

chargeply

MULTI-EV STATION 75.2

Data Sheet



GENERAL PROPERTIES

CHARGING STATION

Mode	Mode 4	Maximum power	2x75 kW DC
Number of chargers	2 (75 kW charging power each)	Numbers of charge points	2 minimum (up to 20 maximum)

OPERATING CONDITIONS

Usage	Indoor/outdoor	Temperature	-25/+50°C
Humidity	≤ 95% RH	Maximum altitude	2000 m

COMMUNICATION

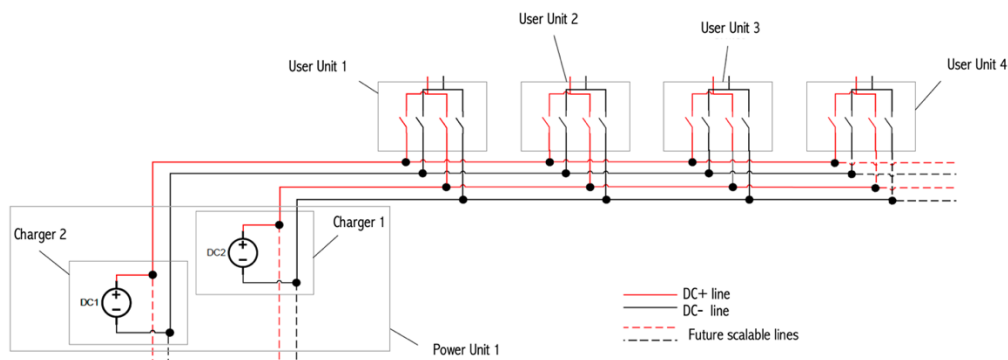
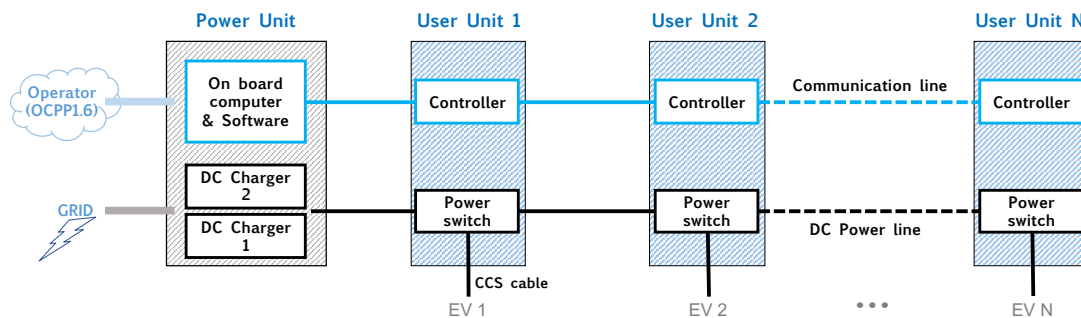
Connectivity	Ethernet, 3G/4G (optional)	Protocol	OCPP 1.6J (2.0 optional)
Authorization	Smartphone, Plug & Charge	Status display	LED on each User Unit

NORMS

Standards	EN 61851-1/23/24, ISO 15118	Marking	CE
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LAYOUT

MULTI-EV STATION 75.2 is composed of 1 Power Unit and a plurality of User Units. The Power Unit includes two DC chargers. Each charger is composed of one or more 25 kW AC/DC converters and can be upgraded modularly up to 75 kW. Each User Unit includes one CCS charge point. Additional User Units can be integrated into the station as the need for more electrified parking spaces evolves.



Power Unit

AC Power input

Supply voltage	400 VAC +/-10 %	Connection	3 P + N + PE
Frequency range	50-60 Hz	Maximum power	170 kVA
Maximum current	250 A	Power factor	> 0,99
Grounding system	TT or TN	Power derating	Programmable

DC Power output

Constant power	2x75 kW max.	Efficiency	> 0,94%
Voltage range	50-500V	Current range	0-190 A max.
Load balancer	Customized algorithm		

Safety

Electrical protections	MCB, RCD, overvoltage	Overtemperature	Power derating
Lightning arrester	Included	Emergency stop	Included

Mechanical properties

Dimensions (HxWxD)	2000x1000x1000 mm	Weight	300kg maximum
Protection ingress	IP44	Impact resistance	IK10
Mounting	Stand	Cooling	Air fans

User Unit

DC Charging

Power	Up to 75 kW	Connector	CCS2
Voltage range	50-500 V	Current range	0-190 A

Safety

Reverse current flow	Diode	High Speed Fuse	300 A
Emergency stop	Optional	Connector holder	Locking system

Mechanical properties

Dimensions (HxWxD)	2100x400x320 mm	Cable length	3.6 m
Weight	60 kg	Protection ingress	IP55
Casing material	Stainless Steel	Color	White
Impact resistance	IK10	Mounting	Stand
Cooling	Passive	Night lighting	Optional

About

CHARGEPLY has spent two years of R&D to design this charging station in close cooperation with Institut VEDECOM. MULTI-EV STATION 75.2 includes different innovations in terms of hardware and software.

Load balancing between charge points operates at maximum power unlike other conventional strategies that divide power between EVs. The station charges EVs at 75 kW one after the other during defined periods of time. At each instant, it selects two of the EVs to be charged by the two chargers, whereas the others remain on waiting list. The selection is made from a dynamic priority list computed by CHARGEPLY's proprietary software program.

Different priority strategies can be implemented on demand, depending on each use case. For instance, charging first:

- The first in
- The first departing EV
- The lowest State Of Charge
- The highest requested distance to go
- Premium customers
- Or any combination of the previous strategies...

Each algorithm developed by CHARGEPLY takes into account different data such as arrival time, departure time, state of charge, EV model, customer options and profile, requested autonomy, as well as grid constraints or predictive information. The intelligent utilization of mobility and energy data offer a smart user experience.

The innovative layout of the station reduces significantly cost of infrastructure. Furthermore, User Units occupy very little space and are noiseless since power electronics is mutualized and remote.

MULTI-EV STATION 75.2 is a well-adapted and customized fast charging solution for locations where need for electrified spaces grows whereas available grid power remains limited: shopping centers, logistic hubs, taxi stations...

Contact

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