 3.8 x 1 in
	Weight	261 g / 9.21 oz
	Mounting	Bulkhead, 6xM4 holes, DINrail with adapter
	System status LED	✓
Environments	Operating temperature	-30°C to +70°C / -22°F to 158°F
	Storage temperature	-40°C to +85°C / -40°F to 185°F
	Humidity	5% - 95%
Certifications		CE, FCC, PTCRB, ISED, AT&T, VZW, US Cellular, Telus
Std. compliance	ROHS, Reach, WEEE	✓
CloudGate Universe	Device can be configured OTA using CloudGate Universe	✓
Secure Element	Microship ATECC608 module	✓



Product	PN
CloudGate LIE WW Secure	CG0124-12228