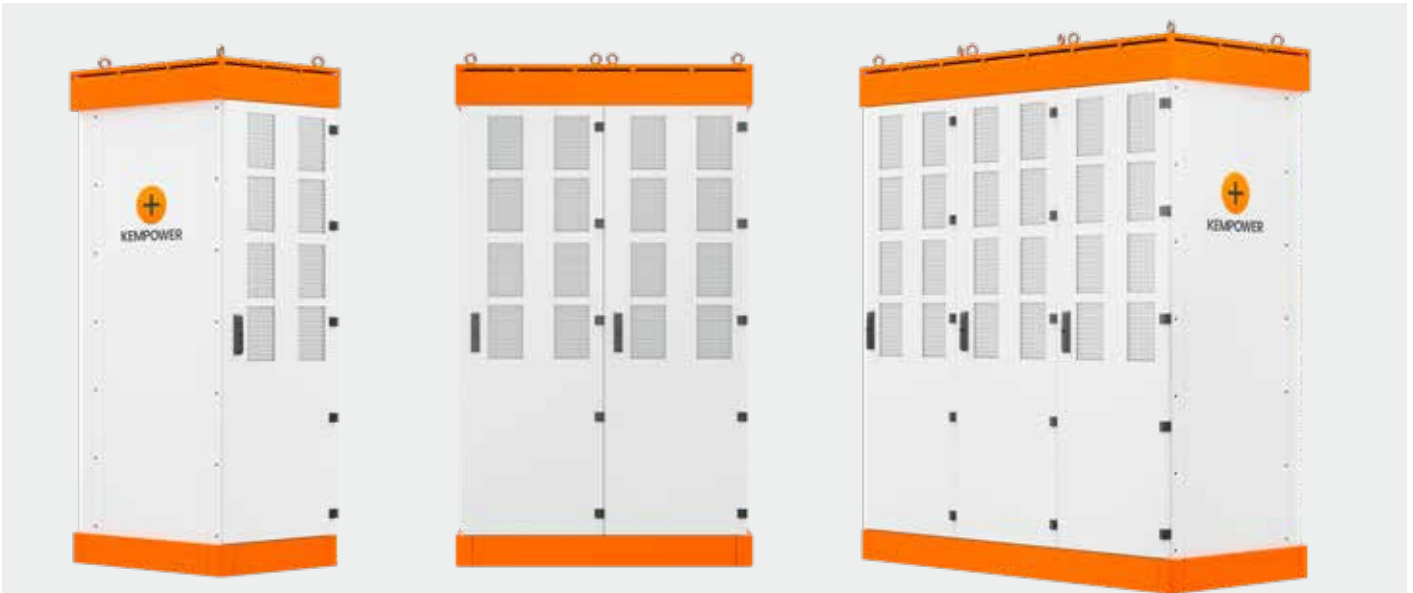


Kempower Power Unit C800



The flexible, modular and scalable Kempower charging system with dynamic power management

Kempower Power Unit distributes the charging power to up to 8 Kempower Satellites or Pantographs simultaneously. The unique dynamic power management enables utilizing the full potential of the on-demand power routing, leading to energy and cost savings.

The Power Unit uses 50 kW power modules. A triple cabinet version can fit up to 12 x 50 kW power modules, providing a maximum nominal power of up to 600 kW.

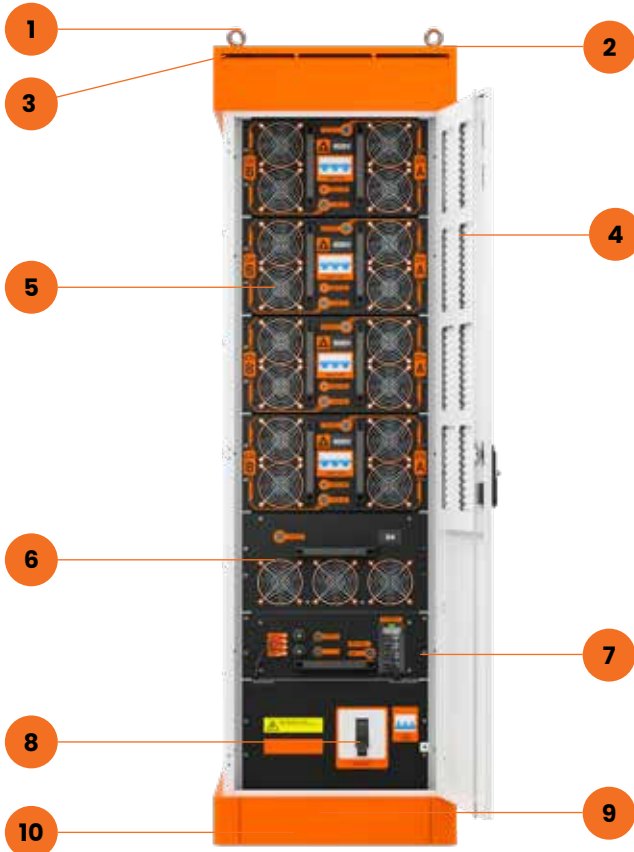
With dynamic power management, the available charging power of all power modules is automatically distributed to all connected charging outputs, depending on the size of the cable and the requirements of the electric vehicles. With static power management, each power module provides pre-set charging power to one dedicated charging output.

