

Integrated Charging System

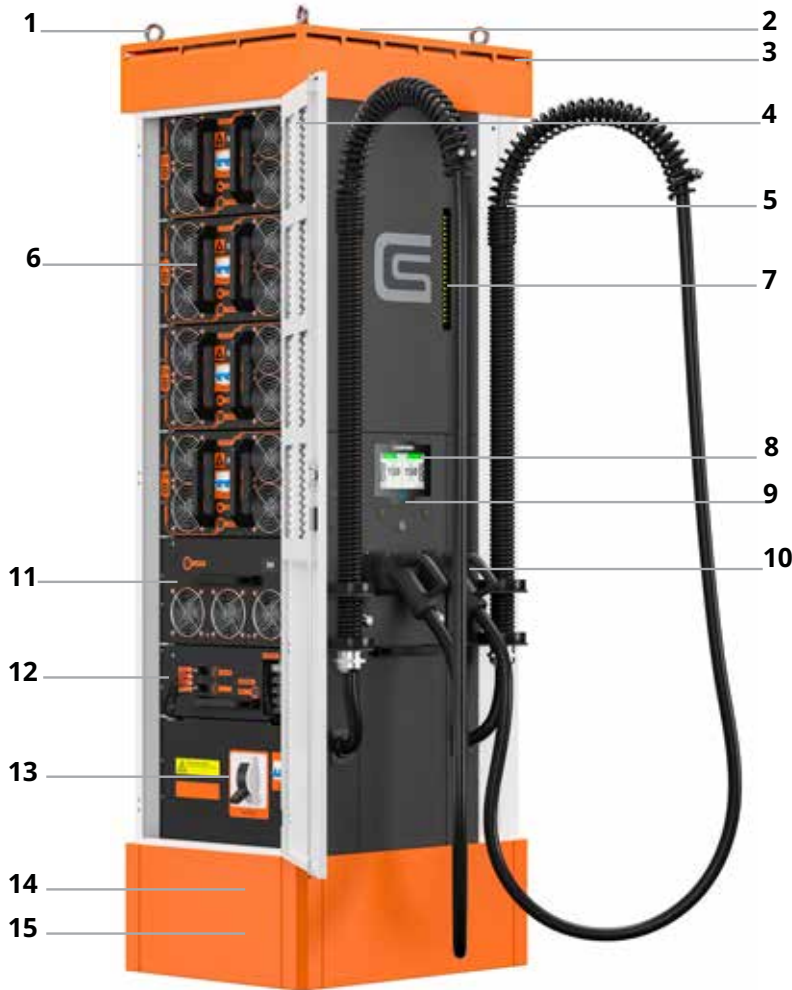
Kempower C-Station C800

Technical Datasheet



The Kempower C-Station combines the functionalities of the C-Series charging power unit (CPU) and the S-Series charging satellite. The heavy-duty electro-mechanical design features a selection of modules for charging power, charging power management, and controlling the system. The charging power of C-Station can be distributed between 1–4 charging outputs. One cabinet can have 1–4 power modules, each providing charging power up to 50 kW, and maximum charging power of up to 200 kW. With static power management, each power module is dedicated to one charging output. With dynamic power management, the available charging power of all power modules is automatically divided between all connected charging outputs, depending on the size of the cable and the requirements of the vehicles being charged.

- Intelligent, adaptive, and automatic charging power distribution with Dynamic Charging Power Management (pat. pend.)
- Easy scalability with add-on power modules
- Charging power for up to 4 charging outputs
- Possibility to add up to 2 external Kempower S-Series charging satellites
- Advanced charging control and customization options with Kempower ChargeEye solution
- Safe but easily accessible enclosure guaranteed by the lockable door



1. Lifting lugs
2. WiFi / cellular / GPS antenna
3. Air outlet
4. Air inlets
5. Charging cable support spring system
6. Power module (1 to 4 pcs per CPU)
7. Charging status indication LEDs
8. 7" touch screen display
9. RFID reader (ISO14443A)
10. Charging cable holders
11. Static/dynamic power distribution module
12. Control module
13. Main switch
14. AC cable entry
15. DC output

Product code interpretation examples:

C801P160NC5CSD2
C801P160CC7CPD2C0

C801	C-Station 800 V single cabinet
P160	Charging power P160 = 200 kW
C CC	Charging method C = CCS2 CC = 2 x CCS2
5C 7C	Charging cable length & current 5 = 5 m 7 = 7 m C = 200 A nominal charging cable current
S P	S = standard user interface P = EMV contactless payment terminal
D2	Power distribution module
C0	Unbranded, no stickers, black roof & base

