



Configure backend for chargers LS4, GTB+ and GLB+

Configure backend for LS4, GTB+ and GLB+

To configure the charger to a backend system, you need to access the charger's web interface. This can be done using either the New or the Legacy web interface. Follow the steps provided for the specific web interface you are using.

Important:

- *Any modifications performed on the controller are done at your own risk. GARO is not responsible for any issues caused by incorrect handling or unauthorized changes.*
- *Before configuring a charger towards a backend operator, you will need to contact the backend operator that will provide you with the settings required for the charger, such as ChargePointID and URL.*

Before You Start:

Note, this must be done by a certified electrician

You will need a Laptop and a micro-USB to USB-A cable. (important that the cables has possibilities for data transfer and not only charging).

This cable should be plugged in from your laptop to the charge controller. **If the charger has two charge controllers** make sure you plug into the charge controller on the right-hand side.

Please make sure to re-connect any cables that are removed during the configuration process when the process is done.

Step 1.

Plug in the Micro-USB in the controller's config port.

The GLB+ only has one controller (see picture below)



The Twin+ & LS4 has 2 controllers (see picture below)



Step 2.

Once plugged into the controller open a web browser and navigate to one of the following IP addresses:

- **New Interface** (white background) - *refer to page 3*
192.168.123.123
- **Legacy Interface** (red background) - *refer to page 5*
192.168.123.123/legacy/operator/operator

Note, if you can't access the legacy interface with above IP address please try:

GLB+

192.168.123.123/operator/operator

TWIN+, LS4:

192.168.123.123:81/operator/operator

Outlet 1

192.168.123.123:82/operator/operator

Outlet 2

Login Credentials:

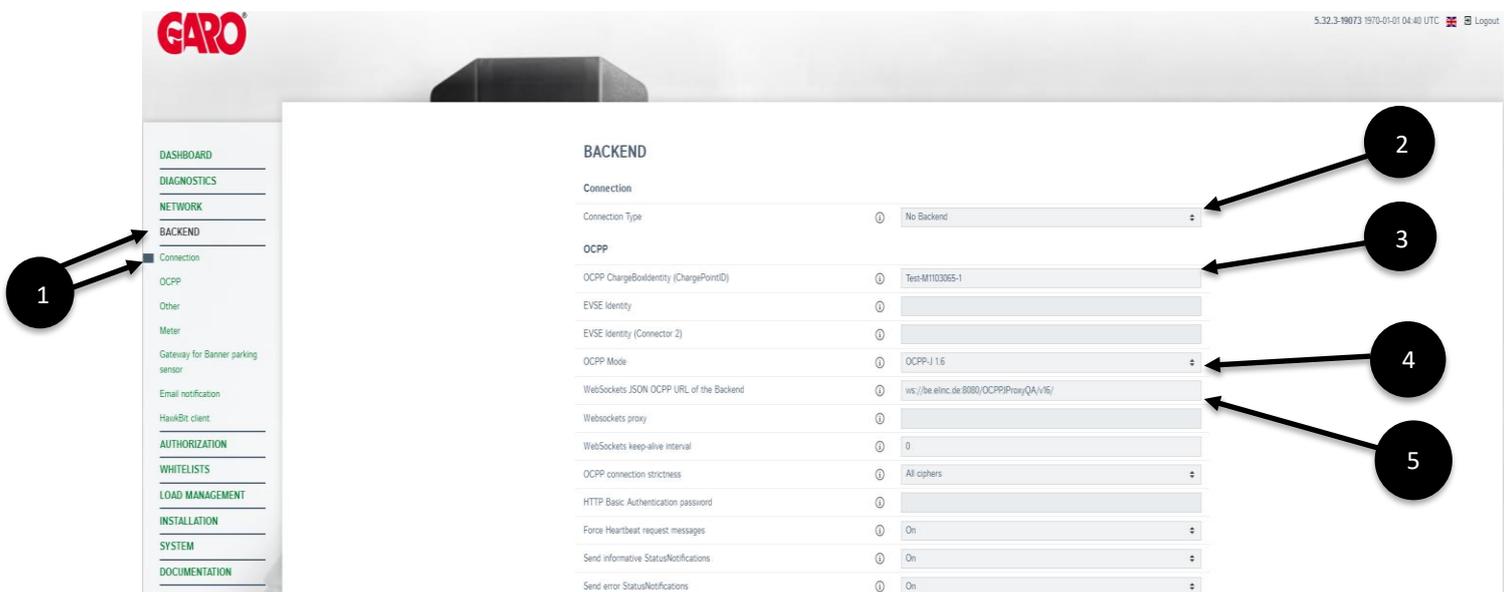
- Username: operator
- Password: cherry_zone or yellow_zone