Power range

50–600 kW

Number of charging outputs in the system

1–8



1. Lifting lugs

2. WiFi / cellular / GPS antenna

3. Air outlet

4. Air inlets

5. Power module (1 to 4 pcs per CPU)

6. Static/dynamic power distribution module

7. Control module

8. Main switch

9. AC cable entry

10. DC output



Charging power for up to 8 charging outputs, 8 single satellites or 4 double satellites



1-4 power modules of 50 kW per cabinet



Scalability with add-on power modules



Improving cost efficiency of the charging system



Lockable door guarantee for safe and easy accessible enclosure



Advanced charging control and customization options with Kempower ChargeEye solution

Product code interpretation examples:

C801P160ND4

C801P160ND4C0

C801	Kempower Power Unit C800 single cabinet
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P160N	Charging power (P160 = 200 kW)
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D4	Power distribution module D4 = Up to 4 dynamic outputs
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C0	Unbranded, black roof & base
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Number of cabinets

C801	Single cabinet*
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C802	Double cabinet*
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C803	Triple cabinet*
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* The rated current of a single charging output terminal using a power distribution module is limited to 200 A.

Power distribution modules

D4	Up to 4 dynamic outputs**
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D6	Up to 6 dynamic outputs**
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D8	Up to 8 dynamic outputs**
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S4	Up to 4 static outputs**
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S8	Up to 8 static outputs**
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**Note: with 300 A charging cables:

500 A (max. 10 min) in +25°C with single charging output. Requires at least 3 output terminals and a specific hardware configuration.

375 A continuous in +25°C with double charging outputs. Requires at least 2 output terminals and a specific hardware configuration.

General electric specifications

Input voltage (AC)	380...480 VAC +6%/-10%
Input frequency	50...60 Hz
Output voltage	200...920 VDC
Power factor (at full load)	0.92
Efficiency (at full load)	94%
Idle power	20 VA
Standby power	C801: 50 W, C802: 100 W, C803: 150 W
Over voltage class	III
Icc	35 kA
Network type	TN-S, TN-C, TN-C-S, TT

Environmental specifications

Operating temperature	-30...+50°C
Current derating	-1.5% of max. charging current per 1°C (above +40°C)
Maximum altitude	2000 m (without altitude derating)
Altitude derating	-1.4% of max. charging current per 100 m (above 2000 m)
Storage temperature	-40...+60°C
Enclosure	IP54, IK10
Operational noise level	< 60 dB (at 1 m distance)
Ambient air humidity	< 95% relative humidity

Connections & Protocols

WiFi	802.11 b/g/n (2.4/5 GHz)
Cellular / GPS	LTE-FDD, LTE-TDD, WCDMA, GSM
Ethernet	RJ45, IEEE 802.3 / 802.3u
OCPP	1.6j / 2.0.1
Connectivity	Kempower ChargEye solution

