

# RAPID ST

## The ULTRA-RAPID



**Ultra-rapid charging stations play a key role** in the complete expansion of e-mobility.

The Ingeteam ultra-rapid charging station solution is based on an innovative DC distribution architecture, for maximum simplicity of the installation as well as the easy integration of storage and PV energy.

It offers all the advantages of the latest generation SiC electronics, while combining an extremely compact size, high efficiency and reliability.

Ingeteam RAPID ST200 and ST400 are the ideal ultra-rapid charging points for service stations with a high turnover. Compatible with the CHAdeMO and CCS standards, they are the perfect solution for charging all types of e-vehicles.

	ST200 ONE	ST400 ONE	ST200 DUO	ST400 DUO
Connectors	1	1	2	2
Simultaneous charging				✓

### FEATURES

- Ultra-rapid charging in CCS up to 400 kW.
- Super-rapid charging in CHAdeMO up to 100 kW.
- RFID / NFC card authentication.
- 7" color touch screen.
- Ambient light.
- Simplicity and efficiency in the integration of storage systems.
- Built-in DC wattmeter.

### COMMUNICATIONS

- Communication Modbus TCP.
- Compatibility with OCPP.

### SAFETY

- Highly visible emergency button to guarantee safety of use.
- Automatic software updates (OCPP, ISO15118, etc.) for the entire product life.

### OPTIONS

- 21" advertising screen.
- Contactless card payment solution (Ingenico).
- Complete supply of satellites, central inverter and sub-station.
- Remote communication via Ethernet and 3G/4G.

### CONNECTOR TYPES



**CCS1 300/500**  
CCS Type 1  
300 or 500 A



**CCS2 300/500**  
CCS Type 2  
300 or 500 A



**CHA125**  
CHAdeMO 125 A



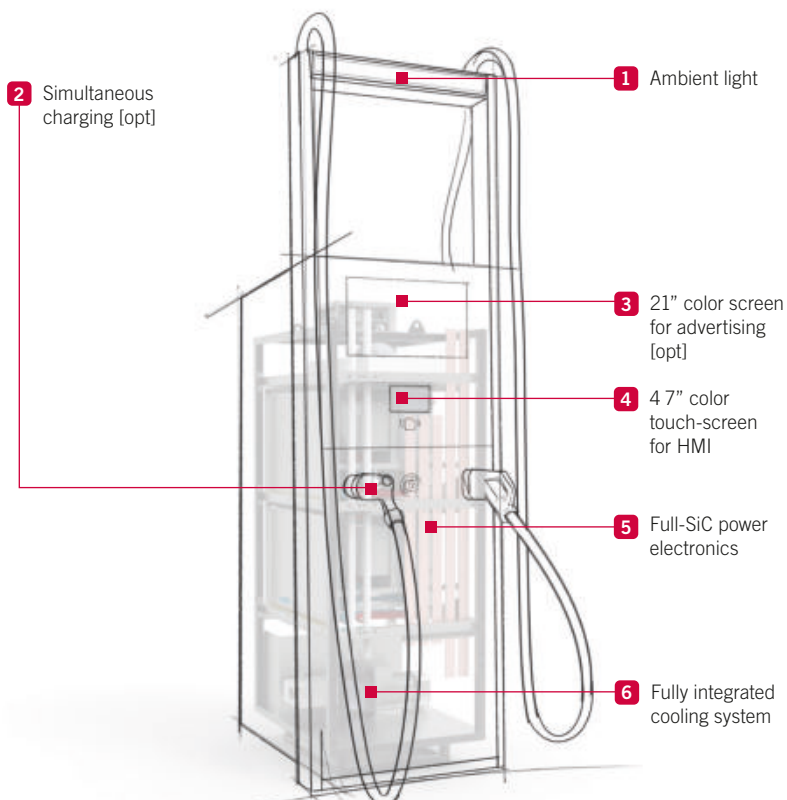
**CHA200**  
CHAdeMO 200 A

# CHARGING station



## ADVANTAGES OF THE DC BUS ARCHITECTURE

- Distance of up to 120 metres between the central inverter and the satellites, free and unobstructed charging area.
- Half the installation footprint of other architectures.
- Integrated cooling in all elements, for maximum installation simplicity.
- Scalability, the system can be easily extended by connecting new satellites to the DC bus.
- Flexible power balancing (DLM) between all the satellites.
- All the satellites can always charge simultaneously with no need to sacrifice power modules in order to divert the energy to another satellite with a higher demand.
- The ST200 satellites can be upgraded to ST400 by simply adding a new power module.

