



EVCharger Product introduction

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Our end pursuit is to provide high quality and best cost-effective products.

We would like to express sincere thanks to our loyalty clients and hope more new customers will join with us.

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Hengyi Mechanical&Electrical Engineering is an enterprise specializing in Research & Development of Electric Vehicle Charging products. The company has a strong R&D team and the team director conducted a visiting scholar study at the University of Michigan Dearborn from 2011 to 2012. And the company also has a complete production supporting system integrating mold design, manufacturing and injection molding.

We can provide customized services to meet different needs from customers, in addition to our regular standard products.

We constantly strive to provide each customer with better products along with customized services. We are committed to become the most professional and efficient manufacturer in the field of EV charging. Now our products adapt to vast majority of vehical models around the world and we will continuously update to provide with safe and efficient EV charging products.



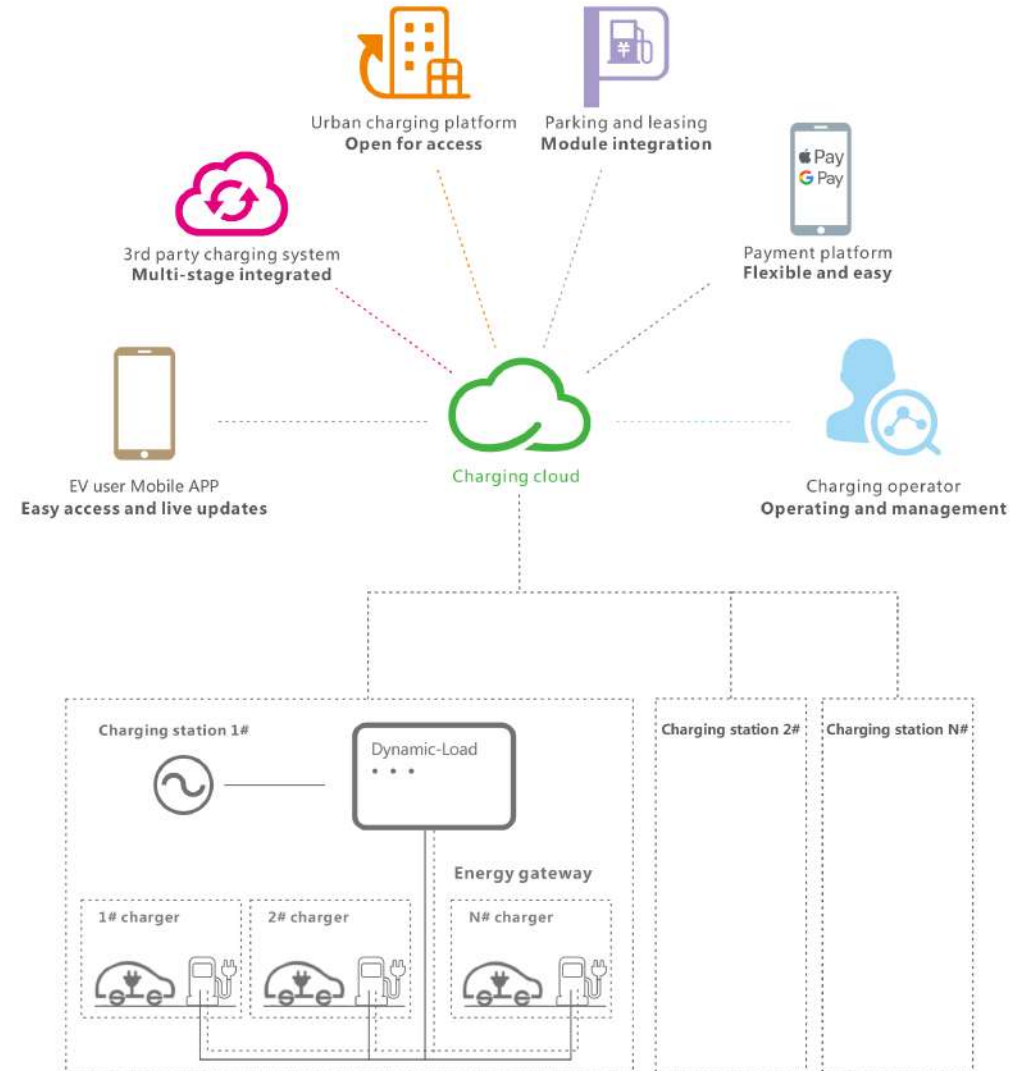
Shanghai Hengyi Mechanical&Electrical Engineering Co., Ltd.

