hyc400

100 kW to 400 kW DC-charging system for EVs



Up to **97.5** % efficiency under full load

Max. total DC output

1200 A (2x 600 A)

50 kW

granularity for dynamic load management

150 - 1000 V

future-proof output range

Bidirectional

native design



Integrated power electronics in an ultra-compact design



Simultaneous DC charging for up to 3 cars



Power-Stack concept: scalable power 100 kW - 400 kW

Product data sheet HYC400 / V1 - 2 © Alpitronic Srl Via di Mezzo ai Piani, 33 39100 Bolzano, Italy info@hypercharger.it





System Specifications		
DC interfaces	CCS2 up to 500 A (600 A boost) CHAdeMO up to 200 A CCS1* NACS* GB/T* * Only upon special request by OEMs	
Load and charging management	Smart, dynamic allocation of power modules and distribution of charging power to charging points.	
Operating temperature	-30° up to +55° C	
Operating height	\leq 4,000 m a.s.l.* * For configuration with CHAdeMO cables, the max. installation height is limited to 2,000 m a.s.l.	
Environmental conditions, in storage	-40° up to +55° C	
Environmental conditions, under transport	-40° up to +70° C	
Humidity (in operation, storage)	10% - 95% relative (non-condensing)	
Efficiency	up to 97.5%	
Protective class	Class I (protective earth connection)	
Environment pollution degree	Class 4	
Noise emission	< 52 dBA* *Standard environmental conditions (20° C, 3 m distance;)	
Installation location	Indoor and outdoor installation	
Type of installation	Floor mounted on plinth or base (Optional concrete foundation base)	
Inlet cable	$2x300\text{mm}^2$ per phase, max. $\varnothing33\text{mm}$ per conductor	
Protection rating	IP54	
Impact resistance	IK10 in accordance with IEC 62262	
Dimensions (H x W x D)	2185 x 732 x 663 mm	
Weight	560 kg up to 890 kg* * Depending on configuration	
User interface	15.6" display, 4 buttons	
Remote management	Remote access, diagnostics, software updates	





Power Supply	
AC nominal voltage (RMS)	400 V -15% +10%
AC maximum input current (RMS)	630 A
Frequency	50 Hz 60 Hz
Network type	3phase TN-C TN-S TN-C-S TT
Power factor	> 0.99 (@ full load)
Controllable PF range	±0.95
THDi (Total harmonic distortion)	< 5% @ full load
Efficiency	up to 97.5 % @ full load
Overvoltage category	OVC III, DIN EN 60664-1
Integrated coordinated lightning protection (SPD)	Type 1 + 2 + 3
Standby power consumption	43 W

Charging Interfaces		
Maximum total DC output power	100 kW (one Power-Stack), max. 300 A 200 kW (two Power-Stacks), max. 600 A 300 kW (three Power-Stacks), max. 1 x 600 A + 1 x 300 A or 2 x 450 A 400 kW (four Power-Stacks), max. 2 x 600 A	
Granularity of output power	50 kW	
Maximum output current	500 A continous (600 A boost)	
Output DC voltage range	150 Vdc - 1000 Vdc	
Charging connection options	CCS2 up to 500 A (prepared for 600 A boost)* CHAdeMO up to 200 A CCS1 GB/T * Preliminary data to be verified	
Cable lengths	3.5 m or 5 m and Cable Management System (CMS)	





Configuration Options	
Branding	Options for custom colours (powder coating), foil application and stickers
CMS (Cable Management System)	For 5 m cables, provides ease of use and ensures a longer cable lifespan
Mounting	Floor mounted on plinth or base (Optional concrete foundation base)
Accessibility	Optional, barrier-free version for the operating elements and plugs in terms of installation height (1,050 mm each) is possible (in accordance with DIN 18040-3)
Payment system	Choose between different card readers for credit cards or EC card, QR-Code-reader;
Law on weights and measurements	DC meters available in accordance with the German Calibration Law
Parametrisation of noise levels	Parameters can be set for the maximum noise level for day and night operation (e.g. for use in sensitive areas)
Additional safety features	Emergency stop button (optional), external emergency stop, crash (tilt) sensor, door contact switch;
Multilingual system	GUI in 27 languages

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DC standard protocol (communications with the vehicle)	CCS1/2: SAE J1772 / EN 61851-24/DIN SPEC 70121; ISO 15118 CHAdeMO 1.2 GB/T 27930 (for automotive multicharger)
RFID system	RFID reader (ISO/IEC 14443A/B, ISO/IEC 15693)
Network connections	LTE/UMTS/GSM Modem 4G/3G/2G 10/100Base-T Ethernet
Communications protocol for the charging infrastructure	Open Charge Point Protocol (OCPP) 1.6 J, ready for 2.0 J
Certifications	TÜV Süd CB DE3-D0044
EU directive	2014/53/EU (RED), 2011/65/EU (ROHS2), 2015/863/EU (ROHS3), 2012/19/EU (WEEE), 1907/2006 (REACH REGULATION);
Electrical safety	IEC 61851-1, IEC 61851-23, IEC 61439-7 (as required by IEC 61851 series), IEC 62311, IEC 62477-1;
RED	ETSI EN 301 330; ETSI EN 301 511, ETSI EN 301 908-1; ETSI EN 301 893; ETSI EN EN 300 328;
EMC	EN 61000-6-4, EN 61000-6-2, IEC 61851-21-2 (INDUSTRIAL - ENVIRONMENTS), ETSI EN 301 489-1, ETSI EN 301 489-3; ETSI EN 301 489-52;