Number of cabinets

C801	Single cabinet
C802	Double cabinet

Charging method

C	CCS2
CC	2 x CCS2
CCA	2 x CCS2 & Type 2 AC
CD	CCS2 & CHAdeMO
CDA	CCS & CHAdeMO & Type 2 AC

Nominal charging cable current

B	125 A (CHAdeMO)
C	200 A (CCS2)
D	250 A (CCS2)
E	300 A* (CCS2)

*500 A (max. 10 min) in +25°C with single charging output
 *375 A continuous in +25°C with double charging outputs

Power distribution modules

S2	Up to 2 static outputs
S4	Up to 4 static outputs
D2	Up to 2 dynamic outputs
D4	Up to 4 dynamic outputs

General electric specifications

Input voltage (AC)	380...480 V _{AC} +6%/-10%
Input frequency	50...60 Hz
Output voltage	200...920 V _{DC}
Power factor (at full load)	0.92
Efficiency (at full load)	94%
Idle power	20 VA
Standby power	C801: 50 W, C802: 180 W
Over voltage class	III
I _{cc}	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

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	1.6 J / 2.0
Connectivity	Kempower ChargeEye solution

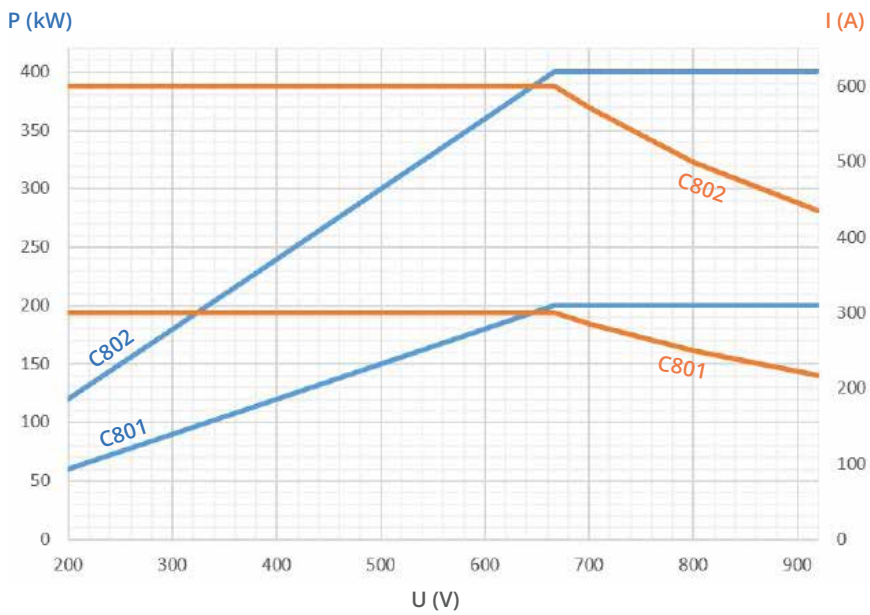
Electrical protections

Over/under voltage	
Surge	
Short circuit	
Overload	
Earth leakage current	
Device over temperature	

Max. 50 kW output / power module

Product code	Charging power (P _{DC}) [kW]	Max. charging current (667 V _{DC}) [A]	Input power [kVA]	Input current 400 V _{AC} [A]	Input current 480 V _{AC} [A]	Required grid fuse [A]
C801P40...	50	75	58	83	70	100
C801P80...	100	150	116	167	139	200
C801P120...	150	225	173	250	209	315
C801P160...	200	300	231	334	278	400
C802P200...	250	375	289	417	348	500
C802P240...	300	450	347	501	417	2 x 315
C802P280...	350	525	405	584	487	2 x 315
C802P320...	400	600	463	668	556	2 x 400

- Notice: Over 500 A requires at least two charging outputs
- Charging power defined at +25°C ambient temperature