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Hengyi smart Intelligent EV Charging for OCPP1.6 System

Aimed at four most prominent targets in the EV charging field, which are: Maximise ROI (Return on investment), increased power energy capacity, user friendly charging position distribution and low operation cost. Power charging is made easy for EV users and operators.

"Mobile phone APP+ Cloud management platform + Intelligent hardware"



Pony II Portable Charger Series

Pony II Portable Charger is a cost-effective, high-reliability vehicle-mounted AC charging device. Small and light, portable, plug-and-play, it can be used as a standard device for the user's car to solve the needs of car owners who want to recharge. As an electric vehicle parts, this product is designed strictly in accordance with the standards of vehicle parts. Its environmental reliability, weather resistance, anti-rolling and EMC performance can directly meet the most stringent standards of OEMs. It can be directly connected to the standard requirements of passenger car OEMs for on-board charging boxes. The design of this product follows the principle of modular & maximum compatibility design. Under the same structure and hardware platform, through the differentiation of power supply interface, charging interface and software control strategy, different power levels while adjustable such as 8A, 10A, 16A and national/local standards such as national standard, European standard, and British standard are flexibly configured.



Product model description

	SE	0	22	35	AC	01	EU
Product code:	SE						
Display Screen:	0: No	1: Yes					
System Nominal Voltage:			22:220V				
Power:				35:3.5KW/16A			
AC or DC type:					AC Charger		
Product Series:		01: Mode 2	02: Mode 3				
Charging Interface:	GB: Chinese Standard Mode	EU: European Standard Mode	US: American Standard Mode				

Pony II Portable Charger Specification

Parameters	Model	SE-0-22-35-AC-02-EU	SE-0-22-35-AC-02-EU	SE-0-22-35-AC-02-US	SE-0-22-35-AC-02-US
Structure Appearance	Product Attribute	EU version		US version	
	Dimension	225(L) × 88(W) × 50(H)mm			
	User Interface	4×LED Indicator light			
	Cable length	5m(standard)/7.5m/10m or other size customized			
	Weight	3kg (including charging gun)			
Electrical Specification	Input voltage	AC 230V±15%			
	Frequency	45 - 65Hz			
	Power rating	1.8KW	3.5KW	1.8KW	3.5KW
	Measurement accuracy	Grade 1.0 on-board			
	Output voltage	AC 230V±15%		AC 110V	
	Adjustable output current	8A	16A	8A	16A
	Standby power	≤1W	≤1W	≤1W	≤1W
Interface Design	Power supply interface	CEE 7/17, CEE 7/7, CEE 7/6, CEE 7/4, SN 441011, CEI 23-50, BS 1363, SI 32 or other standard three-pin plug with grounding		NEMA 5-20, NEMA 6-20, NEMA 14-20	
	Charging interface	IEC-62196-2		SAE J1772	
Safety Design	Design standard	IEC 61851-1:2017, EN IEC 61851-1:2019, IEC 61851-21-2:2018, IEC 61851-23:2014, EN 61851-23:2014, EN IEC 61000-6-1:2019, EN 61000-6-3:2007+A1:2011+AC:2012, EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019,EN 62752-2016+A1:2020		SAE J1772 - 2016, ISO/IEC 15118, UL 2202	
	EMC Level	EMS automotive electronics standards, EMI Class B limit			
	Protection	Overvoltage protection, undervoltage protection, overload protection, short circuit protection, grounding protection, type A leakage protection, lightning surge protection, reverse connection protection, adhesion detection, overtemperature protection (optional)			
Operating Environment	Working temperature	-40 - +65℃			
	Working humidity	5% - 95% no condensation			
	Working altitude	≤4000m			
	IP grade	≥IP67			
	Flame retardant properties	UL94-V0			
	Cooling mode	Natural cooling			
	Applicable	Indoor/Outdoor			
	Special protection	Impedance UV design, anti-vehicle crushing design			
MTBF	≥100000H				
Optional	Plug temperature control	□N/A □With temperature control			



