ConnectLinks
NEVER MISS A BEAT

LITE RANGE

MODBUS IOT GATEWAY LITE — 4G

Live Modbus data from sites that have no network.

It reads your meters, drives and controllers over RS-485 and Modbus TCP and sends every reading to your MQTT broker over its own 4G link. When the link drops, it keeps reading and catches up on its own.

Model **CL-G-M-S/C** 4G LTE Cat 1 · dual SIM · MQTT/TLS

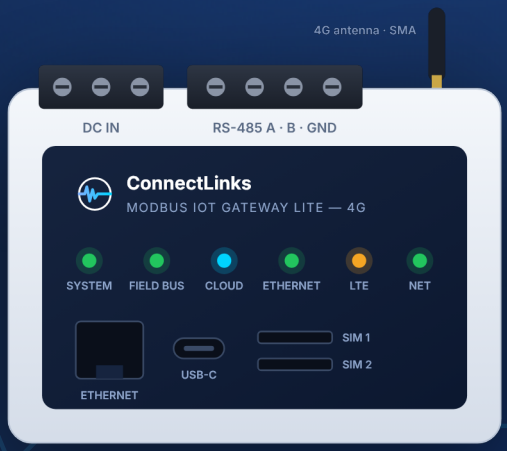

Illustration · front panel and connectors

32
Modbus devices, RS-485 and Modbus TCP together

256 tags
values published, up to 24 per device

7 days+
of readings kept through an outage, then sent in order

2 SIMs
switches carrier by itself when one network fails

From the panel to your platform

No PC on site, no wired internet, no ConnectLinks cloud

YOUR FIELD
Meters, drives, PLCs, inverters
- RS-485 Modbus RTU
- Modbus TCP

polls each 5 s – 24 h

THE GATEWAY
Reads, time-stamps and batches every value
- JSON per device
- periodic or on change

4G LTE MQTT/TLS

YOUR BROKER
AWS IoT Core, Azure, HiveMQ, EMQX or your own
- your CA accepted
- your topics

Link down? Readings wait in on-board flash and are replayed in order, with the time each was measured.

Your team is told by SMS, even when the broker is down.

Why it earns its place in the panel

An outage costs a delay, never data
The gateway keeps polling while the network is down. When it returns, the backlog fills in, in order, or behind live data if you prefer.

16 MB flash · ≈150,000 device records

Two carriers in one box
Fit a SIM from a second operator. If the first network fails, the gateway moves to the backup without a site visit.

2 × mini-SIM · automatic failover

Alerts that do not need the cloud
A device going offline, a lost uplink, a filling buffer or a SIM switch is texted to your team straight from the modem.

SMS alerts · settle window · no duplicates

Set up at the panel in minutes
Plug in a laptop, add devices, scan and test-read them, and watch live status. No web page to secure, no account to create.

USB-C · ConnectLinks Configurator (Windows)

Read-only by design
The gateway only reads your devices and only connects outward. Nothing from the internet can write to your Modbus bus.

no open ports · TLS 1.2 · signed firmware

Updates without a truck roll
New firmware arrives over 4G while the gateway keeps working. If an update ever fails to start, it rolls back by itself.

over-the-air · verified · automatic rollback

BUILT FOR
- Water and wastewater
- Solar and wind
- Cold chain
- Oil and gas wellheads
- Building energy

FIELD SIDE

RS-485	1 port, Modbus RTU master, 2-wire · 1,200–115,200 bit/s · 8N1, 8E1, 8O1, 8N2 · termination and fail-safe bias built in · ±15 kV ESD
Ethernet	10/100 Mbit/s, Modbus TCP master for local devices, up to 6
Devices	Up to 32, RTU and TCP combined
Tags	256 in total, up to 24 per device · 16/32/64-bit integers, floats, text
Functions	Read coils, discrete inputs, holding and input registers (01, 02, 03, 04)
Polling	Per device, every 5 s to 24 h

CLOUD SIDE

Cellular	4G LTE Cat 1, 10/5 Mbit/s · LTE B1/3/5/8/34/38/39/40/41, 3G and 2G fallback (India and APAC)
SIM	2 × mini-SIM, automatic failover to the backup
Protocol	MQTT 3.1.1, QoS 0 and 1 · TLS 1.2 with the broker verified · user name and password
Brokers	Public brokers out of the box; private brokers with your own CA certificate
Data	JSON, one message per device · your own topic prefix
Publishing	Every 30 s to 24 h · all values, or changed values only

STORE AND FORWARD

Buffer	16 MB on-board flash, ≈15.8 MB for readings
Capacity	≈150,000 device records at 8 tags each
Ride-through	7 days or more at a 1-minute publish interval with typical tag counts
Recovery	Backlog sent oldest first with original time stamps · you choose: backlog before live data, or live data first with the backlog filled in behind

SET-UP AND SERVICE

Configurator	Windows application over USB-C · live dashboard, device scan and test read, activity history
SMS alerts	Gateway up, device offline and back, uplink lost and restored, buffer filling, SIM failover
Remote set-up	Gateway settings over MQTT, off until enabled on site · by SMS with PIN and allowed numbers †
Firmware	Over the air via 4G, verified before use, automatic rollback

SECURITY

Field	Read-only Modbus master; no write path from the cloud to your devices
Network	Outbound connections only; no listening port, no web server
Firmware	HMAC-SHA256 signature and CRC-32, checked before every update
Access	Configurator protected by an admin password, stored hashed

HARDWARE

Power	5–24 V DC, pluggable screw terminal, reverse-polarity protected
Consumption	≈3 W typical, ≈6 W peak while transmitting †
Components	Rated −40 to +85 °C · 5–95 % RH, non-condensing
Indicators	6 LEDs: system, field bus, cloud, Ethernet, LTE, network
Antenna	External, SMA female
Standards	Designed to IEC 61000-6-2 and 6-4, RoHS 3 and REACH

Find the right Lite product for your site

The site has a network and you want no SIM
Modbus IoT Gateway Lite — Ethernet
CL-G-M-S/E

One meter far from mains power and cables
Modbus IoT Gateway Lite — Battery 4G
CL-L-M-S/C

Your SCADA reads RS-485 devices over the LAN
Modbus RTU-to-TCP Bridge Lite
CL-B-M-S-2

Modbus devices in your building management system
Modbus-to-BACnet Bridge Lite
CL-B-D-S-2

ORDER CODE
CL-G-M-S/C
Gateway, 4G LTE Cat 1 for India and APAC, dual SIM, Configurator software

EVALUATION UNIT
Full function for 30 days. Turn it into a permanent licence with a per-unit key, in the Configurator, without a reflash.

LICENSED UNIT
Permanent from delivery. Accessories: LTE antenna (SMA, 2–5 dBi), 24 V DC supply, USB-C cable.

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Tell us about your site
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† Design target, not yet measured on the finished unit. Preliminary, for evaluation; specifications may change without notice. Full specification and user manual on request.

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