

Advanced Combined Charging Station

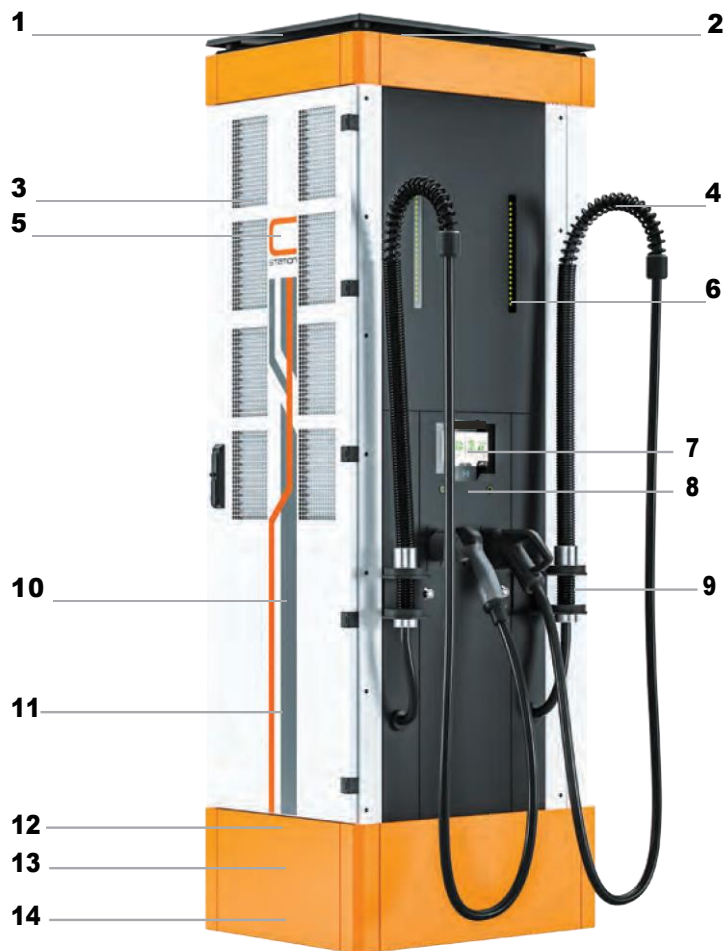
C-Station C800 Integrated Charging System

Technical Datasheet, North America



C-Station includes the functionalities of both S-Series charging satellites and C-Series CPUs. Its heavy-duty electromechanical design includes three type of modules for control, dynamic and power. Each cabinet utilizes 1 to 4 power modules, each providing a charging power of up to 50 kW and a maximum nominal power of up to 200 kW. This can be divided between 1 to 4 charging outputs, using static or dynamic charging power management. On static power management, each power module is dedicated to a specific charging cable, or routed to an external satellite. On dynamic power management, the charging power is routed automatically up to full power, depending of cable sizing and the number of charging outputs.

- Dynamic Charging Power Management (pat. pend.) for intelligent, adaptive and automatic charging power distribution
- Scalability with add-on power modules
- The charging power can be routed to up to 4 charging outputs
- Up to 2 external S-Series charging satellites can be connected to C-Station
- The door is equipped with a swing handle with a tumbler lock for easy & safe enclosure



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

Environmental specifications

Operating temperature	-22...+122° F / -30...+50° C (with CHAdeMO up to +104° F / +40° C)
Current derating	-1.5% of max. charging current per 1.8 °F / 1°C (above +104° F / +40° C)
Maximum altitude	2000 m / 6562 ft
Altitude derating	-1.4% of max. charging current per 328 ft / 100 m (above 6562 ft / 2000 m)
Storage temperature	-40...+140° F / -40...+60° C
Enclosure	Suitable for outdoor use
Operational noise level	< 60 dB (at 3.28 ft / 1 m distance)
Ambient air humidity	< 95% relative humidity

Compliance to standards

Electrical safety	IEC 61851-1, IEC 61851-23
EMC, harmonics	IEC 61851-21-2
Conforms to	UL Std. 2202, 2231-2
Certified to	CSA Std. C22.2 No. 281.2, C107.1

Electrical protections

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

Product code interpretation examples:

C801P160UU5CSD2L

C801P160UU7CSD2LC0

C801	C-Series 800 V single cabinet
P160	Charging power (P160 = 160 kW)
UU	Charging method (UU = 2 x CCS1)
5C	Charging cable 5 = 16.4 ft / 5 m
7C	7 = 23 ft / 7 m C= 200 A nominal charging cable current
S	User interface S = standard P = card payment terminal
D2	Power distribution modules
L	ETL approved
C0	Branding option: no stickers, black roof & base

Charging method

D	CHAdeMO
U	CCS1
UU	2 x CCS1
UD	CCS1 & CHAdeMO

Nominal charging cable current

B	125 A (CHAdeMO) 150 A (CCS1)
C	200 A (CCS1)

Power distribution modules

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

Product code	No. of charging outputs & charging method	Charging cable length	Max. cont. charging current [A] at +40°C / +104 °F	Charging power [kW] at 400 V _{DC}	Charging power [kW] at 670 V _{DC}
C801...D5B...L C801...D7B...L	1 x CHAdeMO	16.4 ft / 5 m 23 ft / 7 m	125 A	50 kW	84 kW
C801...U5C...L C801...U7C...L	1 x CCS1	16.4 ft / 5 m 23 ft / 7 m	200 A	80 kW	134 kW
C801...UU5C...L C801...UU7C...L	2 x CCS1	16.4 ft / 5 m 23 ft / 7 m	2 x 200 A	2 x 80 kW	2 x 134 kW
C801...UD5CB...L C801...UD7CB...L	1 x CCS1 & 1 x CHAdeMO	16.4 ft / 5 m 23 ft / 7 m	200 A & 125 A	60 kW & 50 kW	100 kW & 84 kW

CCS2 UL-CSA certified charging cables available upon request, please contact EV-olution for availability, pricing and delivery times.