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safety protection



multi-model adaptation



work under low temperature



low energy consumption

Pony II Portable Charger Series

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Product model description

Product code: SE 1 22 35 AC 01 EU

Display Screen: 0: No 1: Yes

System Nominal Voltage: 22-220V

Power: 35:3.5KW/16A

AC or DC type: AC Charger

Product Series: 01: Mode 2 02: Mode 3

Charging Interface: GB: Chinese Standard Mode EU: European Standard Mode US: American Standard Mode

Pony II Portable Charger Specification

Parameters	Model	SE-1-22-35-AC-01-EU	SE-1-22-35-AC-01-EU	SE-1-22-35-AC-01-US	SE-1-22-35-AC-01-US
Structure Appearance	Product Attribute	EU version		US version	
	Dimension	225(L) × 88(W) × 50(H)mm			
	User Interface	4×LED Indicator light , 1.8inch display screen			
	Cable length	5m(standard)/7.5m/10m or other size customized			
	Weight	3kg (including charging gun)			
Electrical Specification	Input voltage	AC 230V±15%			
	Frequency	45 - 65Hz			
	Power rating	3.5KW	3.5KW	3.5KW	3.5KW
	Measurement accuracy	Grade 1.0 on-board			
	Output voltage	AC 230V±15%		AC 110V	
	Adjustable output current	16A	8A,10A,13A,16Aadjustable	16A	8A,10A,13A,16Aadjustable
	Standby power	≤1W	≤1W	≤1W	≤1W
Interface Design	Power supply Interface	CEE 7/17, CEE 7/7, CEE 7/6, CEE 7/4, SN 441011, CEI 23-50, BS 1363, SI 32 or other standard three-pin plug with grounding		NEMA 5-20, NEMA 6-20, NEMA 14-20	
	Charging Interface	IEC-62196-2		SAE J1772	
Safety Design	Design standard	IEC 61851-1:2017 , EN IEC 61851-1:2019 , IEC 61851-21-2:2018 , IEC 61851-23:2014 , EN 61851-23:2014 , EN IEC 61000-6-1:2019 , EN 61000-6-3:2007+A1:2011+AC:2012 , EN IEC 61000-3-2:2019 , EN 61000-3-3:2013+A1:2019,EN 62752:2016+A1:2020		SAE J1772 - 2016 , ISO/IEC 15118 , UL 2202	
	EMC Level	EMS automotive electronics standards, EMI Class B limit			
	Protection	Overvoltage protection, undervoltage protection, overload protection, short circuit protection, grounding protection, type A leakage protection, lightning surge protection, reverse connection protection, adhesion detection, overtemperature protection (optional)			
Operating Environment	Working temperature	-40 - +65℃			
	Working humidity	5% - 95% no condensation			
	Working altitude	≤4000m			
	IP grade	≥IP67			
	Flame retardant properties	UL94-V0			
	Cooling mode	Natural cooling			
	Applicable	Indoor/Outdoor			
	Special protection	Impedance UV design, anti-vehicle crushing design			
Function	MTBF	≥100000H			
	Delayed charging	1~10 hours			



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multi-model adaptation



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low energy consumption

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Dark Horse I AC Charger Series