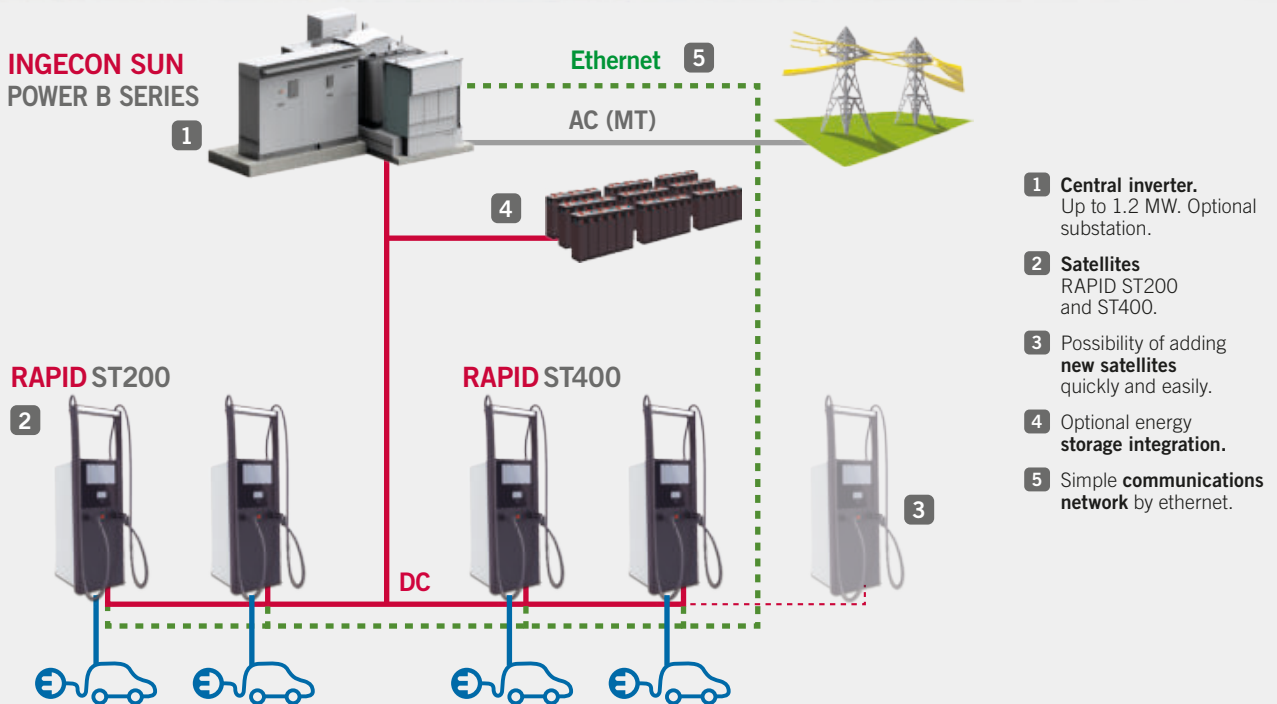


# RAPID ST

# Central inverter AND SATELLITES



DIAGRAM OF THE INSTALLATION



- 1 Central inverter.**  
Up to 1.2 MW. Optional substation.
- 2 Satellites**  
RAPID ST200 and ST400.
- 3** Possibility of adding **new satellites** quickly and easily.
- 4** Optional **energy storage integration**.
- 5** Simple **communications network** by ethernet.

# RAPID ST

	Charging Satellites	
Input (DC)	RAPID ST200	RAPID ST400
Rated input current	200 A	400 A
<b>DC output</b>		
Voltage range	50 - 1000 Vdc	
Maximum current	250 A up to 500 Vdc, 200 A up to 1000 Vdc	500 A up to 500 Vdc, 400 A up to 1000 Vdc
Maximum power	200 kW	400 kW
Connectors	CCS Type 2 / CHAdeMO	
<b>General information</b>		
Cooling system	Integrated liquid cooling	
Auxiliary power supply	3P+N 400V	
Length of cables	4.8 m	
<b>Standards and Safety</b>		
General standards	IEC 61851-1, IEC 61851-23, IEC 61851-24, CHAdeMO 1.0.0, DIN 70121, ISO 15118, IEC 61000	
Indirect contacts	Continuous monitoring of insulation	
Overvoltages	Type III surge arresters	
<b>Dimensions and weight</b>		
Dimensions	775 x 935 x 2,620 mm (W x D x H)	
Weight	430 kg	530 kg

	Central inverter
Input (AC)	1110TL B400
Power at @35 °C / @50 °C	1,020 kVA
Current at @35 °C / @50 °C	1,600 A / 1,472 A
Rated voltage	3P 400 V IT System
Frequency	50 / 60 Hz
Adjustable Power Factor	Yes, 0-1 (leading /lagging)
THD (Total Harmonic Distortion)	<3%
Overvoltage protections	Type II surge arresters
AC breaker	AC MT breaker, door operated, remote tripping or motor driven
<b>Storage</b>	
Battery voltage range	580 - 820 V
<b>Dimensions and weight</b>	
Dimensions (Width x Depth x Height)	2,820 x 825 x 2,270 mm
Weight	1,560 kg

General data	Installation
Operating temperature	-20 °C to +60 °C
Relative humidity (non-condensing)	0 - 100%
Protection rating	IP54 / IK10 (display and ventilation grid IK08)
Corrosion protection	C5H
Maximum altitude	4,500 m (for installations above 1,000 m contact the sales department)
Product marking	CE