

Modbus Interface

(Supported from Firmware Version 2.5.1)

📍 Gdańsk , 2024-09-17

Modbus Protocol Information:

The Enelion Lumina charging station supports both Modbus TCP and Modbus RTU communication protocols.

- Modbus TCP: The server is activated on **port #502** and supports only one connection to the master device at a time.
- Modbus RTU:

Parameter	Value
Connection Type	RS485
Baud Rate	9600 bits per second
Data Bits	8 bits
Stop Bits	1 bit
Parity	Even

Note: The default endian type for all Modbus communication (TCP and RTU) is **big-endian**.

Modbus Register List:

Register(s)	Accessibility (R/RW)	Category	Description	Step Size & Unit	Data type	Details / Example Response
100-109	R	Unit Information	Manufacturer name	N/A	STRING	Example: Enelion
110-119	R	Unit Information	Serial number	N/A	STRING	Example: 221C-0453
120-144	R	Unit Information	Model number	N/A	STRING	Example: LH-32-3-S-0-C-50-0-00
145	R	Unit Information	Connector type	N/A	UINT16	0: Socket, 1: Cable
146	R	Unit Information	Built-in lock	N/A	UINT16	0: No, 1: Yes
147-155	R	Unit Information	Software version	N/A	STRING	Example: 2.1.2000
158	R	Unit Information	Temperature	0.1°C	INT16	Example: 236 (23.6°C)
159	R	Unit Information	Humidity	0.1%	UINT16	Example: 505 (50.5%)
160	R	Charging Information	Connector state	N/A	UINT16	0: Available, 1: Cable connected, 2: EV connected, 3: Charging, 4: Suspended EV, 5: Suspended EVSE, 6: Reserved, 7: Unavailable, 8: Faulted
161-162	R	Charging Information	Energy transferred during current session	1 Wh	UINT32	Example: 14596 Wh
163-164	R	Charging Information	Current charging session duration	1 second	UINT32	Example: 3600 s (1 h)
165	RW	Transaction Management	Transaction Active	N/A	UINT16	0: Stop Transaction, 1: Start Transaction
166	RW	Transaction Management	Suspend Charging	N/A	UINT16	0: Resume charging, 1: Suspend charging
168	R	EV Information	EV state of charge	1%	UINT16	Example: 50% Default: 0 (EV not plugged in)
169	R	EV Information	EV battery capacity	0.1 kWh	UINT16	Example: 825 (82.5 kWh) Default: 0 (EV not plugged in)

170	RW	Charging Power Settings	Number of phases used	N/A	UINT16	1: Single-phase, 3: Three-phase
171	RW	Charging Power Settings	Current limit per phase	1 A	UINT16	Example: 16 (max 32 A)
175	R	DLB Data	DLB power offered	0.1 kW	UINT16	Example: 440 (44.0 kW)
176	RW	DLB Data	DLB circuit current limit	1 A	UINT16	Example: 500
180	R	Meter Data	Voltage on L1	0.1 V	UINT16	Example: 2301 (230.1 V)
181	R	Meter Data	Voltage on L2	0.1 V	UINT16	Example: 2301 (230.1 V)
182	R	Meter Data	Voltage on L3	0.1 V	UINT16	Example: 2301 (230.1 V)
183	R	Meter Data	Current on L1	0.1 A	UINT16	Example: 164 (16.4 A)
184	R	Meter Data	Current on L2	0.1 A	UINT16	Example: 164 (16.4 A)
185	R	Meter Data	Current on L3	0.1 A	UINT16	Example: 164 (16.4 A)
190	R	OCPP Data	OCPP connected	N/A	UINT16	0: Not connected, 1: Connected
191	R	OCPP Data	OCPP accepted by the backend	N/A	UINT16	0: Not accepted, 1: Accepted
192	R	OCPP Data	Number of connectors	1 unit	UINT16	Example: 10