The Dark Horse I AC series is a cost-effective and highly reliable single-phase AC ev charger. It combines an AC charging interface, a human-machine interface, electrical safety design and protection of the charging function, and offers various charging methods such as card, APP and plug-and-charge. The intelligent configuration of the AC ev charger follows the principle of modular design. Under the same structure and hardware platform, it can be flexibly configured with Bluetooth, WIFI, 4G networking, Ethernet and intelligent interactive screen. The AC pile is highly integrated with human-machine interaction, control, metering and safety protection modules, energy-saving and power-saving, with a minimum standby power consumption of 5 W. With special accessories, the charging current of the ev charger can be dynamically adjusted according to the household electricity consumption, protecting your household power supply line.



charging cable

charging cable with display

socket

socket with display

Product model description



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Dark Horse I AC Charger Specification

Parameters	Model	SEVK-1-22-35-AC-02-EU	SEVK-1-22-7-AC-02-EU	SEVK-1-38-11-AC-02-EU	SEVK-1-38-22-AC-02-EU
Structure Appearance	product properties	APP with screen	APP with screen	APP with screen	APP with screen
	Dimension	350(H) × 240(W) × 95(D)mm			
	User Interface	4.3 inch display screen with indicator light			
	Installation method	Wall-mounted Type / Floor-standing Type Installation			
	Wiring method	Bottom enter&out			
	Cable length	5M(16.4FT) standard, 7.5m / 10m or other size customizable			
	Weight	8.0kg (Including charging gun)			
Electrical Specification	Input voltage	AC220V±20%	AC220V±20%	AC380V±10%	AC380V±10%
	Frequency	45-65Hz			
	Power rating	3.5KW	7.0KW	11.0KW	22.0KW
	Measurement accuracy	OBM 1.0			
	Output voltage	AC220V±20%	AC220V±20%	AC380V±10%	AC380V±10%
	Output current	16A	32A	3*16A	3*32A
	Standby power	5W	5W	6W	6W
Function	Indicator light	Yes	Yes	Yes	Yes
	Display	Yes	Yes	Yes	Yes
	Communication interface	WIFI/4G/OCPP1.6/LAN			
Protection	Design standard	EN/IEC 61851-1(2010/2017), EN/IEC 61851-22(2001), EN/IEC 62196-1(2014), EN/IEC 62196-2(2017), ROHS directive 2011/65/EU, SAE J1772			
	Protection	Overvoltage protection, undervoltage protection, overload protection, short circuit protection, ground protection, over temperature protection, lightning protection, type A 30mA leakage protection			
Operating Environment	Working temperature	-40~+65℃			
	Working Humidity	5%-95% no condensation			
	Working altitude	≤3000m			
	IP grade	≥IP55			
	Cooling mode	Natural cooling			
	Applicable	Indoor/Outdoor, No conductive dust, no corrosive gas, no explosive gas, no strong vibration			
	Special protection	UV resistance			
Optional	MTBF	≥100000H			
	Installation components	Stand pillar			
	RFID	2 user cards			
	Leakage protection	Upgrade to Type A 30mA AC + 6mA DC			
	Home load balancing	Adapter cable and accessories			
Optional	Socket outlet	Change charging cable to socket(not support SAE standard)			



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safety protection



multi-model adaptation



work under low temperature



low energy consumption

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Dark Horse III AC Charger Series

Dark Horse III AC Charger Series are cost-effective, high-reliability AC station. It has a simple and elegant appearance, and can be used as a home use ev charger station or an commercial use EV charger station for social public operation. The product integrates AC charging interface, electrical safety design, and charging function protection in one, and provides RFID charging methods by swiping the RFID card for payment. The intelligent configuration of the AC station follows the principle of modular design. Function modules such as control, metering, and security protection are highly integrated, saving energy and electricity, and the stand-by power consumption is as low as 5W.



