

POWER BREAK.

with GARO Futuresmart™

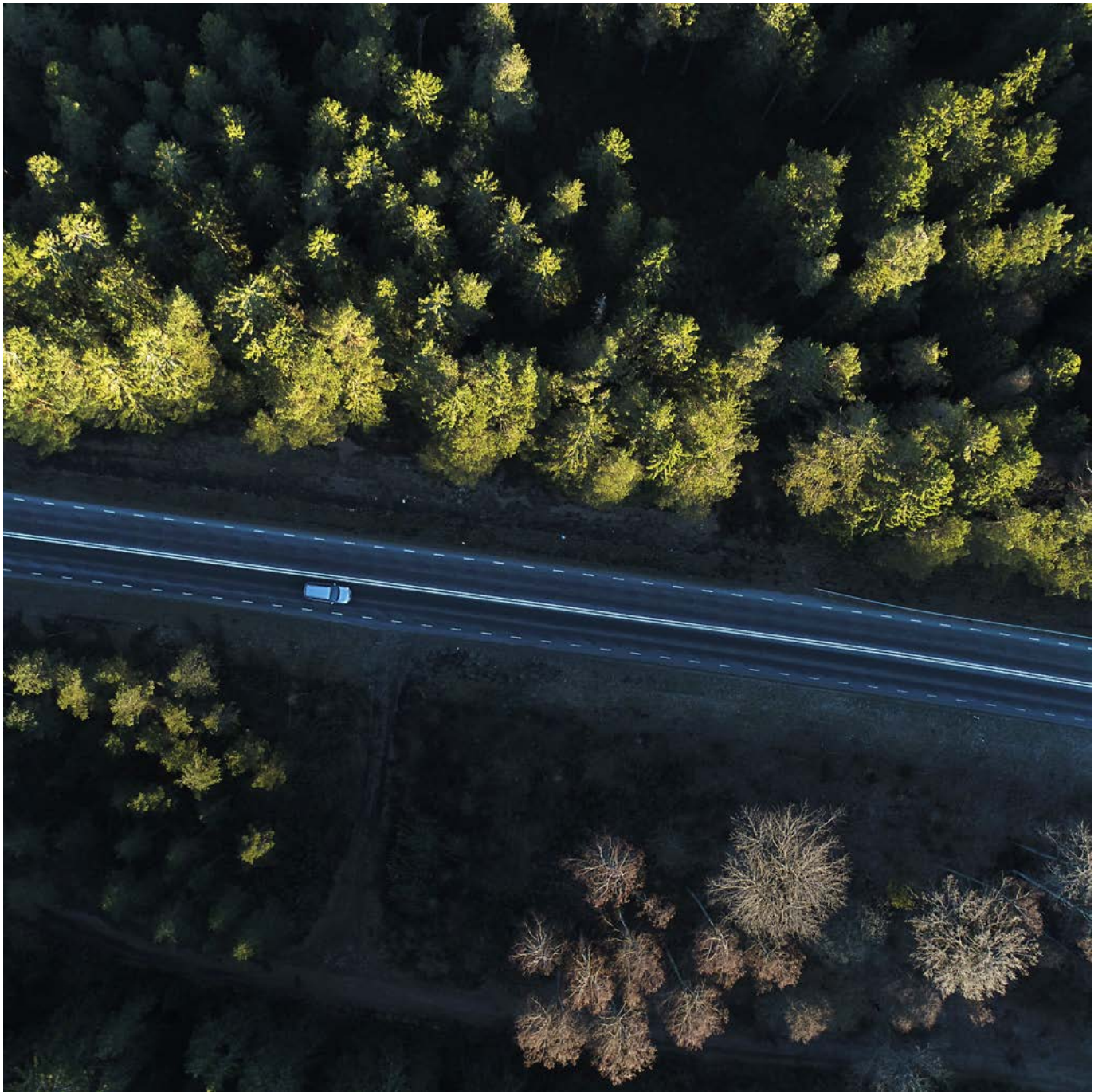
GARO fast charging

The future is electric

The ever-present climate debate has led increasingly more people to accept responsibility and join efforts to reduce carbon emissions. Car manufacturers are investing heavily to offer new battery-powered models. This means that we can expect to see a huge demand for charging facilities throughout society in the future, which is a great opportunity to demonstrate both environmental responsibility and customer care.

GREEN CUSTOMER CARE

If you run a business that customers visit by car, whether to shop, get coffee, eat, exercise or just take a break, this is a great opportunity to attract more customers. Installing a charging station that offers fast charging will not only attract customers, but also reward you with greater loyalty by clearly showing on which side of the climate debate you stand.







A quick top-up with Althea 50 kW

On the back of many years of charging experience and development, GARO is now launching its very own 50 kW DC charger. Althea brings not only style and modernity, but also new opportunities in terms of remote connection, operation and maintenance. To ensure smooth operation, GARO has built up an entire aftermarket concept around Althea, offering you access to local service and maintenance. Sticking to the recommended service intervals also provides the option of an extended warranty.