General electric specifications

Input voltage (AC)	400/480 V _{AC} ±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	50 W
Over voltage class	III
Icc	35 kA
Network type	TN-S, TN-C, TN-C-S, TT

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	EV-olution ChargeEye remote maintenance and management dashboard

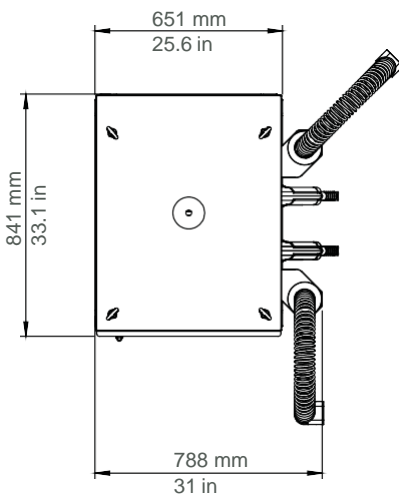
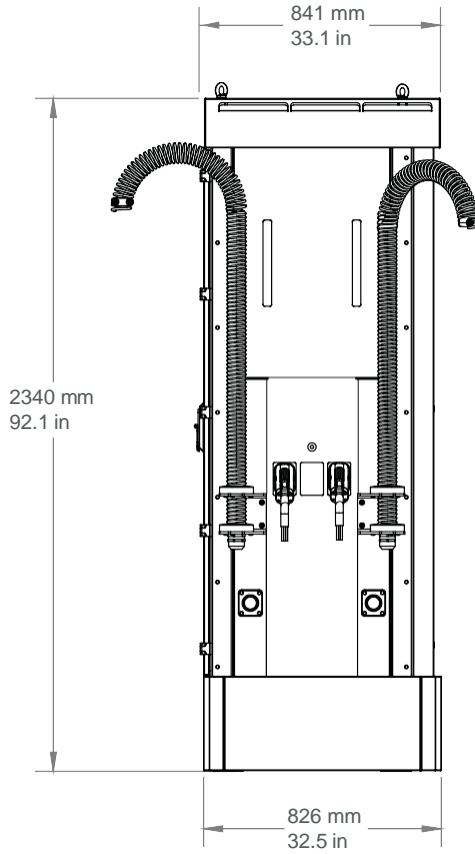
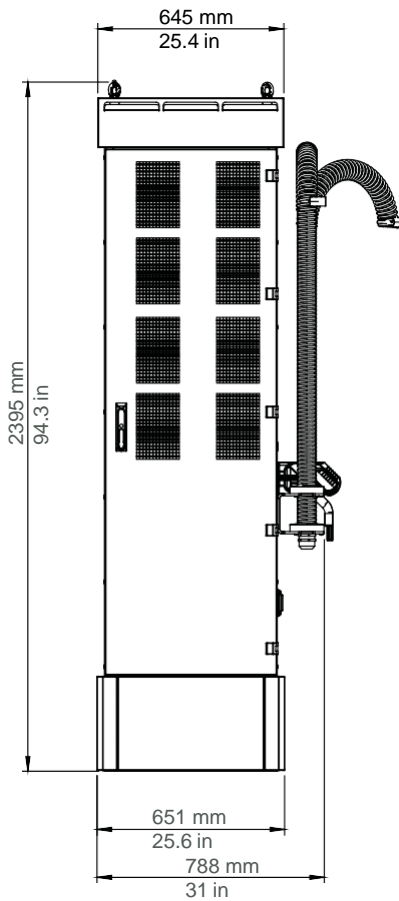
Intermittent operation, 50 kW output / power module

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]	Rec. grid fuse [A]
C801P40...L	50	75	58	83	70	100
C801P80...L	100	150	116	167	139	200
C801P120...L	150	225	173	250	209	315
C801P160...L	200	300	231	334	278	400

Continuous operation, 40 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]	Rec. grid fuse [A]
C801P40...L	40	60	46	67	56	100
C801P80...L	80	120	93	134	111	200
C801P120...L	120	180	139	200	167	250
C801P160...L	160	240	185	267	223	315

- Notice: Over 500 A requires at least two charging outputs
- The charging power in the intermittent operation table are available for 30 minutes, at +40°C / +105°F ambient temperature
- After this, the maximum output power is dropped to the continuous operation level
- The duration of intermittent charging power depends on the ambient temperature; as the temperature increases, the duration of intermittent charging power gets shorter
- In continuous operation, the charging power is available continuously within the specified (max. +40°C / +104°F) ambient temperature
- At higher ambient temperatures, current derating is applied according to table above
- Fuses recommendation applies only for continuous operation



Mechanical dimensions (WxHxD, footprint)

25.6 x 92.1 x 33.1 in / 651 x 2395 x 841 mm

Weight

C801P40...L	618 lbs	280 kg
C801P80...L	706 lbs	320 kg
C801P120...L	793 lbs	360 kg
C801P160...L	881 lbs	400 kg

Options

Customized branding (colors, stickers)

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

Warning: Never release the charging cable from your hands when moving it to or from the vehicle, in order to prevent damaging the plug or the vehicle. After charging, always place the plug back in its holder. Refer to the operating manual for warnings, functions and features.

