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# Powerful and reliable DC charging.



**GARO**<sup>®</sup>

Powered by  
**Ingeteam**

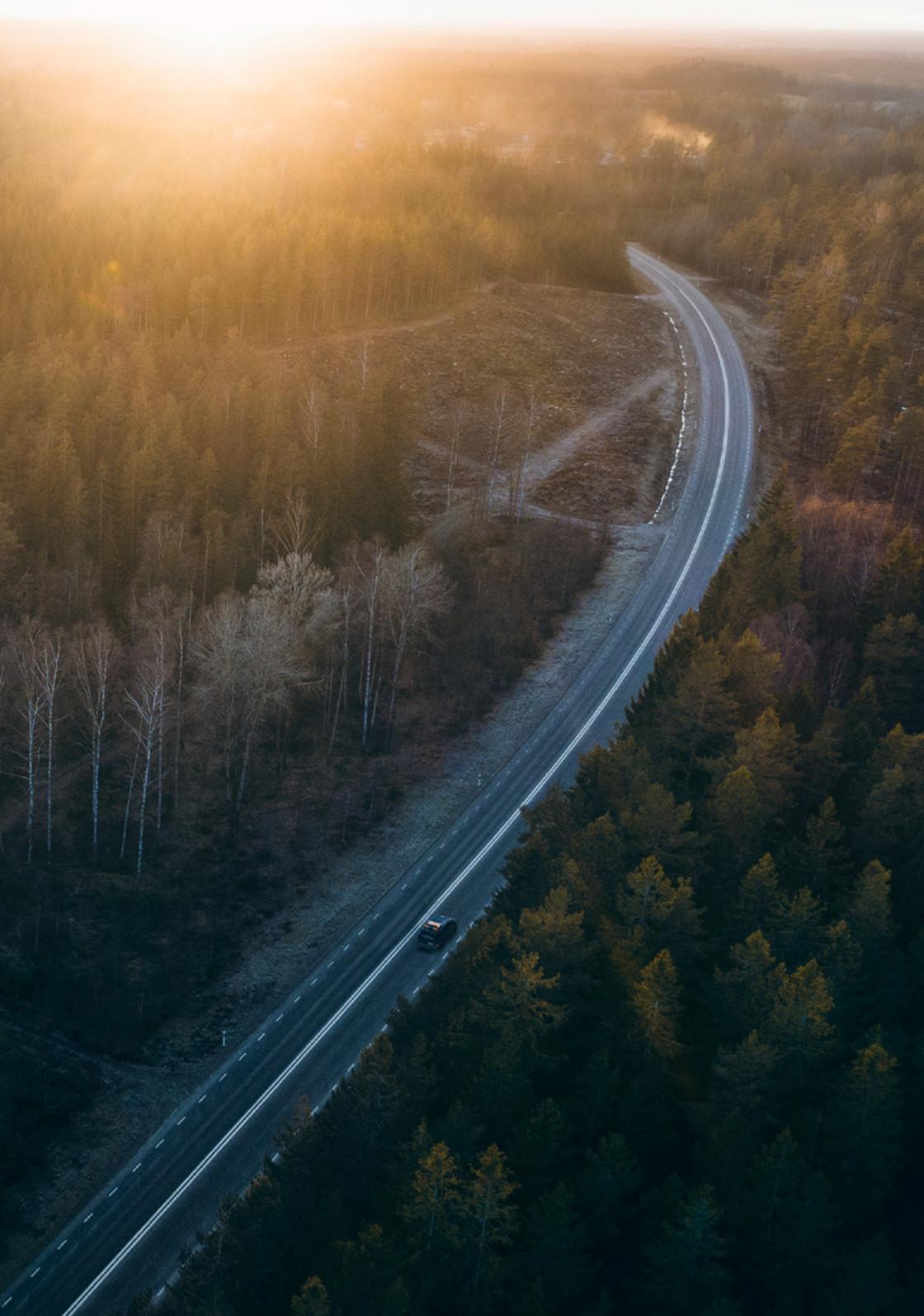


## Fast and efficient charging for two cars

RAPID 120/180 kW is a fast charger designed to be able to deliver power even to the most demanding vehicles. The charging station has been constructed to meet high requirements and quality standards, and it offers optimal performance in areas such as energy management, communication, reliability, and efficiency.