ROADSIDE APPEAL

Our Althea fast charger is perfectly suited to places where people run shorter errands. And the fact that they are able to top up their electric charge will encourage more frequent visits. Since Althea is equipped with both CCS and CHAdeMO charging cables, it is suitable for use with all electric cars that support fast charging. The straightforward touchscreen makes the charger easy to use regardless of language. Moreover, the high-quality technology and components mean that this charging station takes care of itself with minimal maintenance.

Althea – outstanding GARO quality

CHARGES ALL CARS

Althea is equipped with both CCS and CHAdeMO charging cables to ensure that all electric car types with support for fast charging can be charged. Only one charging cable is used at a time.

USER-FRIENDLY TOUCHSCREEN

The touchscreen, with its straightforward interface and different language options, makes understanding the charging process simple.

IDENTIFICATION BY RFID

Charging starts following identification by RFID tag or via operator's app.

RELIABLE DESIGN

Compact and robust design ready for fast and efficient installation. Althea is made for harsh climates and harsh conditions (IP55/IK10).

CUSTOM BRANDING

The charger can be customised with your own vinyl wrap design to strengthen your brand and advertise your contribution to the environment.

EASY CONNECTION

Althea is ready for connection to all types of three-phase networks (3x400 V TN).

DUAL CONNECTIONS

Dual modems, one for communication with the payment provider and one for remote service updates to increase reliability.





What does an Althea installation require?

An Althea installation should be carefully planned based on the location and the layout of the parking area. The charging station should be powered from a supply rated at least 80 A (400 V TN). It should also be decided whether it is to be connected to a back office charging provider and, if so, how access control is to be implemented. Once everything has been planned and ordered, Althea will be delivered ready to use and configured with all the right settings. Like all GARO products, Althea is designed to be easy to install and intuitive to use.







GARGITNER

Althea – general specifications

AC POWER SUPPLY



Voltage: 400 VAC 50 Hz TN-S

Nominal current: 80A

Max. short-circuit current at connection point: 36 kA

Recommended fuse: min. 80A (C-type)

To optimize EMC performance, we recommend connecting a reinforced functional earth.

Power factor: >0.98

Harmonics: Normal operation conforms to EN61000-3-122

MID-certified energy meter on AC supply

DC OUTPUT



Voltage: 200–500 VDC

Current: max. 125 A

Max. power: 50 kW

INSULATION

In (AC)/Out (DC): 3 kVAC

Out (DC)/PE: 2.2 kVDC

Output earth: DC floating earth

Insulation tests require special measures

OPERATING TEMPERATURE

Ambient temperature (air): -30°C to +40°C

HARDWARE-BASED PROTECTION

Surge protection on AC supply

Circuit breaker with thermal-magnetic protection

The circuit breaker has disconnecter characteristics and is lockable

Residual current device 30 mA for support systems

Separate fuses for each DC/DC module

Fast-acting fuses on DC supply to car

ELECTRONIC PROTECTION

Insulation monitoring on output DC

Overload and short-circuit protection

Overheating and temperature control

Surge protection

Polarity protection

Connector monitoring

Althea – general specifications cont.

COMMUNICATION INTERFACE FOR ELECTRIC VEHICLES

CCS/COMBO (Type 2)

CHAdeMO

Cable length: 4.5 m (standard) or 6.5 m (optional)

MECHANICAL PROPERTIES

Dimensions: H=1955 mm, W=600 mm, D=540 mm

Weight: 280 kg

Pallet/packaging dimensions: 1200x1000x2200 mm, 305 kg

IP55, IK10

COMMUNICATION INTERFACE

OCPP 1.6J-SON

2 x 4G modem, one for service and one for OCPP

Optional: LAN/TCP-IP Ethernet (RJ45)

Vehicles: CAN (CHAdeMO) and PLC (CCS/COMBO)

Access: RFID reader

STANDARD COMPLIANCE

EN 61851-1:2017 ed. 3.0

IEC 61851-21-2 ed. 10 (part 21-2), -23:2014 ed. 1.0, -24:2014 ed. 1.0

IEC 61439-1:2011 ed. 2.0, -7:2018 ed. 1.0

IEC 60529:2013 + A1:1999 + A2:2013

EN61000-3-122, -6-2:2005, 61000-6-3:2006 + A1:2010

IEC 62311:2007

CE marking (LVD, EMC, RED, ROHS)

VARIANTS / OPTIONS

Supplied with preconfigured OCPP settings

Long cable/cables (6.5 m)

LAN/Ethernet connection

Custom vinyl wrap

Service agreement

3-year extended warranty with service agreement

Base for casting in concrete

Universal base for installing in ground available through our partner, Unimi.





Atle 24 kW – compact, convenient and easily placed

Our Atle fast charger has a compact design for fast and efficient installation on either a wall or a stand. This is a robust and durable charging station with a front panel that can be customised with your own vinyl wrapping design. Atle is an ideal solution for car dealers, car repair shops, car rental companies, vehicle depots and other establishments with extensive fast charging needs.

