

Charging Hub

EFAPOWER EV CH800

EFAPOWER EV D250/D375/DL500/DL700

Overview

The perfect choice for infrastructure growth.

Our next-generation distributed Charging Hub platform delivers up to 800 kW of charging power, distributed across up to 10 charging points. Designed to allow parallel power unit topology, the platform can be expanded to a combined output of up to 1600 kW, supporting high-power charging for the full range of electric vehicles — from light-duty to heavy-duty EVs.

Engineered to maximize availability, performance, and sustainability, the system supports a wide range of dispenser configurations, including both dry and liquid-cooled cable solutions. Its modular architecture enables a true “pay-as-you-grow” approach, allowing operators to scale capacity in line with demand.

Plug & Charge ready, supports simultaneous charging across all connectors, with advanced dynamic power allocation per outlet.



Main features

- Peak efficiency: > 96,6%
- CCS2 standard compliant
- Output configurations available up to 700 A continuous
- Simultaneous charging for all output configurations
- Cable Management System (CMS)
- Plug-n-Charge ready (ISO 15118)
- Noise reduction operative modes
- TFT color display (for user interface and advertising)
- Network integration via OCPP 1.6 (ready for upgrade to OCPP 2.0.1) with smart charging or proprietary protocol
- Built-in communications (2G; 3G; 4G; LAN; Wi-Fi) with high gain external antenna
- Load Management System (LMS) integration via MODBUS TCP/IP
- Cyber security enhanced features
- Remote maintenance access (optional)
- Over-the-air software updates
- RFID integration
- Payment Terminal System (optional / mandatory for German market)
- Eichrecht compliant (for German market)
- C4 Corrosion class (C5 – optional)
- Branding customizable (optional)

DC charging systems



Value proposition

- Up to 10 d.c. outputs / Power Unit
- Simultaneous charging
- Dynamic power allocation
- Dry and Cooled cable dispensers with up to 700 A continuous
- CMS
- High power density
- Local and remote monitoring and control
- Flexibility/ scalability - pay as you grow
- Business opportunity with digital advertising (optional)
- Low Total Cost of Ownership (TCO)

Technical data (Power Unit)		CH800		2 x CH800	
AC Input					
Phases / lines		3 Phase + PE			
Voltage (range) / Frequency (range)		400 V (± 10%) / 50 Hz (47,5 Hz – 52,5 Hz)			
Nominal input power / current		up to 850 kVA / 1227 A		up to 2 x 850 kVA / 2 x 1227 A	
Efficiency (peak/full load)		>96,6 % / >95,6 %			
Power factor		0,99 ⁽¹⁾			
DC Output					
Number of charging Outputs		up to 10 (per power unit)			
Voltage range		150 V to 1000 V			
Maximum power (per charging output)		500 kW			
Maximum current (per charging output)		500 A			
Combined Charging Power		up to 800 kW		up to 1600 kW	
Granularity		40 kW / 80 kW (depending on Output configuration)			
Dimensions (W x D x H) – power unit		1000 x 1000 x 2110 mm			
Technical data (Dispensers)		D250 (Dry)	D375 (Dry)	DL500 (Cooled)	DL700 (Cooled)
Output Configuration		2 x CCS2 1 x CCS2	2 x CCS2 1 x CCS2	2 x CCS2 ⁽²⁾ 1 x CCS2	1 x CCS2
CCS Dry cable current (max. continuous / boost)		250 A / 400 A	375 A / 500 A	-	-
CCS cooled cable max. continuous current		-	-	500 A	700 A
Maximum power (per charging gun)		400 kW	500 kW	500 kW	700 kW
Voltage range		150 V to 1000 V			
CMS		Yes			
General Specifications					
Metering		MID Meter DC for each DC output (Eichrecht compliance optional)			
Human Machine Interface					
Display		10" TFT color screen (Multilanguage)			
Buttons		4x push buttons + 1x Stop Charger button (optional)			
RFID system		Yes (ISO/IEC 14443A/B, ISO 15693)			
Payment Terminal		Yes (optional – mandatory for German market)			
Led station indication		Yes			
Dimensions (W x D x H)	(without CMS)	400 x 365 x 1550 mm:		400 x 715 x 1550 mm	
	(with CMS)	400 x 365 x 2470 mm	400 x 365 x 2300 mm	400 x 715 x 2470 mm	
Technical data		GENERAL SPECIFICATIONS			
Mounting type		Floor mounted (Indoor / Outdoor)			
Altitude		Up to 2000 m ⁽³⁾			
Protection degree		IP54 IK10 (card reader, display: IK08 minimum)			
Corrosion class		C4 (C5 as optional)			
Operating temperature		-30 °C to +55 °C ⁽⁴⁾			
Storage temperature		-40 °C to +70 °C ⁽⁵⁾			
Relative humidity		5 to 95%			
Noise level - dispenser Noise reduction mode		< 55 dB(A) @ 3m distance and 25 °C Yes			
Communication		2G/3G/4G/5G (optional) ⁽⁶⁾ , Ethernet			
Interface with EV		DIN 70121, ISO 15118–2, ISO 15118–20 ⁽⁷⁾			
Upstream protocols		OCPP 1.6 and 2.0.1 ⁽⁷⁾			
PnC		Yes (ISO 15118)			
Auto charge		Yes			
Certifications ⁽⁸⁾		ENA UK (IEC 61000-3-11 and IEC 61000-3-12), UKCA, Eichrecht			
Safety		IEC 61851-1, IEC 61851-23, IEC 61439-1, IEC 61439-7			
EMC		IEC 61851-21-2, IEC 61000-6-2, IEC 61000-6-4			
Cyber security		Cyber Security QuickScan - IEC 62443			
Other Options					
Software update		Remote software update via OCPP or web portal			
Anti-graffiti paint		Under request			
(1) From 50% load factor.		(5) Depending on type of package.			
(2) Shared cooled system for all cables.		(6) On request. Contact factory.			
(3) Please consult Efacec with the specific operating conditions in order to characterize an eventual derate with altitude.		(7) Future upgrade through OTA.			
(4) Without power derating up to +40°C. Power derating depending on the cable configuration and ambient temperature operation.		(8) Certification undergoing			

Efacec Electric Mobility, S.A.
EV Chargers Area

evcharging@efacec.com
www.efacec.com



MOD. CS510I2609A1