Wall-mounted Type

Stand pillar

Product model description

Product code: SEVK

Display Screen: 1: Yes

System Nominal Voltage: 22: 220V

Power: 7: 7KW/32A

AC or DC type: AC Charger

Product Series: 01: Mode 2 02: Mode 3

Charging Interface: GB: Chinese Standard Mode III EU: European Standard Mode III US: American Standard Mode III

SEVK 1 22 7 AC 02 EU

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Dark Horse III AC Charger Specification

Parameters	Model	SEVK-1-22-7-AC-02-EU	SEVK-1-22-7-AC-02-EU
Structure Appearance	product properties	Offline with screen	Networking with screen
	Dimension	370(H) × 220(W) × 85(D)mm	
	User Interface	4.3 inch display screen with Indicator light	
	Installation method	Wall-mounted Type/Floor-standing Type Installation	
	Wiring method	Bottom enter&out	
	Cable length	3.5m/5m/10m optional	
	Weight	6.0kg (Including charging plug)	
Electrical Specification	Input voltage	AC220V±20%	
	Frequency	45-65Hz	
	Power rating	7.0KW	7.0KW
	Measurement accuracy	0.8M 1.0	
	Output voltage	AC220V±20%	
	Output current	32A	32A
	Standby power	5W	6W
Function	Indicator light	Yes	Yes
	Display	Yes	Yes
	RFID	Yes	Yes
Protection	Design standard	EN/IEC 61851-1 (2010 / 2017), EN/IEC 61851-22 (2001), EN/IEC 62196-1 (2014), EN/IEC 62196-2 (2017), ROHS directive 2011 / 65/EU	
	Protection	Overvoltage protection, undervoltage protection, overload protection, short circuit protection, ground protection, over temperature protection, lightning protection, onboard A-type leakage protection	
Operating Environment	Working temperature	-40~+65℃	
	Working Humidity	5%-95% no condensation	
	Working elevation	≤3000m	
	IP grade	≥IP65	
	Cooling mode	Natural cooling	
	Applicable Environment	Indoor/Outdoor. No conductive dust, no corrosive gas, no explosive gas, no strong vibration	
	Special protection	UV resistance	
Optional	MTBF	≥100000H	
	Installation components	<input type="checkbox"/> Stand pillar	



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Dark Horse III AC Charger Series are cost-effective, high-reliability AC station. It has a simple and elegant appearance, and can be used as a home use ev charger station or an commercial use EV charger station for social public operation. The product integrates AC charging interface, electrical safety design, and charging function protection in one, and provides RFID charging methods by swiping the RFID card for payment. The intelligent configuration of the AC station follows the principle of modular design. Function modules such as control, metering, and security protection are highly integrated, saving energy and electricity, and the stand-by power consumption is as low as 5W.



Wall-mounted Type

Stand pillar

Product model description

Product code: SETX

Display Screen: 1: Yes

System Nominal Voltage: 38: 380V

Power: 11: 11KW/16A

AC or DC type: AC Charger

Product Series: 01: Mode 2 02: Mode 3

Charging Interface: GB: Chinese Standard Mode III EU: European Standard Mode III US: American Standard Mode III

SETX 1 38 11 AC 02 EU

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Dark Horse III AC Charger Specification

Parameters	Model	SEVK-1-38-11-AC-02-EU	SEVK-1-38-11-AC-02-EU
Structure Appearance	product properties	Offline with screen	Networking with screen
	Dimension	370(H) × 220(W) × 85(D)mm	
	User Interface	4.3 inch display screen with Indicator light	
	Installation method	Wall-mounted Type/Floor-standing Type Installation	
	Wiring method	Bottom enter&out	
	Cable length	3.5m/5m/10m optional	
	Weight	8.0kg (Including charging plug)	
Electrical Specification	Input voltage	AC400V±10%	
	Frequency	45-65Hz	
	Power rating	11KW	11KW
	Measurement accuracy	0.8M 1.0	
	Output voltage	AC400V±10%	
	Output current	16A	16A
	Standby power	5W	6W
Function	Indicator light	Yes	Yes
	Display	Yes	Yes
	RFID	Yes	Yes
Protection	Design standard	EN/IEC 61851-1 (2010 / 2017),EN/IEC 61851-22 (2001),EN/IEC 62196-1 (2014),EN/IEC 62196-2 (2017),ROHS directive 2011 / 65/EU	
	Protection	Overvoltage protection, undervoltage protection, overload protection, short circuit protection, ground protection, over temperature protection, lightning protection, onboard A-type leakage protection	
Operating Environment	Working temperature	-40~+65℃	
	Working Humidity	5%-95% no condensation	
	Working elevation	≤3000m	
	IP grade	≥IP65	
	Cooling mode	Natural cooling	
	Applicable Environment	Indoor/Outdoor, No conductive dust, no corrosive gas, no explosive gas, no strong vibration	
	Special protection	UV resistance	
	MTBF	≥ 100000H	
Optional	Installation components	<input type="checkbox"/> Stand pillar	



