

EV Charging Solution

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EV CHARGING SOLUTION

SMARTER CHARGING FOR BETTER LIFE



**BASED ON NEW ENERGY AUTOMATIVE FIELD
EXTEND A FULL RANGE OF INTELLIGENT
CHARGING PRODUCTS**





Global urban populations are expanding, and it's estimated that in 2050, 66% of the global population will be living in cities. In order to reduce the growing problem of traffic congestion, governments of various nations are working with car manufacturers to implement smart services and ride-sharing by encouraging the use of electric vehicles. Through Intelligent's renowned and advanced technology the company has successfully developed a series of highly efficient EV charging solutions. The company began its efforts on EV systems and chargers since 2015, factory become the charger supplier for several Chinese large electric buses. The company has also earned the acclaim of the cooperated car manufacturers and operators EV chargers is also working with several EV operators in Europe and Southeast Asia by partnering with YUTONG, a well-known Chinese EV manufacturer, and has set up charging stations at France, Bulgaria and Singapore, etc. We have been always committed to the healthy development of green transportation and promotion of the new energy all over the world.

Our factory is a national high-tech enterprise as well as tech little giant enterprise of Hubei Province, which is specialized in R&D production, marketing of smart charging stations, as well as the overall charging system solutions. The industrial Park has covered an area of 56,000m². The company has nearly 150 employees, 30% of which are core R&D staff.

Factory has created a complete industrial chain and covered all the four international charging standards as GB/T, CCS2, CCS1 as well as CHAdeMO. Products covered three series of AC DC and super charging systems. Its brand EV chargers have already been applied to more than 200 cities in China and over 27 countries and regions around the world. By virtue of over 20 years R&D experiences of electronic power control technology, the company has developed multiple independent intellectual property rights of core technologies such as the whole charger design, charging control system, billing and metering system, remote monitoring and management platform and mobile terminal charging service, which help it accumulated enriched experience in R &D and manufacturing fields.

By virtue of high-quality products and services, it has won many awards such as "Gazelle Enterprise", "Excellent Software Demonstration Enterprise", "Intelligent Manufacturing Pilot Demonstration Enterprise", "Little Giant Enterprise in Science and Technology". etc. It has also won awards as "2017 Best Charging Solution Supplier", "2018 Top 10 Charging Pile Brands in China Green Logistics Industry", "2019 Top 10 Charging Pile Brand Award", "2020 Top 10 Influential Brands in China Charging Facility Industry" and many other industry awards. Meanwhile factory has successfully passed the assessments as "safety production standardization of the three-level enterprise", "international ISO full series management system certification" and other authoritative certification

innovation as the concept and quality as the cornerstone, in order to respond to the national energy conservation and emission reduction and the global "double carbon" target. Factory will always keep cooperating closely with the upstream and downstream enterprises, and making contribution to the global energy conservation and emission reduction, low-carbon environmental protection type of social construction and the healthy development of green renewable energy.

VISION

To become a leading brand in industrial IOT and intelligent electrical field

To become respected leader in new energy and charging field

Core team achieve common growth with the company and become prominent player of related field