EASY FAST CHARGING FOR EVERYONE

Boasting a 24 kW output for both CCS and CHAdeMO, Atle can fast-charge all electric cars on the market. The user starts the charger with an RFID tag. The straightforward touchscreen is easy to use and can display its instructions in a number of languages. How long charging takes always depends on the car, but generally speaking Atle offers a higher charging speed than traditional AC chargers. In ideal conditions and at full power, a car's range can be topped up by as much as 120 km an hour.

PROVIDER CONNECTION

Atle offers wireless connectivity, opening the way for the payment service provider of your choice.

Atle – outstanding GARO quality

CHARGES ALL CARS

Can be equipped with a single CCS charging cable or paired with a CHAdeMO cable to ensure that all electric car types can be charged. One charging cable is used at a time.

USER-FRIENDLY TOUCHSCREEN

The touchscreen, with its straightforward interface and different language options, make understanding the charging process simple.

IDENTIFICATION BY RFID

Charging starts following identification by RFID tag.

RELIABLE DESIGN

Compact and robust design ready for fast and efficient installation. Atle is made for harsh climates and harsh conditions (IP55/IK10).

CUSTOM BRANDING

The charger's front panel can be customised with your own vinyl wrap design to strengthen your brand and advertise your contribution to the environment.

EASY CONNECTION

Atle is ready for connection to all types of three-phase networks (3x400 V TN and 3x230 V IT).

MINIMAL SERVICE

A maintenance-free heat exchanger, with no air filter to change, minimises service needs.



Atle – general specifications

TECHNICAL DATA

Type designation

Atle CCS: AT DCx24/530V1000BORTA,

Atle CCS & CHAdeMO: AT DCx24/530V1100BORTA

Net weight: 66 kg (Atle CCS)

Net weight: 93 kg (Atle CCS & CHAdeMO)

Width: 507 mm

Height: 860 mm (Atle CCS)

Height: 1225 mm (Atle CCS & CHAdeMO)

Depth: 250 mm

Rated voltage: (AC) 400 V TN

Rated current: (AC) 37 A

Rec. min. fuse: 40A

Frequency: 50 Hz

Output: 24 kW

Output voltage: (DC) 150-530 V

Max. output current: (DC) 65 A

Charging connector: CCS Combo (Type 2), (Atle CCS)

Charging connector: CCS Combo (Type 2) & CHAdeMO (Atle CCS & CHAdeMO)

Operating temperature: -25°C to +50°C

Protection class: IP55

Impact protection: IK 10

Communication backend OCPP 1.6

HMI touchscreen 7"

RFID: Yes

COMMUNICATION

Vehicle interface: PLC GreenPhy (Atle CCS),

Vehicle interface: PLC GreenPhy & CAN (Atle CCS & CHAdeMO)

Cable length: 3.5 m

Wireless communication: 4G via OCPP 1.6 (as of 2021)

Access & identification: RFID reader

INSTALLATION ENVIRONMENT

Operating temperature: -25°C to +50°C

Storage temperature: -25°C to +60°C

Relative humidity: 10% – 95%

CONFIGURATION AND OPTIONS

3P+N 400 V (Europe) or 3P 240 V (Norway)

Pedestal for stand-alone installation

Vinyl wrap for front panel for custom look





Design your own fast charger

Although GARO's fast chargers are stylish as standard, you have the option of branding them with your own vinyl wrap design. This provides an excellent marketing space to both strengthen your brand and advertise your contribution to the environment.

Both Althea and Atle can be delivered with a custom design straight from the factory. This requires that you select this option when ordering and provide GARO with the necessary design specification. Althea also provides the option of displaying your very own welcoming message along with your brand on the touchscreen when it is in standby mode. In the future, we may develop additional screen functions, enabling you to use it as a practical communication channel.

GARO's dependable service and support

GARO's fast chargers offer modern remote connection options to simplify service and support, with the aim of minimising the need for callouts. They require servicing for optimal operation and high availability.

GREATER SERVICE PRESENCE

GARO has invested heavily to be able to provide first-class service and rapid support no matter where you install your fast charger. If you would like a convenient turnkey solution, we can offer attractive service agreements in several countries, such as commissioning and remote monitoring with a callout response when necessary. We ensure that your customers can always charge their cars at your establishment.



The leading Nordic supplier of vehicle charging technology

After 80 years in the industry, GARO has built up a level of stability and expertise that makes us a reliable and trustworthy supplier. Since 2008, we have developed all types of electric car charging equipment and delivered products for over 100,000 charging points throughout Europe. We manufacture high-quality products based on our own advanced research and development and technical expertise in the fields of software and electronics. This also means that we always ensure that our future technological developments are backwards compatible with existing GARO products. This makes an electric vehicle charger from GARO a futureproof investment underpinned by reliable and knowledgeable support close to hand.



We are GARO. We are Futuresmart.

GARO Futuresmart stands for innovation and products developed for the future; products that ensure energy savings, smart control and ease of use. With GARO Futuresmart, our intention is to continuously develop by creating new products, training packages, certifications, sustainability solutions, user satisfaction, service, etc. We constantly strive to make things simpler, better and smarter. For a safer, more sustainable future.

GARO FUTURESMArt GUARANTEES:

- Innovation
- Control
- Training
- Safety
- Modern design
- Service and support
- Energy savings
- Sustainability

