



EV CHARGING SOLUTIONS

Smart charging stations
for every application...

Futuresmart



- SINGLE & DUAL WALL CHARGERS
- PUBLIC CHARGER PILLARS



MADE IN
EUROPE



ROBUST &
DURABLE



COMPREHENSIVE
WARRANTIES

ABOUT GARO

The European leader in charging

GARO Electric is one of the main EV Charging providers in Europe and part of the long-established GARO Group. The company's Nordic headquarters are market leaders in the region due to their extensive history, knowledge & expertise in this space.

After more than 80 years in the industry, **GARO** is the reliable supplier of all types of electric car charging. With our own experts in product development and advanced technical knowledge in software and electronics, we manufacture our own quality products.

We always ensure that future technology developments can be implemented in today's GARO products. An electric car charger from GARO is a future-proof choice with reliable and knowledgeable support on hand.

GARO provide a comprehensive range of charging stations, developed to meet the demand of the entire market from small domestic settings through to all scales of commercial installation and rapid motorway locations.

GARO is a member of the IEC committee for Electric Vehicle chargers. GARO is always up to date with international standards, local requirements and national divergence. GARO chargers are third party tested in an independent laboratory and approved to ensure they meet all relevant standards.

Trusted EV Charging Solutions with Safety, Quality & Compliance at their Core.

KEY FEATURES & CONSIDERATIONS



DC LEAKAGE PROTECTION

DC Leakage monitoring comes built-in. This ensures that the protective devices operate under fault conditions and negates the need for a Type B RCD.



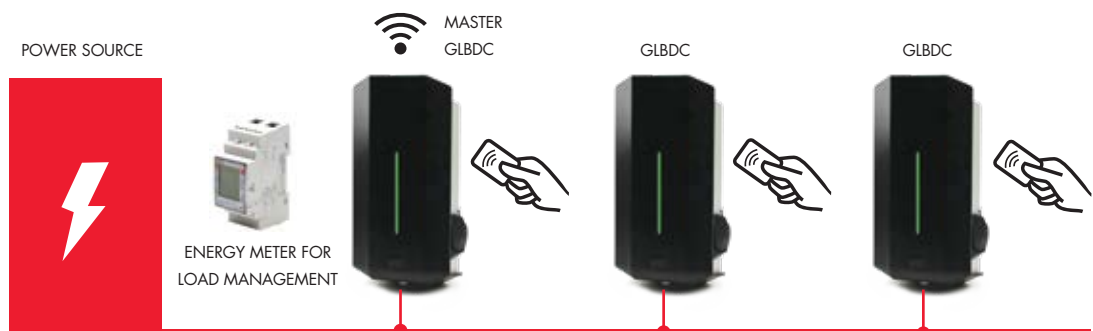
WHAT TYPE OF RCCB OR RCBO?

The IET state that a type B RCCB or RCBO must be used due to DC leakage current, unless the manufacturer has fitted DC leakage detection equipment. All GARO Chargers have DC leakage protection built into the product. The Electrical Contractor needs to fit a type A RCCB or RCBO.



DYNAMIC LOAD MANAGEMENT

With dynamic load management, the charging station, or a group of charging stations, uses an external meter that is usually placed in the main distribution board on the property. The charger keeps track of how much electricity is used in the rest of the property and can therefore adjust how much electricity is used for EV charging at any given moment. At the same time, you can use the capacity you have in the property more efficiently, so that the car charges as quickly as possible - without the main fuse tripping.



WHAT DO I NEED TO PROTECT THE MAIN FUSE?

1

GARO Charger with DLM capabilities

All commercial EV chargers from GARO are prepared for dynamic load management. The software required for this is always pre-installed.

2

Energy meter

In order for load management to be dynamic, an external energy meter is required to be placed in your main distribution board. This meter then measures the total electricity use.

3

Communication cable

The charger and the energy meter need to be able to communicate with each other. Therefore, they are connected with a communication cable. This is easy to do and normally takes place when the power cable is being installed.

KEY FEATURES & CONSIDERATIONS

COMMUNICATIONS



Wi-Fi & RFID

The Wi-Fi module (optional in certain models) allows the charger to be configured and updated remotely. It future-proofs the charger allowing updates for both firmware and software. The Wi-Fi module can be retro fitted.

With the Wi-Fi module fitted, the charger can also be fitted with an optional RFID reader for increased security and billing. With the addition of an energy meter it will give the user the ability to view their energy consumption on their mobile phone, tablet or web browser. Users will also have the ability to create schedules to suit their lifestyle or energy tariffs.



4G or LAN CONNECTION

GARO offers chargers with either integrated 4G modems or connection via a LAN cable. A charging station with a 4G modem can handle the communication for many charging stations through a master-slave configuration. In installations where a 4G solution would not be ideal and a LAN connection is used (e.g. underground car parks) an external modem can be fitted outside.

Talk to our GARO technical experts for assistance with project specs, potential site limitations and communication requirements.



OCPP Payment Solutions

OCPP stands for Open Charge Point Protocol. This protocol allows charge points (hardware) and charge point software to talk to each other. A major advantage of OCPP is that you're not locked into one vendor/software provider for the life of the product. OCPP allows you to mix and match EV charging points and software from different providers.

KEY FEATURES & CONSIDERATIONS



FUTURE-PROOFED SOLUTIONS

Chargers that work today and adapt to the future.

GARO EV Chargers offer a range of features and options to ensure they will stand the test of time, durable solutions with the latest technology.