Product code	Charg. out-puts	Charging method	Simult. charg. with 2 outputs	Max. cont. charging current [A]	Charging power [kW] at 400 Vdc	Charging power [kW] at 670 Vdc	Weight [kg] (full cabinet)
C801 / C802							
Product codes with 5 m charging cables							
C80...C5C...	1	CCS2	no	200 A	80 kW	130 kW	430 kg / 830 kg
C80...C5D...	1	CCS2	no	250 A	100 kW	165 kW	460 kg / 860 kg
C80...C5E...	1	CCS2	no	300 A	120 kW	200 kW	465 kg / 865 kg
C80...CC5C...	2	2 x CCS2	yes	2 x 200 A	2 x 80 kW	2 x 130 kW	460 kg / 860 kg
C80...CC5D...	2	2 x CCS2	yes	2 x 250 A	2 x 100 kW	2 x 165 kW	515 kg / 915 kg
C80...CC5E...	2	2 x CCS2	yes	2 x 300 A	2 x 120 kW	2 x 200 kW	525 kg / 925 kg
C80...CD5CB...	2	CCS2 & CHAdeMO	yes	200 A & 125 A	80 kW & 50 kW	130 kW & 80 kW	460 kg / 860 kg
C80...CD5DB...	2	CCS2 & CHAdeMO	yes	250 A & 125 A	100 kW & 50 kW	165 kW & 80 kW	515 kg / 915 kg
C80...CD5EB...	2	CCS2 & CHAdeMO	yes	300 A & 125 A	120 kW & 50 kW	200 kW & 80 kW	525 kg / 925 kg
C80...CCA5C...	3	2 x CCS2 & Type 2 AC	yes	2 x 200 A & 32 A	2 x 80 kW & 22 kW	2 x 130 kW & 22 kW	460 kg / 860 kg
C80...CCA5D...	3	2 x CCS2 & Type 2 AC	yes	2 x 250 A & 32 A	2 x 100 kW & 22 kW	2 x 165 kW & 22 kW	515 kg / 915 kg
C80...CCA5E...	3	2 x CCS2 & Type 2 AC	yes	2 x 300 A & 32 A	2 x 120 kW & 22 kW	2 x 200 kW & 22 kW	525 kg / 925 kg
C80...CDA5CB...	3	CCS2 & CHAdeMO & Type 2 AC	yes	200 A & 125 A & 32 A	80 kW & 50 kW & 22 kW	130 kW & 80 kW & 22 kW	460 kg / 860 kg
C80...CDA5DB...	3	CCS2 & CHAdeMO & Type 2 AC	yes	250 A & 125 A & 32 A	100 kW & 50 kW & 22 kW	165 kW & 80 kW & 22 kW	515 kg / 915 kg
C80...CDA5EB...	3	CCS2 & CHAdeMO & Type 2 AC	yes	300 A & 125 A & 32 A	120 kW & 50 kW & 22 kW	200 kW & 80 kW & 22 kW	525 kg / 925 kg

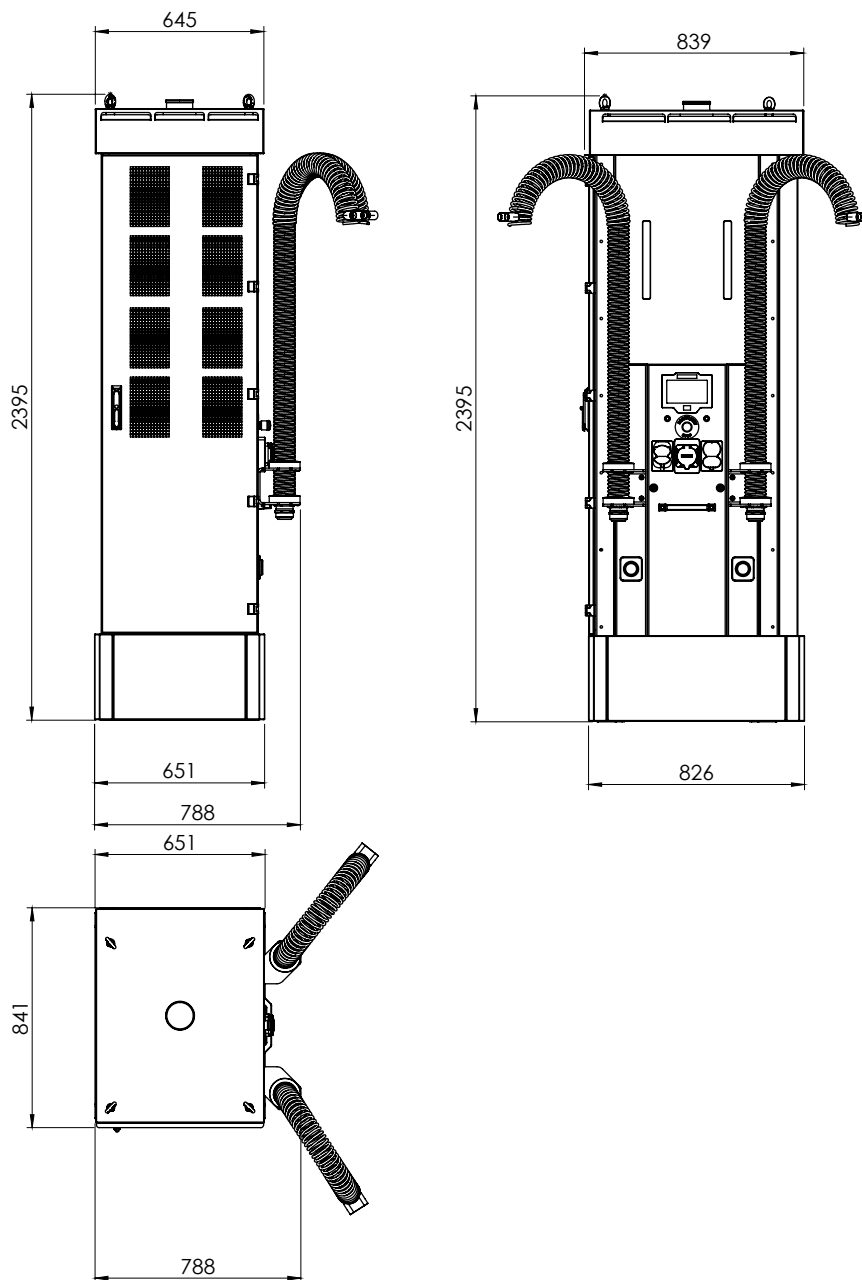
Note: For versions with a payment terminal, replace S with P in the product code e.g. C801P140C5CPD2