Configure backend in the charger – New Interface:

192.168.123.123

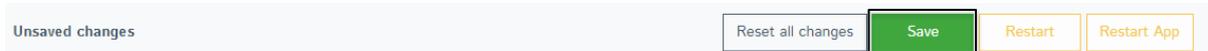
After logging into the charge controller, follow these steps:

1. Navigate to the **Backend** menu (wait for the page to fully load) and **Connection**
2. Select the **Connection Type**
No backend = No connection to an operator
GSM = 4G SIM card
Ethernet = LAN
USB = Not in use
WLAN = Not in use
- Fill in the charger's CBID in the corresponding field **OCPP ChargeBoxIdentity (ChargePointID)**
Note: This is a unique ID-number that differs from various CPO's, and therefore it needs to be provided by the backend operator you're configuring the charger to connect to.
3. Set the **OCPP Mode** to the latest version, most current is OCPP-J 1.6
4. Fill in the **WebSockets JSON OCPP URL of the Backend** provided by your backend operator.

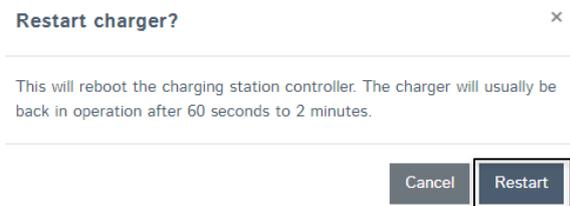
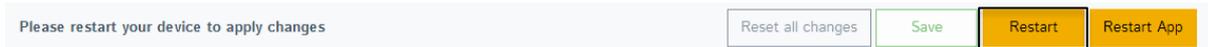


The screenshot shows the GARRO web interface. The sidebar on the left contains a menu with the following items: DASHBOARD, DIAGNOSTICS, NETWORK, BACKEND, Connection, OCPP, Other, Meter, Gateway for Banner parking sensor, Email notification, HawkBit client, AUTHORIZATION, WHITELISTS, LOAD MANAGEMENT, INSTALLATION, SYSTEM, and DOCUMENTATION. The 'BACKEND' menu item is highlighted with a callout '1'. The main content area is titled 'BACKEND' and contains a list of configuration fields. The 'Connection' section has a 'Connection Type' dropdown menu with 'No Backend' selected, indicated by callout '2'. The 'OCPP' section has several fields: 'OCPP ChargeBoxIdentity (ChargePointID)' with the value 'Test-M103055-1' (callout '3'), 'EVSE Identity', 'EVSE Identity (Connector 2)', 'OCPP Mode' with 'OCPP-J 1.6' selected (callout '4'), 'WebSockets JSON OCPP URL of the Backend' with the value 'ws://be.elinc.de:8080/OCPPProxy/QA/v1.6/' (callout '5'), 'Websockets proxy', 'WebSockets keep-alive interval', 'OCPP connection strictness' with 'All ciphers', 'HTTP Basic Authentication password', 'Force Heartbeat request messages', 'Send informative StatusNotifications', and 'Send error StatusNotifications'.