The chargers are compatible with the CCS standard and can be configured with either one or two CCS cables, with a cable length of 6.5 meters and a current rating of 300A.

Load balancing can be achieved between CCS cables or between installed RAPID charging stations in a cluster using DLM 2.0, which is included as standard. This ensures a smooth and efficient distribution of charging power for optimal performance and reliability.



## Key features

- Modular power electronics in 30 kW increments.
- RAPID 120 kW can be upgraded to 180 kW to meet increasing demands.
- Supports CCS charging up to 180 kW. Possible to choose between Single/Dual CCS for different needs.
- Equipped with a built-in cable management system to facilitate handling.
- Uses an RGB-LED to provide clear status indication for the user.
- Includes an RFID reader for user authentication.
- Has a built-in 7-inch touchscreen with multilingual support for easy use.
- Energy consumption is measured with a MID-approved energy meter.
- The chassis is robust and made of stainless steel for long-lasting durability.
- Supports the ISO 15118 standard for Plug & Charge functionality.
- Includes DLM 2.0 for load balancing between CCS cables and RAPID charging stations in a cluster.

# Safety

## **SHORT CIRCUIT AND OVERCURRENT PROTECTION**

Utilizes MCB (Miniature Circuit Breaker) and RCB (Residual Current Breaker) to protect against short circuits and overcurrents, contributing to a safe and stable operation.

## **SURGE PROTECTION AND TYPE 2 TRANSIENT PROTECTION**

Includes surge protection and Type 2 transient protection to safeguard against surges and transients, crucial for preventing damage to the system and connected vehicles.

## **EMERGENCY STOP BUTTON**

A clearly visible and easily accessible emergency stop button ensures that users can immediately halt the charging process in an emergency, enhancing safety during usage.

# Optional features

## **SELF-RESETTING GROUND FAULT CIRCUIT INTERRUPTER**

An option for a self-resetting ground fault circuit interrupter, which further enhances the unit's safety by monitoring and promptly responding to any ground faults.

## **LOCKING SYSTEM FOR CCS CABLES**

Offers a locking system for CCS cables. This increases security and prevents unauthorized access or use of the charging outlets.

## **INTEGRATED PAYMENT TERMINAL**

An option for an integrated payment terminal, enabling a smooth and convenient payment process for users directly at the charging station.

## **SMART DLM (DISTRIBUTED LOAD MANAGEMENT)**

In addition to the built-in DLM (Distributed Load Management), the facility can be supplemented with Smart DLM (DLM Pro). This option enables balancing against external load, providing additional flexibility and optimizing the charging process.





## New charging station with dual outlets

Together with Ingeteam, GARO presents RAPID 60 kW, a compact charging station equipped with two CCS cables, with a cable length of 4.4 meters and a current rating of 150A. During charging, an output of either 30 kW on both outlets or 60 kW on a single outlet can be achieved. The charging station is equipped with a user-friendly cable management system and is connectable via 4G. For increased functionality, there is also an option for mounting a payment terminal that can be purchased as an add-on.

This charging station is an excellent solution for locations where the need for a space-saving DC charger is high. Its flexibility allows for ground mounting on a foundation either against a wall or back-to-back. This means that there is an opportunity to install up to four charging points in a small area. Additionally, the charging station can be vinyl wrapped with its own design, providing further customization options.

# Key features

## **SMOOTH CABLE MANAGEMENT SOLUTION**

Option for a self-resetting ground fault circuit interrupter, which further enhances the unit's safety by monitoring and promptly responding to any ground faults.

## **ROBUST CHASSIS**

Made of galvanized steel with a stainless steel version available as an option for long-lasting durability.

## **EASY INSTALLATION**

Can be easily placed with a forklift or lifted in place with integrated lifting loops. The bottom of the chassis is prepared for forklift handling.

## **SIDE-MOUNTED VENTILATION**

Allows for wall or back-to-back mounting. Opening of the charger occurs from the front.