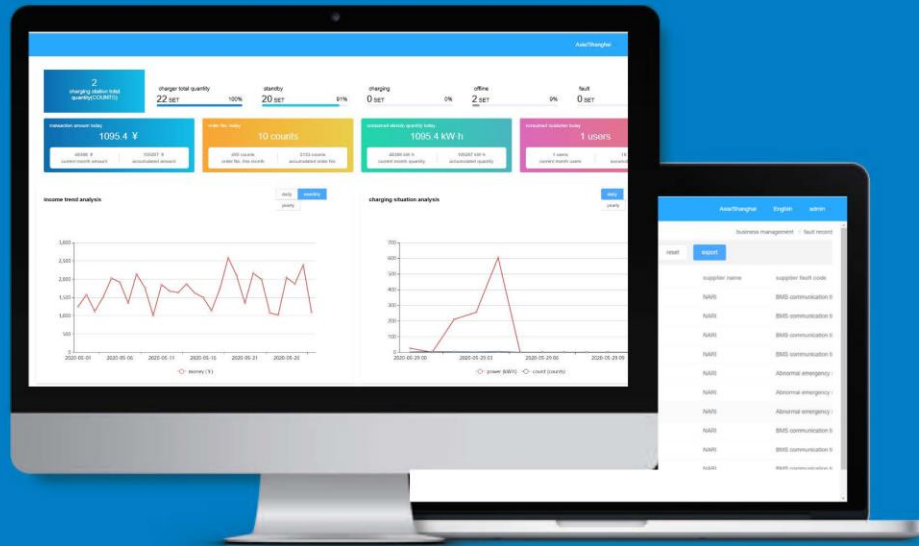


STRATEGIC PARTNERS

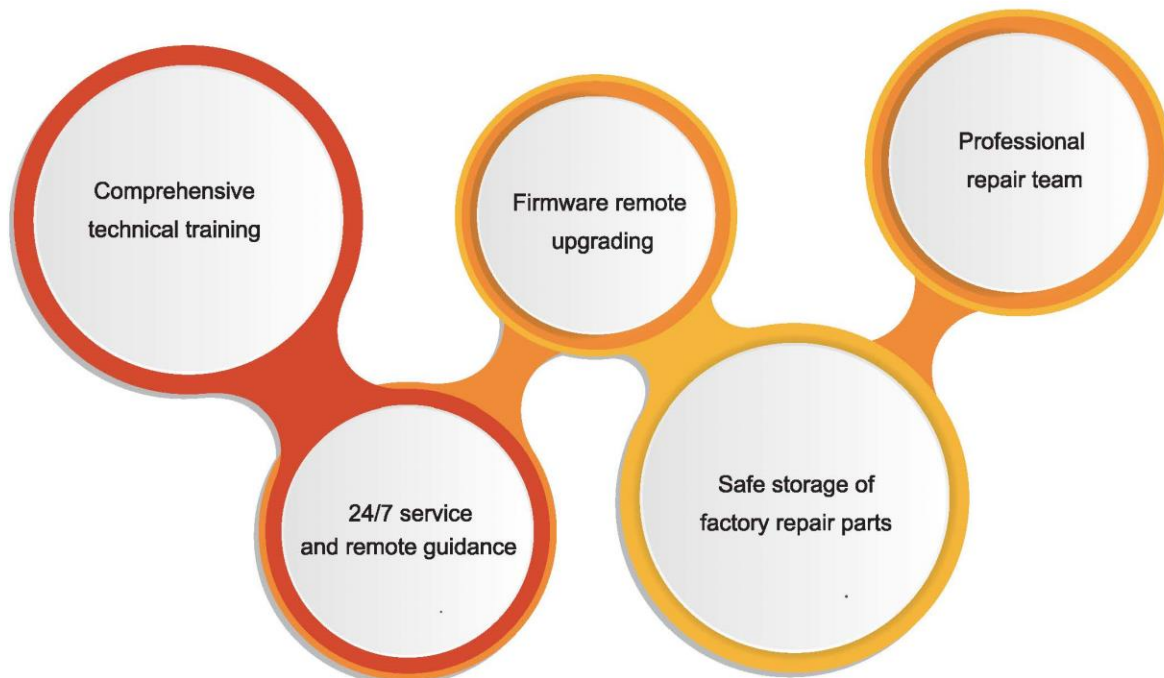


■ Back Office Platform Management

- Back end/cloud platform development & management
- Real-time monitoring and management of chargers
- Account authorization management
- Big data analysis



■ After-sale Services



PRODUCT PERFORMANCE



TIME-TESTED

Over 17 years of experience in driving field and with more than
> 10000 units sold



GLOBAL

Installations in over > 200 cities in China and > 27 countries



FLEXIBILITY

Free combination of 4 standards serving all electric vehicles

GB/T connectors for Chinese cars

CCS connectors for American and EU cars

CHAdeMO connectors for Japanese cars

AC Plug for early EV and hybrid cars



SAFETY

Independently certified and 3rd party tested according to relevant
electrical safety standards



RELIABILITY

Multiple power modules ensures continued operation in the event
of single component failure



INNOVATIVE

Always ready for the next generation of EVs, including trucks,
vans and other special vehicles, with up to 1000V higher voltage
output





CONNECTIVITY

24/7/365 network monitoring of the charger status Remote updates with latest features for the latest EVs
More than 75% of service cases could be resolved remotely