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safety protection



multi-model adaptation



work under low temperature



low energy consumption

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Fast Horse I 30-80KW Integrated DC pile series

SEVK Fast Horse I series is a kind of two-plug integrated 30-80kw DC station developed by HENGYI. The product integrates power switching, charging control, charging protection, man-machine interaction control, communication control and billing functions, and has good IP protection characteristics to ensure the safety of outdoor operation and use of equipment.

The power switching and configuration of DC station follow the principle of modular design, which can be flexibly configured into 30KW, 40KW, 60KW or 80KW power output, and the maximum output power of a single plug can reach 80KW, meeting the charging requirements of different vehicles and different operating scenarios. The product covers single and double plug output, and is a reliable choice for outdoor fast DC charging.



Product model description

Product code: VK	VK	1	75	080	DC	2
Display Screen: 0:None 1:Yes		1				
SystemNominalVoltage: 50:500V 75:750V			75			
Power: 030:30KW 040:40KW 060:60KW 080:80KW				080		
AC and DC type: AC: AC charging pile DC:DC charging pile AD: AC and DC charging pile					DC	
Number of plug: 0:No plug 1:Single plug 2:Double plugs 3:Three plugs 4:Four plugs						2

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Product Parameter

Parameter	Product model	VK150030DC	VK175030DC	VK150040DC	VK175040DC	VK150060DC	VK175060DC	VK150080DC	VK175080DC
Structure	Size (mm)	1680 (H) ×720 (W) ×500 (D) mm							
	Display	7 inch LCD touch panel + LED							
	Linear way	Bottom in line, bottom out plug							
	Charging cable	5m/8m/10m							
Electrical Specifications	Input voltage	AC380V±10%							
	Frequency rating	45 ~ 65Hz							
	Power rating	30KW		40KW		60KW		80KW	
	Measuring accuracy	0.5/1.0							
	Output voltage	150-550VDC	150-750VDC	150-500VDC	150-750VDC	150-550VDC	150-750VDC	150-500VDC	150-750VDC
	Current rating	70A	50A	100A	66A	140A	100A	200A	132A
	Current limiting protection	>110%							
	Stabilized voltage precision	<±0.5%							
	Stabilized current precision	<±1.0%							
	Ripple coefficient	<±0.5%							
	Efficiency	>95% (Full load)		>95% (Full load)		>95% (Full load)		>95% (Full load)	
	Power factor	>0.99 (up to 50% load)							
	Harmonic content	<5% (up to 50% load)							
Function	HMI	Display screen, emergency stop button, LED, RFID, scan code							
	Communication interface	GPRS, Ethernet, 4G/3G, CAN, RS485							
Protection	Design standard	IEC-62196-1, IEC-62196-3, IEC-61851-1, ISO15118(CC5)							
	Protection	Charging connector temperature monitoring, Over-voltage protection, Under-voltage protection, Over-current protection, Short-circuit protection, Insulation monitoring, Over-temperature protection, OVR, Reverse battery protection							
Operating conditions	Working temperature	-25 ~ +50℃							
	Relative humidity permission	5% ~ 95% (non-condensation)							
	Maximum altitude permission	<3000m							
	IP grade	>IP54							
	Cooling way	Force-air cooling							
	Noise level	<60dB							
	MTBF	>10000H							
Optional features	Charging plug	<input type="checkbox"/> Single <input type="checkbox"/> Double							
	Auxiliary power	<input type="checkbox"/> 12V <input type="checkbox"/> 24V <input type="checkbox"/> 12&24V							