Electrical protections

Over/under voltage

Surge

Short circuit

Overload

Earth leakage current

Device over temperature

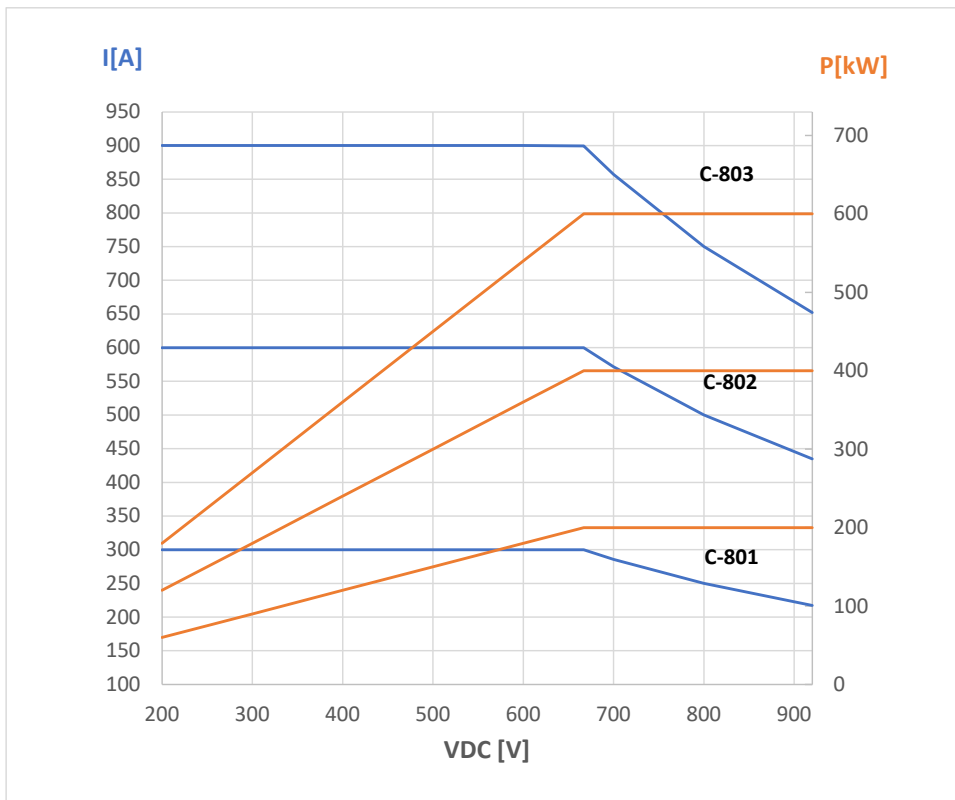
Power performance

Product code	VDC	Charging (I)	Charging (P)	Input current (at 400 V)	Input current (at 480 V)
C801	200 V	300 A	60 kW	100 A	83 A
	300 V	300 A	90 kW	150 A	125 A
	400 V	300 A	120 kW	200 A	167 A
	500 V	300 A	150 kW	250 A	209 A
	600 V	300 A	180 kW	300 A	250 A
	667 V	300 A	200 kW	334 A	278 A
	700 V	286 A	200 kW	334 A	278 A
	800 V	250 A	200 kW	334 A	278 A
	920 V	217 A	200 kW	334 A	278 A
C802	200 V	600 A	120 kW	200 A	167 A
	300 V	600 A	180 kW	300 A	250 A
	400 V	600 A	240 kW	401 A	334 A
	500 V	600 A	300 kW	501 A	417 A
	600 V	600 A	360 kW	601 A	501 A
	667 V	600 A	400 kW	668 A	556 A
	700 V	571 A	400 kW	668 A	556 A
	800 V	500 A	400 kW	668 A	556 A
	920 V	435 A	400 kW	668 A	556 A

Power performance

Product code	VDC	Charging (I)	Charging (P)	Input current (at 400 V)	Input current (at 480 V)
C803	200 V	900 A	180 kW	300 A	250 A
	300 V	900 A	270 kW	451 A	376 A
	400 V	900 A	360 kW	601 A	501 A
	500 V	900 A	450 kW	751 A	626 A
	600 V	900 A	540 kW	901 A	751 A
	667 V	900 A	600 kW	1001 A	835 A
	700 V	857 A	600 kW	1001 A	835 A
	800 V	750 A	600 kW	1001 A	835 A
	920 V	652 A	600 kW	1001 A	835 A