EASY TO USE

Automatic customer authorization upon plug-in with Autocharge feature
Touch screen display with user friendly flow and simplified visual of charge process, support English, French, Spanish, Russian, Kazakh

EV CHARGER PRODUCTS



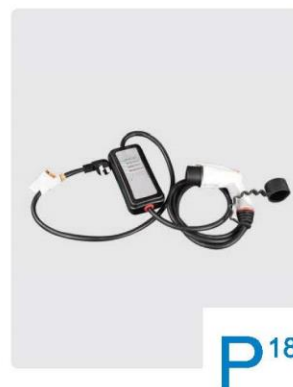
32A Wall Box
AC EV Charger



32A Wall Box
AC EV Charger



63A Floor Mounted
AC EV Charger



16A Portable
AC EV Charger



30kW Wall Box
DC Fast Charger



60-160kW
DC Fast Charger



60kW/120kW/180kW
Multi-Standards Fast Charger



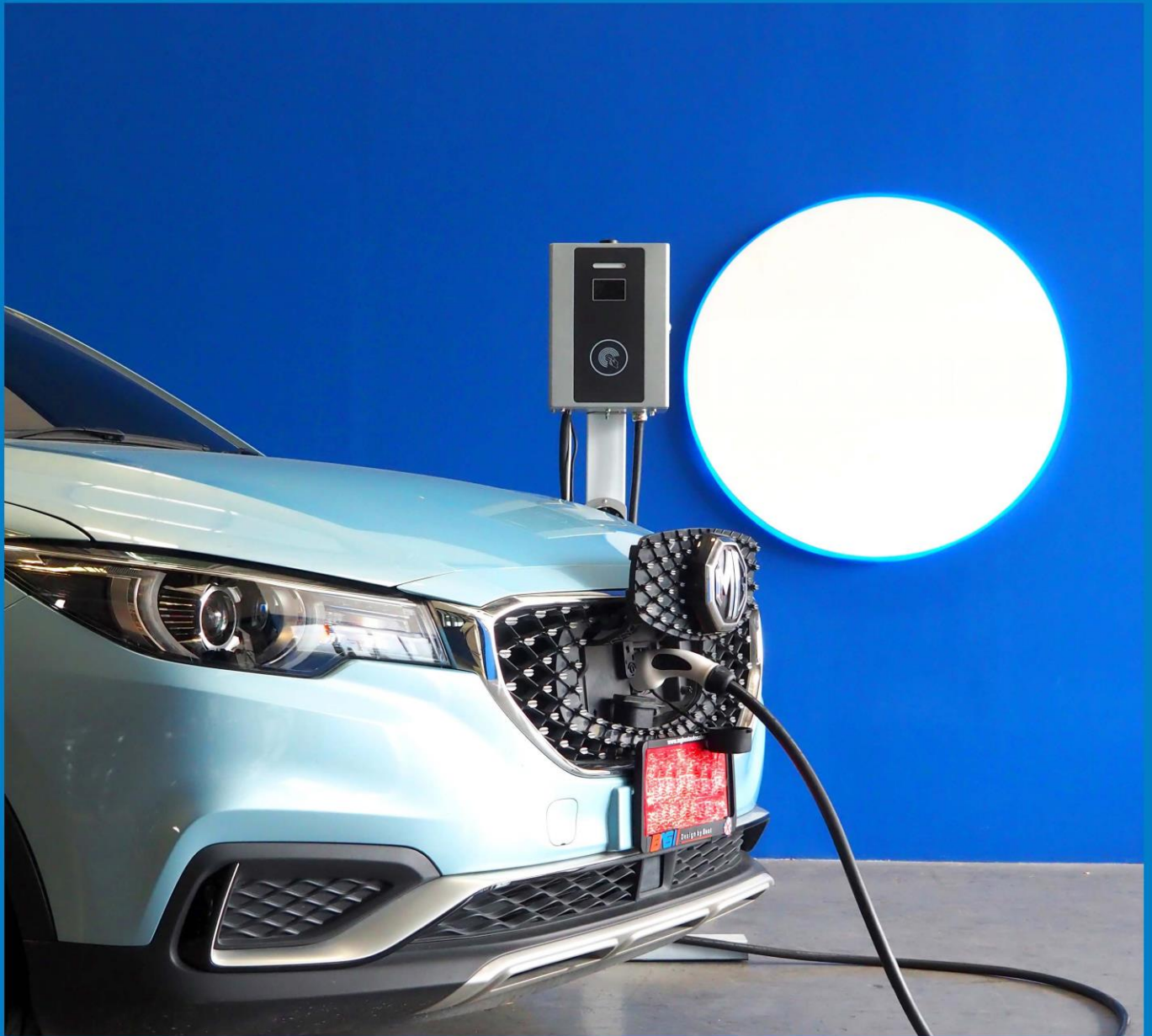
360kW Split Type Liquid Cooling
DC Charging System



