



# Modbus Interface

**(Ab Firmware Version 2.5.1)**

## Modbus-Protokollinformationen:

Die Enelion Lumina-Ladestation unterstützt sowohl die Kommunikationsprotokolle Modbus TCP als auch Modbus RTU.

- Modbus TCP: Der Server wird auf Port 502 aktiviert und unterstützt jeweils nur eine Verbindung zum Master-Gerät.
- Modbus RTU:

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

Hinweis: Die Standard-Byte-Reihenfolge für alle Modbus-Kommunikationen (TCP und RTU) ist 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: <b>Enelion</b>  |
| 110-119     | R                    | Unit Information       | Serial number                             | N/A              | STRING    | Example: <b>221C-0453</b>  |
| 120-144     | R                    | Unit Information       | Model number                              | N/A              | STRING    | Example:<br><b>LH-32-3-S-0-C-50-0-00</b>   |
| 145         | R                    | Unit Information       | Connector type                            | N/A              | UINT16    | <b>0:</b> Socket,<br><b>1:</b> Cable   |
| 146         | R                    | Unit Information       | Built-in lock                             | N/A              | UINT16    | <b>0:</b> No,<br><b>1:</b> Yes   |
| 147-155     | R                    | Unit Information       | Software version                          | N/A              | STRING    | Example: <b>2.1.2000</b>   |
| 158         | R                    | Unit Information       | Temperature                               | 0.1°C            | INT16     | Example: <b>236</b> (23.6°C)   |
| 159         | R                    | Unit Information       | Humidity                                  | 0.1%             | UINT16    | Example: <b>505</b> (50.5%)  |
| 160         | R                    | Charging Information   | Connector state                           | N/A              | UINT16    | <b>0:</b> Available,<br><b>1:</b> Cable connected,<br><b>2:</b> EV connected,<br><b>3:</b> Charging,<br><b>4:</b> Suspended EV,<br><b>5:</b> Suspended EVSE,<br><b>6:</b> Reserved,<br><b>7:</b> Unavailable,<br><b>8:</b> Faulted |
| 161-162     | R                    | Charging Information   | Energy transferred during current session | 1 Wh             | UINT32    | Example: <b>14596</b> Wh   |
| 163-164     | R                    | Charging Information   | Current charging session duration         | 1 second         | UINT32    | Example: <b>3600</b> s (1 h)   |
| 165         | RW                   | Transaction Management | Transaction Active                        | N/A              | UINT16    | <b>0:</b> Stop Transaction,<br><b>1:</b> Start Transaction   |
| 166         | RW                   | Transaction Management | Suspend Charging                          | N/A              | UINT16    | <b>0:</b> Resume charging,<br><b>1:</b> Suspend charging   |
| 168         | R                    | EV Information         | EV state of charge                        | 1%               | UINT16    | Example: <b>50%</b><br>Default: <b>0</b> (EV not plugged in)   |
| 169         | R                    | EV Information         | EV battery capacity                       | 0.1 kWh          | UINT16    | Example: <b>825</b> (82.5 kWh)<br>Default: <b>0</b> (EV not plugged in)  |

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