

Advanced Satellite Charging System

Technical Datasheet

C800-series Charging Power Units



Charging Power Units

Charging Power Units (CPU) can be selected according to charging application. CPU's heavy duty electromechanical design comprises three type of modules for control, communication and power. Each cabinet utilizes 1 - 4 power modules that each has charging power up to 40 kW. Depending on the charging power demand, full CPU provides nominal power of 160/320/480 kW.

Charging power management can be selected from static or dynamic to meet application needs. On static power management, each power module is dedicated to specific satellite or pantograph. On dynamic control charging power is routed optimatically up to full power respectively to cable sizing and number of satellites - reload from web: [Kempower S-series datasheet.pdf](#).

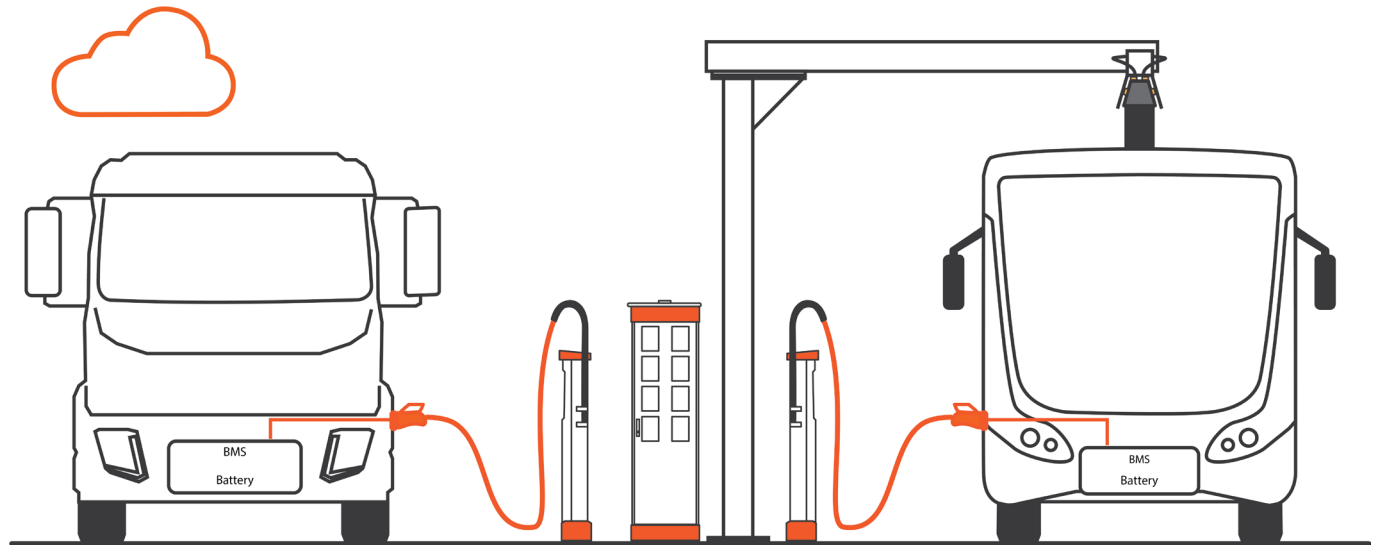
- ▶ Static power management for constant charging sessions or dynamic power management (pat. pend.) for intelligent power distribution
- ▶ Scalability with add-ons power modules
- ▶ Due to advanced power electronics design charging power can be routed to satellites, pantographs or both.



CPU's doors are equipped with micro switch and mechanical triangle-key lock.

Charging Power Unit

Technical datasheet



⚠ Recommended max. DC cabling between CPU cabinet and Satellite/Pantograph is up to 50 meters, for longer distances consult Kempower.