5. Press **“Save”** to apply the changes.
(The bar is visible at the bottom of the screen)



6. Click **“Restart”**, and when the **“Restart Charger”** appears, confirm by pressing **“Restart”** again.

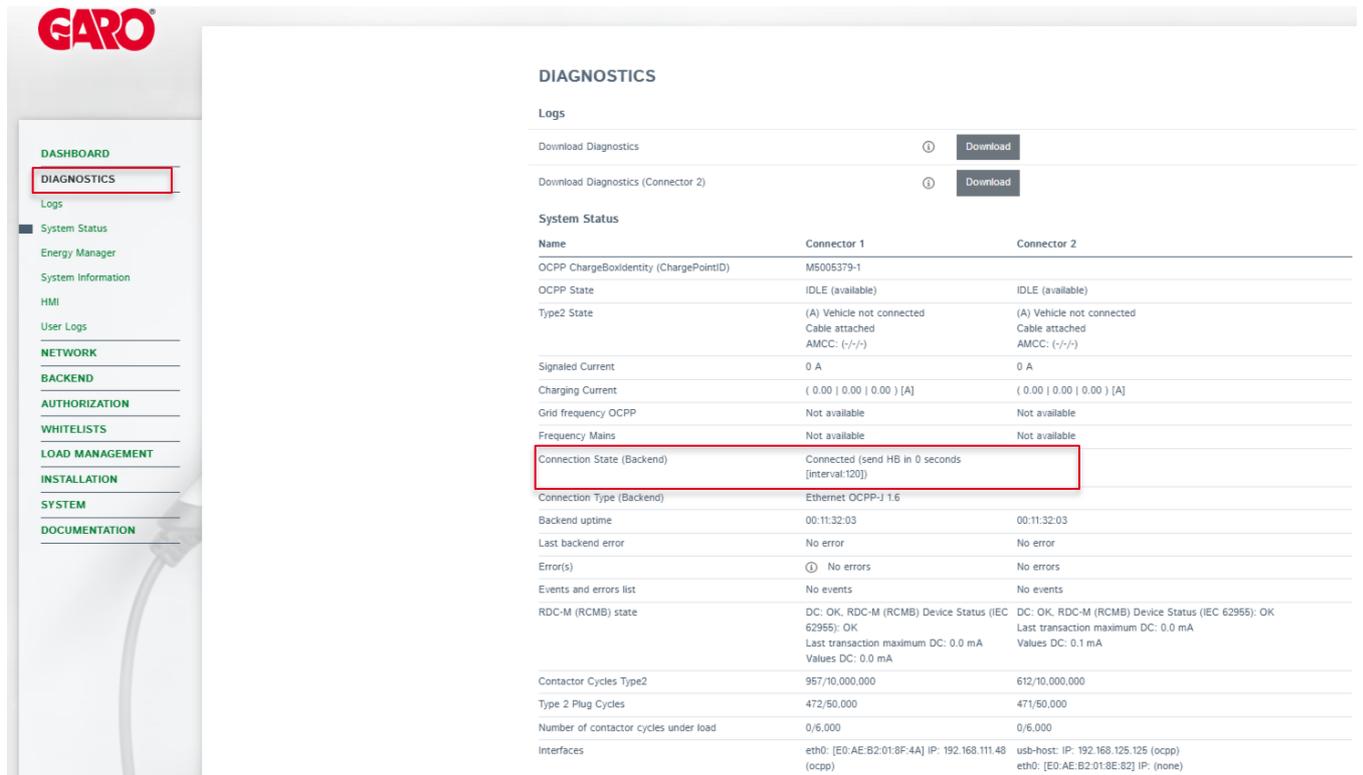


After the above operation (s) are done the charger will restart.

Wait until the chargers LED's displays a green light and log back into the web interface. Use the login credentials:

- **Username: operator**
- **Password: cherry_zone or yellow_zone**

Once logged in, navigate to the **“Diagnostics”** menu and verify that the charger shows **“Connected”** under **“Connection State (Backend)”**



DIAGNOSTICS

Logs

Download Diagnostics ⓘ Download

Download Diagnostics (Connector 2) ⓘ Download

System Status

Name	Connector 1	Connector 2
OCPP ChargeBoxIdentity (ChargePointID)	M5005379-1	
OCPP State	IDLE (available)	IDLE (available)
Type2 State	(A) Vehicle not connected Cable attached AMCC: (-/-)	(A) Vehicle not connected Cable attached AMCC: (-/-)
Signaled Current	0 A	0 A
Charging Current	(0.00 0.00 0.00) [A]	(0.00 0.00 0.00) [A]
Grid frequency OCPP	Not available	Not available
Frequency Mains	Not available	Not available
Connection State (Backend)	Connected (send HB in 0 seconds [Interval:120])	Not available
Connection Type (Backend)	Ethernet OCPP-J 1.6	
Backend uptime	00:11:32:03	00:11:32:03
Last backend error	No error	No error
Error(s)	ⓘ No errors	No errors
Events and errors list	No events	No events
RDC-M (RCMB) state	DC: OK, RDC-M (RCMB) Device Status (IEC 62955): OK Last transaction maximum DC: 0.0 mA Values DC: 0.0 mA	DC: OK, RDC-M (RCMB) Device Status (IEC 62955): OK Last transaction maximum DC: 0.0 mA Values DC: 0.1 mA
Contactor Cycles Type2	957/10,000,000	612/10,000,000
Type 2 Plug Cycles	472/50,000	471/50,000
Number of contactor cycles under load	0/6,000	0/6,000
Interfaces	eth0: [E0:AE:B2:01:8F:4A] IP: 192.168.111.48 (ocpp)	usb-host: IP: 192.168.125.125 (ocpp) eth0: [E0:AE:B2:01:8E:82] IP: (none)

Configure backend in the charger – Legacy Interface:

192.168.123.123:81/legacy/operator/operator

Note: In the Legacy web interface, changes are only made in the **Master controller**.

