ConnectLinks
NEVER MISS A BEAT

LITE RANGE

MODBUS-TO-BACNET BRIDGE LITE

Your Modbus plant, native in your BMS.

It reads meters, drives, chillers and generator sets over Modbus RTU and Modbus TCP, and presents them to your building management system as BACnet/IP objects it can read, subscribe to and command. No custom driver, no cloud, no web page.

Model **CL-B-D-S-2** 2 × RS-485 · Modbus TCP · BACnet/IP

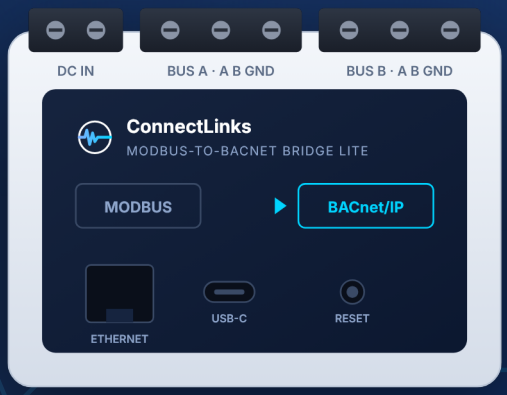

Illustration · front panel and connectors

32 + 5
Modbus RTU devices plus Modbus TCP devices

500 points †
BACnet objects in any mix, 200 of them commandable

16
priority levels on every commandable output

2 buses
independent RS-485 buses, each with its own speed

From the plant room to the BMS front-end

One BACnet device, organised meter by meter

YOUR PLANT
Meters, drives, chillers, gensets, UPS
2 × RS-485 RTU
Modbus TCP

reads and writes

THE BRIDGE
Turns registers into named BACnet objects
scale and offset · 15 data types

Ethernet BACnet/IP

YOUR BMS
Any BACnet/IP front-end or supervisor
read · COV · write · UDP 47808

Every meter has a health point, so the BMS knows which device went offline.

Across subnets, it registers as a foreign device with your site's BBMD.

Why it earns its place in the panel

Faults the BMS can see
When a meter stops answering, its points show FAULT and a communication failure instead of a frozen value.

offline after 1–10 failed polls

Writes the BACnet way
Outputs carry a full priority array and a relinquish default, so your BMS commands plant the way it expects to.

16-level priority · 200 commandable points

Commissioned from a spreadsheet
Load a full point list in one step. A list with an error is refused whole, so a site is never half-configured.

CSV import and export · EDE export

Organised by meter
Each meter gets its own block of object numbers and a name prefix, so the BMS point list reads like the plant.

device n → objects n × 1,000 onwards

Quiet until commissioned
It takes an address by DHCP and stays silent on the BACnet network until it is configured, so it never surprises a live BMS.

DHCP from the factory · no I-Am until set up

Nothing to secure online
No cloud, no web page and no network administration. Changes are made over USB at the panel.

USB-C Configurator · signed firmware

BUILT FOR • Panel builders • Chillers and gensets • Energy metering • UPS and drives • BMS retrofits

MODBUS SIDE

RS-485	2 independent buses, Modbus RTU master, half duplex · up to 32 devices
Serial	9,600–115,200 bit/s · none, even or odd parity · 1 or 2 stop bits
Modbus TCP	Up to 5 devices, port 502 by default, unit ID 0–255
Functions	Read 01, 02, 03, 04 · write 05, 06, 15, 16
Polling	Grouped reads up to 125 registers or 2,000 bits · time-out 100–2,000 ms, 0–3 retries

BACNET SIDE

Device	BACnet/IP server, B-GW profile, protocol revision 28
Services	ReadProperty, ReadPropertyMultiple, WriteProperty, Who-Is, Who-Has, SubscribeCOV, DeviceCommunicationControl, time sync
Network	UDP 47808 · foreign-device registration with a BBMD
APDU	1,024 bytes, no segmentation

MAPPING

Points	500 in any mix, 200 commandable †
Objects	Analog, Binary and Multi-state Input, Output and Value
Data	15 data types · 4 byte orders · scale and offset · inverted binaries
COV	500 subscriptions from 64 subscribers †

SET-UP AND SERVICE

Configurator	Windows application over USB-C · CSV point lists, EDE export
Firmware	Signed update over USB with automatic rollback
Diagnostics	Health point per device · activity log
Reset	Factory reset by holding the button for 5 s

SECURITY

Internet	No cloud, web or remote administration in the firmware
Control	DeviceCommunicationControl protected by a password
Robustness	Every incoming message is bounds-checked

HARDWARE AND STANDARDS

Power	5–24 V DC on the current board; the range is confirmed with the next board revision
Processor	32-bit Arm Cortex-M4, 80 MHz · 16 MB storage
Ethernet	10/100 Mbit/s, RJ45
BTL	Built and self-tested to the BTL Test Package; not BTL-listed

Find the right Lite product for your site

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

Data from a remote site to your cloud over 4G
Modbus IoT Gateway Lite — 4G
CL-G-M-S/C

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

ORDER CODE

CL-B-D-S-2

BACnet bridge with two RS-485 buses, Ethernet and Configurator software

EVALUATION UNIT

Full function for 30 days from the day the clock is set at installation. Make it permanent with a per-unit key, no restart.

LICENSED UNIT

Permanent from delivery. PICS available on request.

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Tell us about your building

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† Design target, not yet measured on the finished unit. Preliminary, for evaluation; specifications may change without notice. Full specification, PICS and user manual on request. ConnectLinks Systems · Brochure 1.0 draft · November 2026