Professional heat dissipation design



stable and reliable



active charging protection



dual IP protection



compatibility with old and new national standards



multi-model adaptation



intelligent platform



flexible configuration

Fast Horse II 90-150KW Integrated DC pile series

SEVK Fast Horse II series is a kind of two-plug integrated 90-150kw DC station developed by HENG YI. The product integrates power switching, charging control, charging protection, man-machine interaction control, communication control and billing functions, and has good IP protection characteristics to ensure the safety of outdoor operation and use of equipment.

The power switching and configuration of DC station follow the principle of modular design, which can be flexibly configured into 90KW, 120KW or 150KW power output, and the maximum output power of a single plug can reach 150KW, meeting the charging requirements of different vehicles and different operating scenarios. The product covers single and double plug output, and is a reliable choice for outdoor fast DC charging.



Product model description

Product code: VK	VK	1	75	150	DC	2
Display Screen: 0:None 1:Yes		1				
SystemNominalVoltage: 50:500V 75:750V			75			
Power: 090:90KW 120:120KW 150:150KW				150		
AC and DC type: AC: AC charging pile DC:DC charging pile AD: AC and DC charging pile					DC	
Number of plug: 0:No plug 1:Single plug 2:Double plugs 3:Three plugs 4:Four plugs						2

Product Parameter

Parameter	Product model	VK150090DC	VK175090DC	VK150120DC	VK175120DC	VK150150DC	VK175150DC
Structure	Size (mm)	1860 (H) ×850 (W) ×620 (D) mm					
	Display	7 inch LCD touch panel + LED					
	Linear way	Bottom in line, bottom out plug					
	Charging cable	5m/8m/10m					
Electrical Specifications	Input voltage	AC380V±20%					
	Frequency rating	45 – 65Hz					
	Power rating	90KW		120KW		150KW	
	Measuring accuracy	0.5/1.0					
	Output voltage	150-550VDC	150-750VDC	150-500VDC	150-750VDC	150-550VDC	150-750VDC
	Current rating	210A	150A	300A	198A	370A	248A
	Current limiting protection	≥110%					
	Stabilized voltage precision	≤±0.5%					
	Stabilized current precision	≤±1.0%					
	Ripple coefficient	≤±0.5%					
	Efficiency	≥95% (Full load)		≥95% (Full load)		≥95% (Full load)	
	Power factor	≥0.99 (up to 50% load)					
	Harmonic content	≤5% (up to 50% load)					
Function	HMI	Display screen, emergency stop button, LED, RFID, scan code					
	Communication interface	GPRS, Ethernet, 4G/3G, CAN, RS485					
Protection	Design standard	IEC-62196-1、IEC-62196-3、IEC-61851-1、ISO15118(CCS)					
	Protection	Charging connector temperature monitoring、Over-voltage protection、Under-voltage protection、Over-current protection、Short-circuit protection、Insulation monitoring、Over-temperature protection、OVR、Reverse battery protection					
Operating conditions	Working temperature	-25 ~ +50℃					
	Relative humidity permission	5%—95% (non-condensation)					
	Maximum altitude permission	≤3000m					
	IP grade	≥IP54					
	Cooling way	Force-air cooling					
	Noise level	≤60dB					
	MTBF	≥10000H					
Optional features	Charging plug	<input type="checkbox"/> Single <input type="checkbox"/> Double					
	Auxiliary power	<input type="checkbox"/> 12V <input type="checkbox"/> 24V <input type="checkbox"/> 12&24V					



Professional heat dissipation design



stable and reliable



active charging protection



dual IP protection



compatibility with old and new national standards



multi-model adaptation



intelligent platform



flexible configuration