Power curve



Mechanical dimensions

(WxHxD), footprint

C801: 650 x 2195 x 841 mm

C802: 1250 x 2195 x 841 mm

C803: 1850 x 2195 x 841 mm

Weight

C801P40...	280 kg
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C801P80...	320 kg
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C801P120...	360 kg
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C801P160...	400 kg
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C802P200...	680 kg
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C802P240...	720 kg
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C802P280...	760 kg
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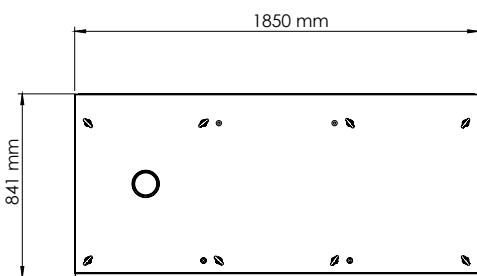
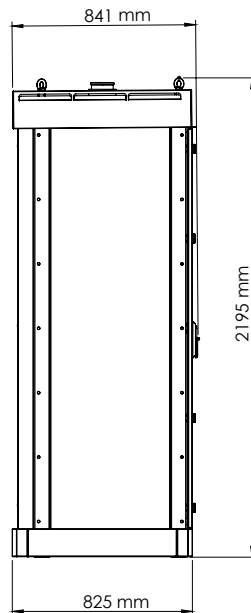
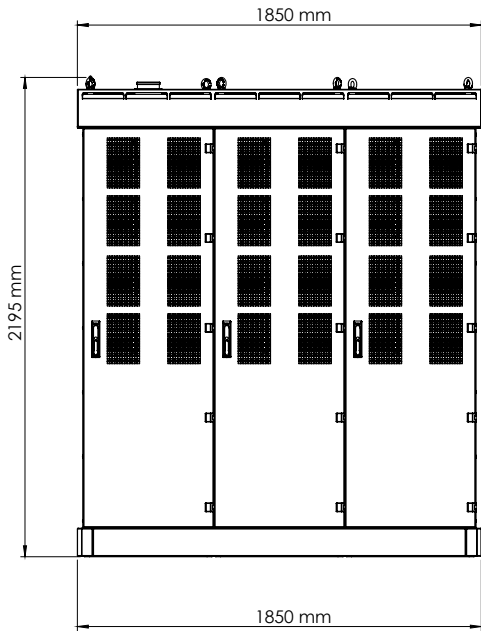
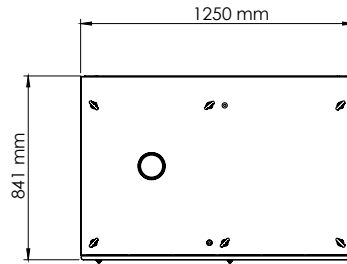
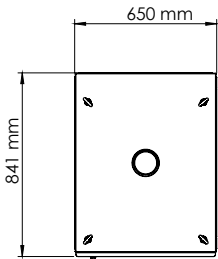
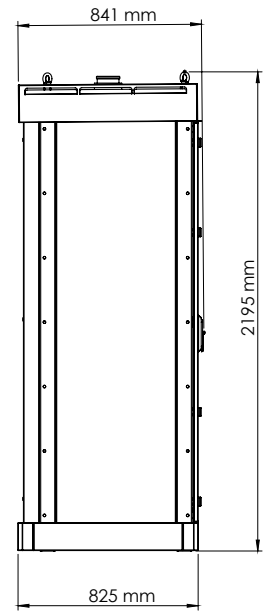
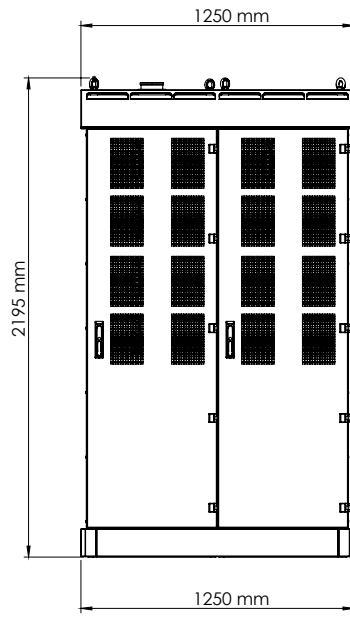
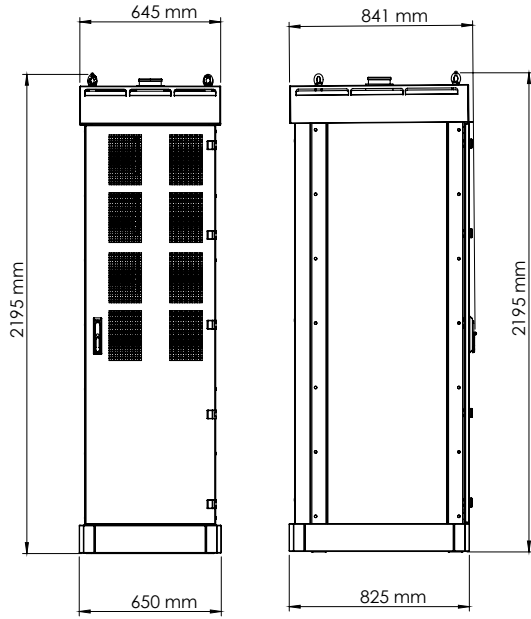
C802P320...	800 kg
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C803P360...	1080 kg
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C803P400...	1120 kg
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C803P440...	1160 kg
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C803P480...	1200 kg
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Compliance to standards

Electrical safety IEC 61851-1, IEC 61851-23

EMC, harmonics IEC 61851-21-2

Options

Steel base Installation kit for a single cabinet, for flat surface assembly

Customized branding Customer branding options (colors, stickers)*

*Please consult Kempower for availability, pricing and MOQ