## **FLEXIBLE CHARGING**

Enables charging of two vehicles with 2x30 kW or 60 kW with only one charging vehicle.

# User interface and visibility

## **LED STATUS INDICATION**

360-degree LED illumination at the top of the charger, as well as LED indication around the integrated holder for the charging cable to visualize the charger's status.

## **RFID READER**

For user authentication.

## **10.1" TOUCHSCREEN**

With support for multiple languages.

# Safety

## **BUILT-IN ELECTRICAL SAFETY PROTECTION**

Specifications for built-in electrical safety protection.

## **EASILY ACCESSIBLE EMERGENCY STOP**

For safe use and handling of emergency situations.

# Communication paths and protocols

## **ETHERNET PORTS**

2 Ethernet ports with switch functionality.

## **4G COMMUNICATION**

Two SIM card slots for 4G communication.

## **PROTOCOL SUPPORT**

OCPP, Autocharge, Plug&Charge (features depending on backend).

## **LOAD BALANCING**

Static and dynamic load balancing in clusters of RAPID chargers.

Smart DLM enables balancing against main fuse and external load (requires external meter).

## **WEB MANAGER**

Manage, configure, and control the charger via a web interface.

## **PROTOCOL**

Modbus TCP, MQTT.

# Optional features

## **INTEGRATED CARD PAYMENT TERMINAL**

Enables payment directly at the charging station (requires a separate agreement with card issuer).

## **LOCKABLE PARKING MODE**

Increased security through lockable parking mode.

## **SMART DLM (OPTIONAL)**

Complements built-in DLM for load balancing against external load.

This charging station offers a variety of features and customization options for different user needs and charging environments.





	<b>RAPID 120</b>	<b>RAPID 180</b>	<b>RAPID 60 Duo</b>
<b>INPUT</b>			
Voltage	AC three-phase + N + PE; 380/400/480 VAC ±15%		
Frequency	50/60 Hz +-5%		
AC current (max.)	190A	280A	96A
Output (kW)	120kW	180kW	60KW
<b>DC OUTPUT</b>			
Voltage	150 - 1000V		
Max. current (power electronics)	600A (250A+250A)	600A (250A+250A)	150 A
Max. power	120 kW (60+60)	180 kW (90+90)	60kW (30+30)
Connections	CCS (single), CCS + CCS (dual), CCS + CHAdEMO (125, 200 A)		
<b>STANDARDS AND SAFETY</b>			
Standards	IEC 61851-1 ed 3, IEC 61851-21-2 ed 1, IEC 61851-23 ed 1, IEC 61851-24 ed1, IEC 62196-2, IEC 62196-3, IEC 61000, ISO15118		
Overcurrent	Programmable MCB		
Earth fault monitoring	DC – Type A 30 mA RCD DC leak sensor; AC – Type B RCD		RCD 30mA
Overvoltage	DC inputs and outputs protected against type 2 permanent and transient overvoltage		
Communication	Ethernet, 3G/4G modem		
Communication protocol	OCPP (1.5 SOAP, 1.6 SOAP, 1.6 Json)		
Interface (HMI)	7" touchscreen, RFID (Mifare Classic 1K & 4K, Mifare DESFire EV1, NFC)		10 tum touchscreen
<b>GENERAL INFORMATION</b>			
Stand-by power	<60W	<80W	<100W
Cable management system	Yes		
Cable length	6.5 m, of which 5 m extended length		4,4m
Energy metering	MID meter		DC meter Eichrecht (ongoing)
Operating temperature	-35°C to 60°C (optional kit for higher or lower temp.)		-35°C to 50°C
Humidity	<95%		
Weight	380kg	420kg	160kg
Dimensions (Height x Width x Depth)	2300 x 774 x 730 mm		1950 x 760 x 335 mm
Enclosure	430 stainless steel and aluminium		Galvanised steel, RAL 9003
Operating altitude	For use at altitudes above 2000 m, please contact GARO		
Protection ratings	IP54/IK10 (touchscreen IK08) / C5H		IP54 / IK10 / C5H
CE marking	Yes		
Directives	Low voltage directive: 2014/35/EU – EMC Directive: 2014/30/EU		

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