C-series product codes

C801 - P160 - N - S8

Voltage class and mechanical size indicator

801=800V model, single cabinet

DC charging power

Based on heavy duty rating.
See table on page 3

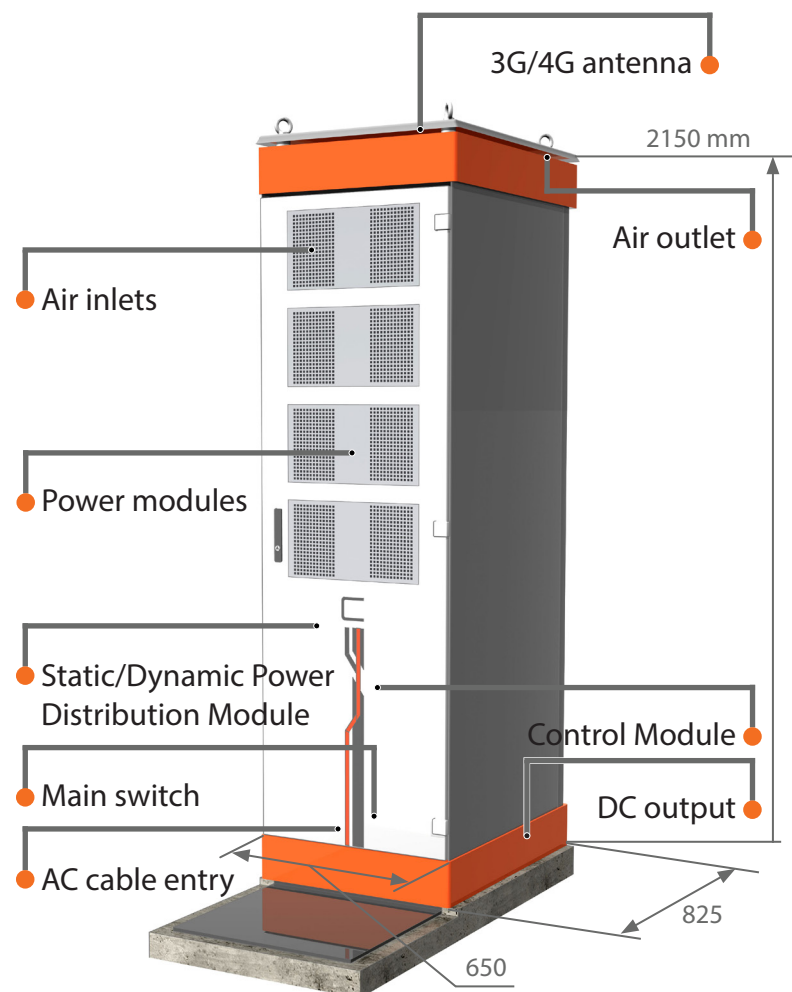
Charging cabinet options

N= Neutral

Power distribution module

S = Static, D= Dynamic

Features and Dimensions



Type	Description
801	single cabinet
802	dual cabinet
803	triple cabinet

Type	Description
S4	up to 4 static outputs
S8	up to 8 static outputs
D4	up to 4 dynamic outputs
D8	up to 8 dynamic outputs

Specification

General electric specifications C800-Series

Input Voltage	380 - 480 V _{AC} + - 10%, 50 - 60 Hz
Input current	See table below
Output Power	40 - 480 kW
Output current	See table below
Output Voltage	200 - 800 V _{DC}
Max. Output V	920 V _{DC} with 400 V _{AC} 1000 V _{DC} with 480 V _{AC}
Power factor	0.94 at P _N
Efficiency	94% @ output P _N
Standby power	50W (on full cabinet)
Output delivery	Cable + plug / Pantograph

Environmental Specifications

Operating Temperature	-40 to +55 °C (with derating)
Derating high ambients	1,5%/1°C up to +55°C max
Maximum altitude	4000 m
Altitude derating	1%/100m above 2000 m
Storage Temperature	-40 to +60 °C
Enclosure class	IP54, IK10
Humidity	< 95% relative humidity
Operational noise level	< 60 dB

Features

3G/4G/LTE, WiFi, OCPP 1.6/2.0, cloud based back-end, service and management dashboard, easy power up of power modules

Electrical Protections

Over/under voltage, Surge protection, Short circuit, Earth leakage current, Over temperature

Compliant to Standards

Electrical safety	IEC 61851-1, IEC 61851-23
EMC	IEC 61851-21-2, EN 61000-1, -2, -3, -4
Harmonics	61000-3-12

Mechanical dimensions (WxHxD)

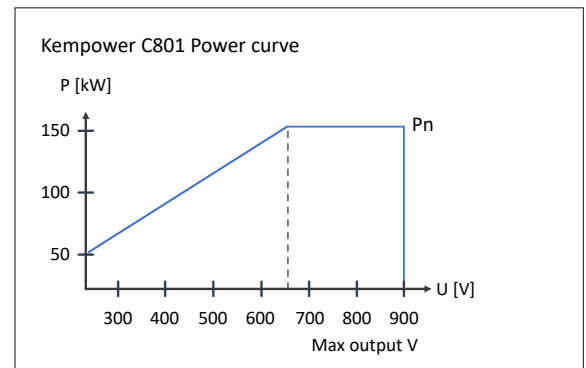
C801: 650x2150x825 mm
C802: 1250x2150x825 mm
C803: 1850x2150x825 mm
Weight: See table below

Model specific values

800V

200 - 800 V_{DC}

		Rating				Weight [kg]
	Product code	P _{HD} Charging power at 400 V _{dc} [kW]	Charging current I _{HD} at +40 C [A _{dc}]	Input power P _{IN} at P _{HD} [kVA]	Input current I _{IN} at P _{HD} [A]	
1.	C801 P40 N _	40	60	46	66	280
2.	C801 P80 N _	80	120	91	131	320
3.	C801 P120 N _	120	180	137	197	360
4.	C801 P160 N _	160	240	182	263	400
5.	C802 P200 N _	200	300	228	328	680
6.	C802 P240 N _	240	360	273	394	720
7.	C802 P280 N _	280	420	319	460	760
8.	C802 P320 N _	320	480	364	526	800
9.	C803 P360 N _	360	540	410	591	1080
10.	C803 P400 N _	400	600	455	657	1120
11.	C803 P440 N _	440	660	501	723	1160
12.	C803 P480 N _	480	720	546	788	1200



Notes:



CPU options

Pos.	Item	Definition
1.	C-series steel foundation	Installation KIT for a single CPU cabinet for flat surface assembly, such as concrete floor. Provides more installation space for AC and DC cables. Suitable for single cabinet, multiple KITs for multi section cabinets. Consult Kempower for details.

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Your local dealer



CE Manufactured in Finland

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