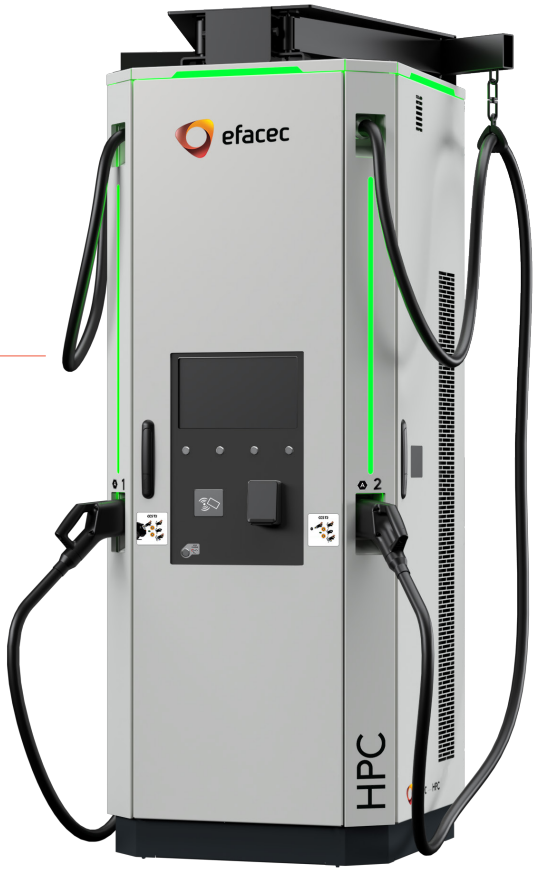
High-power Charger

HPC 240/400



Overview

The perfect choice for infrastructure growth.

Our brand-new all-in-one high-power charger solution for electric vehicles, available in two variants of 240 kW and 400 kW is designed to increase customer availability, power and sustainability.

The HPC 400 is Plug-n-Charge ready and allows simultaneous charging of up to 400 kW, providing up to 500 A continuous. It also incorporates an active monitoring and remote upgrade system.

Main features

- Variants of 240 kW and 400 kW
- High efficiency: > 96,6%
- Multi standard compliant (CCS2 and CHAdeMO)
- Output configurations available up to 500 A continuous
- Simultaneous charging for all output configurations
- Cable Management System (CMS)
- Plug-n-Charge (ISO 15118)
- Noise reduction operative modes
- TFT colour 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
- Over-the-air software updates
- RFID integration
- Payment Terminal System (optional)
- C4 Corrosion class (C5 – optional)
- Branding customisable (optional)

DC charging systems

CCS

CHAdeMO

Value proposition

- Multiple standards
- Two DC outputs
- Dynamic power allocation in 40 kW steps
- Up to 500 A continuous
- CMS
- Simultaneous charging
- High power density
- Simple plug & play installation
- 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	HPC 240	HPC 400
AC input		
Phases / lines	3 phases + PE	
Voltage (range) / frequency (range)	400 V (± 10%) / 50 Hz (47,5 Hz – 52,5 Hz)	
Nominal input power / current	250 kVA / 360 A	415 kVA / 600 A
Efficiency (peak / full load)	>96,6 % / >95,6 %	
Power factor	0,98	
DC output		
Voltage range (CCS / CHAdeMO)	150 V to 1000 V / 150 V to 500 V	
Maximum power (CCS / CHAdeMO)	240 kW / 50 kW [1]	400 kW / 50 kW[1]
CCS Dry cable current (max. continuous / boost)	350 A / 500 A	
CCS cooled cable max. continuous current [2]	-	500 A
CHAdeMO max. continuous current	125 A	
Output configurations	CCS2 (Dry) / CCS2 (Dry) CCS2 (Dry) / CHA (Dry)	CCS2 (Dry) / CCS2 (Dry) CCS2 (Dry) / CHA (Dry) CCS2 (Cooled) / CCS2 (Cooled)
CMS	Yes (optional)	
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 %[6]	
Noise level	< 55 dB(A) at 3m distance @25 °C	
Noise reduction mode	Yes	
Dimensions (W x D x H)	856 x 856 x 2210 mm (without CMS) | 1222 x 856 x 2366 mm (with CMS)	
Human Machine Interface		
Display	15" 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)	
Led station indication	Yes	
Communication	2G/3G/4G/5G (optional) [7], Ethernet	
Interface with EV	DIN 70121, ISO 15118–2, ISO 15118–20 [8], CHAdeMO 0.9	
Upstream protocols	OCPP 1.6 and 2.0.1 [8]	
PnC	Yes (ISO 15118)	
Auto charge	Yes (CCS and CHAdeMO)	
Metering	(optional) MID Meter for each DC output (EN 50470-1:2006, EN 50470-3:2006) (for German market) Eichrecht compliance for each DC output (PTB-A 50.7, PTB-A 20.1)	
Certifications	OCPP pricing, OCA, 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	
Plug cable detection in stand by	Under request	
Power upgradable	Yes [9]	-

[1] CHAdeMO maximum power @ 400 Vd.c.;
[2] Shared cooled system for all cables;
[3] Please consult Efacec with the specific operating conditions in order to characterize an eventual derate with altitude;
[4] Without power derating up to +40°C. Power derating depending on the cable configuration and ambient temperature operation;
[5] Depending on type of package;
[6] No condensation;
[7] On-request. Contact factory;
[8] Future upgrade through OTA;
[9] Dependent on version selected (HPC 240 upgradable or HPC 240 non-upgradable). Retrofit kit for 400 kW.

Efacec Electric Mobility, S.A.
EV Chargers area

evcharging@efacec.com
www.efacec.com

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