Note, if you can't access the legacy interface with above IP address please try:

GLB+

192.168.123.123/operator/operator

TWIN+, LS4:

192.168.123.123:81/operator/operator

Outlet 1

or 192.168.123.123:82/operator/operator

Outlet 2

After logging into the charge controller, follow these steps:

1. Navigate to the **Settings** menu
2. Fill in the charger's CBID in the corresponding field **OCPP ChargeBoxIdentity (ChargePointID)**
3. Select the **Connection Type**
No backend = No connection to an operator

GSM = 4G SIM card
 Ethernet = LAN
 USB = Not in use
 WLAN = Not in use

4. Set the **OCPP Mode** to the latest version, most current is OCPP-J 1.6
5. Fill in the **WebSockets JSON OCPP URL of the Backend** provided by your backend operator.

Charging station interface 5.32.3-19073 (Master controller) 1970-01-01

1 Settings

2 OCPP ChargeBox/Identity (ChargePointID) M1125685-68

3 Connection Type Ethernet

4 OCPP Mode OCPP-J 1.6

5 WebSockets JSON OCPP URL of the Backend wss://be.elinc.de:8555/OCPP/ProxyGar

Free Charging On

Operator Current Limit [A] 16

6. Press **“Save and Restart”** to apply the changes.
 After this, the charger will restart.
 Wait until the charger displays a green light.



7. Once the charger has restarted (indicated by a green light) navigate to the **“State”** menu and verify that the charger shows **“Connected”** under **“Connection State (Backend)”**

State		
> DLM		
Settings		
> Default		
Operator		
> Default		
Manufacturer		
System		
Documentation		

OCPP ChargeBoxIdentity (ChargePointID)	M1125585-68	ID that is sent to the backend and used by the backend to identify the ChargePoint.
EVSE Identity		The 'EVSE Identity' can be used to differentiate a technical ID in the backend from the ID that is presented to the user. If set, the 'EVSE Identity' will be used for ISO 15118 certificate signing requests. When left empty, the ISO 15118 name of the EVSE will be derived from the 'ChargeBoxIdentity'.
OCPP State	IDLE (available)	State of OCPP at connector 1.
Type2 State	(A) Vehicle not connected PR: NO CABLE Plug not locked AMCC: (-/-)	State of TYPE2 socket at connector 1.
Signaled Current	0 A	Current (in Ampere) that is signaled to the vehicle via PWM.
Connection Type (Backend)	Ethernet OCPP-J 1.6	Current connection type used for communication with the backend.
Connection State (Backend)	Connected (send HB in 239 seconds [interval 240])	Current state of the backend connection on TCP level.
Backend uptime	00:00:00.01	Backend uptime (d h m s)
Last backend error	No error	Last reported backend error.
Free Charging	On (With OCPP status notif without auth)	Shows if free charging is enabled and, if applicable, with which OCPP behavior it is configured. Note that in case of master-slave scenario the slave will be automatically configured to the same mode the master uses.
Error(s)	No errors	List of errors currently present in the ChargePoint.
Events and errors list	No events	List of the last events and errors with their timestamp.
RDC-M (RCMB) state	RMS: OK, DC: OK, RDC-M (RCMB) Device Status (IEC 62752): OK Last transaction maximum RMS: 0.0 mA, DC: 0.0 mA Values RMS: 0.0 mA, DC: 0.0 mA	RDC-M (RCMB) protection state Maximum values of last transaction Current values
Modbus TCP Server for energy management systems	Off	Activates the charging station's Modbus TCP Server function for connecting energy management systems via Ethernet. Through this interface control information and commands are transferred between charging station and energy manager. For detailed information on the Modbus registers, see the product documentation.
Modbus TCP Server Base Port	502	Port number on which the Modbus TCP Server waits for incoming connections on connector 1. A second server waits on 'port + 100'. Its registers are read-only. In

Important:

Any modifications performed on the controller are done at your own risk. GARO is not responsible for any issues caused by incorrect handling or unauthorized changes.

For further information, please contact:

Support E-mobility (EV charging, GARO Connect, G-Cloud)

Contact: [Click here!](#)