Product code	Charg. out-puts	Charging method	Simult. charg. with 2 outputs	Max. cont. charging current [A] at +40 °C	Charging power [kW] at 400 Vdc	Charging power [kW] at 670 Vdc	Weight (full cabinet) [kg] C801 / C802
Product codes with 7 m charging cables							
C80...C7C...	1	CCS2	no	200 A	80 kW	130 kW	435 kg / 835 kg
C80...C7D...	1	CCS2	no	250 A	100 kW	165 kW	460 kg / 860 kg
C80...C7E...	1	CCS2	no	300 A	120 kW	200 kW	470 kg / 870 kg
C80...CC7C...	2	2 x CCS2	yes	2 x 200 A	2 x 80 kW	2 x 130 kW	465 kg / 865 kg
C80...CC7D...	2	2 x CCS2	yes	2 x 250 A	2 x 100 kW	2 x 165 kW	520 kg / 920 kg
C80...CC7E...	2	2 x CCS2	yes	2 x 300 A	2 x 120 kW	2 x 200 kW	530 kg / 930 kg
C80...CD7CB...	2	CCS2 & CHAdeMO	yes	200 A & 125 A	80 kW & 50 kW	130 kW & 80 kW	465 kg / 865 kg
C80...CD7DB...	2	CCS2 & CHAdeMO	yes	250 A & 125 A	100 kW & 50 kW	165 kW & 80 kW	520 kg / 920 kg
C80...CD7EB...	2	CCS2 & CHAdeMO	yes	300 A & 125 A	120 kW & 50 kW	200 kW & 80 kW	530 kg / 930 kg
C80...CCA7C...	3	2 x CCS2 & Type 2 AC	yes	2 x 200 A & 32 A	2 x 80 kW & 22 kW	2 x 130 kW & 22 kW	465 kg / 865 kg
C80...CCA7D...	3	2 x CCS2 & Type 2 AC	yes	2 x 250 A & 32 A	2 x 100 kW & 22 kW	2 x 165 kW & 22 kW	520 kg / 920 kg
C80...CCA7E...	3	2 x CCS2 & Type 2 AC	yes	2 x 300 A & 32 A	2 x 120 kW & 22 kW	2 x 200 kW & 22 kW	530 kg / 930 kg
C80...CDA7CB...	3	CCS2 & CHAdeMO & Type 2 AC	yes	200 A & 125 A & 32 A	80 kW & 50 kW & 22 kW	130 kW & 80 kW & 22 kW	465 kg / 865 kg
C80...CDA7DB...	3	CCS2 & CHAdeMO & Type 2 AC	yes	250 A & 125 A & 32 A	100 kW & 50 kW & 22 kW	165 kW & 80 kW & 22 kW	520 kg / 920 kg
C80...CDA7EB...	3	CCS2 & CHAdeMO & Type 2 AC	yes	300 A & 125 A & 32 A	120 kW & 50 kW & 22 kW	200 kW & 80 kW & 22 kW	530 kg / 930 kg

Note: For versions with a payment terminal, replace S with P in the product code e.g. C801P140C5CPD2

Mechanical dimensions (WxHxD, footprint)

651 x 2395 x 841 mm



Options

Customized branding
(colors, stickers)

Consult your sales representative at Kempower for customer
branding options (colors, stickers), pricing and MOQ

Compliance to standards

Electrical safety

IEC 61851-1, IEC 61851-23

EMC, harmonics

IEC 61851-21-2