GARO is **FUTURESMART**.

- Real time diagnostics / fault reporting
- Network connectivity options
- Dynamic Load Management
- Cloud based remote management
- Minimise vandal / accident issues – IK10 rating
- IP rated (dust and water ingress) to suit the environments
- Potential for branding & customisation
- Operating Temperature Range to suit all environments
- Remote RCD testing and auto reset (option)





SINGLE WALL MOUNTED CHARGERS



Simple, smart and safe - The charger of the future

GARO GLB chargers offer smart, safe and efficient vehicle charging in apartment buildings and workplaces. GAROs range of single wall mounted chargers are developed to cope with harsh climates and meet all requirements for electrical installations.

Flexible to install, both on the wall or on a post

Installing a GARO charging station is simple and flexible. Through a wide range of accessories, the charger can be installed on a wall or on a standard post (60mm). With GARO's post bracket, it is possible to install two chargers back to back, which provides an efficient installation.

Features:

Plug and Play means installers can either simply connect and walk away, or easily configure the charger to:

- Deliver between 3.7kW and 22kW
- Accept input to start or stop charging
- Provide remote isolation





Features of the GARO GLB Range

- Designed to withstand harsh climate, manufactured from marine grade aluminium
- Dynamic Load Management - main fuse protection
- Control - up to 32 GLB's linked as master/slave configuration
- LED Status information of the charger
- User identification - RFID reader
- DC leakage built-in, no need for separate Type B RCD
- Motorised interlock with power reserve
- Future proofed if Wi-Fi module fitted
- Mounting on either a wall or pillar/post
- Simple and intuitive installation
- Socket or tethered lead (5m)
- Optional customisation of appearance (complete/partial wrapping)



SUITABLE FOR:

- Apartment Buildings
- Workplaces
- Public Car Parks



Single Wall Mounted GLB

Model Selection

STANDARD GLBDC

OCPP & OZEV GLB-B

| | | |
|--|--------------|--------------|
| Basic Charging | Y | Y |
| Socket or Tethered Option(5m Cable) | Either | Either |
| Motorised Interlock | Y | Y |
| Output Options 6 - 32A set by dip switch | Y | Y |
| Available output range set by dip switch | 3.7kW - 22kW | 3.7kW - 22kW |
| Optional Pillar | O | O |
| Master/Slave configuration - max 32 chargers | Y | Y |
| Metering | O | O |
| Dynamic Load Management | Y | Y |
| Input for timer / low tariff selection | Y | Y |
| Built-in DC Leakage Control | Y | Y |
| Wi-Fi Module | O | O |
| Communication | WiFi / LAN | 4G / LAN |
| RFID access control | O | Y |
| Cloud Reporting system | O | OCPP |
| OCPP (Control via device / PC) | - | 1.6 |

O = Optional Extra

* Note: Dynamic Load Management requires energy meter (sold separately)

Standard - DLM & DC Monitoring

GLBDC-T222WO 3.7kW - 22kW Socket Type 2

OCPP / OZEV DC Monitoring, DLM & RFID

GLB-B-DCMT274WOL 7.4kW Socket Type 2 LAN

GLB-B-DCMT222WOL 22kW Socket Type 2 LAN

PUBLIC CHARGER PILLARS



GARO®



Quality and design for public environments

Robust and proven chargers with high quality, future-proof connectivity & OCPP support

The GARO's LS4 station is manufactured from marine grade aluminium. Its construction allows it to be directly bolted to the ground (e.g. concrete), or mounted on a pole mounted assembly (compact LS4). The top of the charger features a 360 light indicator which displays the charge status of each station from a distance. The front illuminated surface, is available for customer logo and instructions.

The station is equipped with two illuminated type 2 sockets protected against weather conditions. It has separate protection and residual current circuit breakers for each socket and integrated electronic communication between the station and the car. The stations are equipped with intelligent controllers for each of the sockets enabling communication with OCPP 1.6.

As a part of an installed station group, (up to 25 LS4 stations), Dynamic Load Management (DLM) can be activated, which dynamically controls the power of each LS4 socket working in the group.





Features of the GARO LS4 Pillar Charger

- Simple and intuitive operation
- User identification - RFID reader
- Charger status information
- Optional integration with Back Office (OCPP)
- Built-in communication (4G or LAN)
- Ability to activate DLM (dynamic power limitation of each socket)
- Personalisation with branding
- Floor-standing or wall-mounting
- Plug & play installation
- Local and remote monitoring and control of devices
- Compact version available

SUITABLE FOR:

- Public Car Parks
- Shopping Centres
- Bus & Rail Stations
- Restaurants, Hotels etc



STANDARD / TALL

LS4 Public Charger Pillar

Model Selection

All models OCPP

LAN & LANC

| | |
|---|-----|
| Basic Charging | Y |
| Type 2 Sockets | x 2 |
| Motorised Interlock | Y |
| Output Factory Set | Y |
| Dynamic Load Management* | Y |
| Metering | Y |
| Core Balanced Protection (no nuisance tripping) | Y |
| Full Open OCPP | Y |
| PC Browser Interface | Y |
| LAN | Y |
| 4G Built in Modem | - |
| RFID access control | Y |
| DC Leakage Protection | Y |
| Suitable for Wall Mounting | - |
| OCPP Back Office Software | O |
| Auto Reclosing MCB / RCCB | - |



O = Optional Extra

* Note: Dynamic Load Management requires energy meter (sold separately)





GARO®