300kW Split Type Fan Cooling
DC Charging System



300kW/600kW Split Type
Pantograph System



AC EV CHARGER

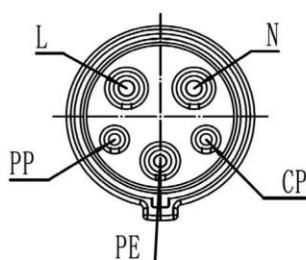
- Wall-mounted
- Floor-mounted
- Portable

32A WALL BOX

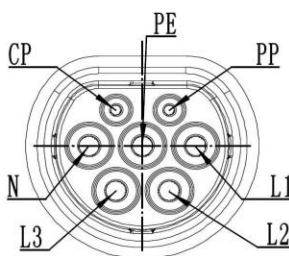
AC EV CHARGER

Features

- Ideal choices for residential, community, and commercial AC EV charger
- Optional wired/wireless connection for back office management
- Optional RFID card reader for user identification and management
- Input: 200Vac~240Vac / 400Vac \pm 15%
- IP54 rated for indoor/outdoor applications
- Firmware updates through remote connection
- Charging interface: SAE J1772 (Type 1) / IEC 62196-2 (Type2)



TYPE 1



TYPE 2



Applications

- Highway gas / service station
- Home use or commercial use
- EV dealer workshops
- Parking garage
- EV infrastructure operators and service providers

Electric Features

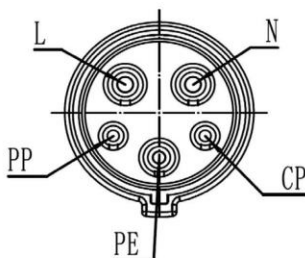
CATEGORY		HKAC SERIES	
Model Name		CS- HKAC 32 (EU)	CS- HKAC 32 (US)
AC Input	Input Rating	230 Vac / Single Phase 400Vac / Three Phase	208-240 Vac / 1-phase (AC Level 2) 400Vac / Three Phase
	AC Input Connection	L/N/PE 3P/N/PE	
	Max. Input Current (A)	32	
	Frequency (Hz)	45-65	
	Residual Current Device (Type B Optional)	Type A: IΔn 30 mA Type B: IΔn 30 mA + dc 6 mA	CCID 20
User Interface & Control	Display	3.5 inch LCD	
	User Authentication	RFID ISO/IEC 14443A/B	
	Display Information	Current, Energy	
Communication	External	Ethernet/4G/3G	
	Internal	OCPP 1.6 JSON	
Environmental	Operating Temperature (°C)	-30 ~ 50	
	Humidity (%)	5 ~ 95 RH non-condensing	
	Altitude (m)	≤2500m	
	IP Level	IP54	NEMA TYPE 3R
	Cooling method	Natural Cooling	
Mechanical	Dimension(WxDxH mm)	160*280*398.5 (Wall mounted type) 181.5*280*1515 (Floor mounted type)	
	Weight(kg)	≤14kg (Wall mounted type) ≤20kg (Floor mounted type)	
	Cable Length(m)	5	
Protection	Input Protection	OCP: <35.2A / OVP: >275V / UVP: <160V	
	Output Protection	OCP: <35.2A / OVP: >275V / UVP: <160V	
	Ground Fault Protection	Lost input ground connection	
Regulation	Certificate	IEC 61851-1:2017 IEC 61851-21-2	UL2594 , UL2231-1/-2
	Safety	CE	UL/cUL
	Charging Interface	IEC 62196-2:2016, Type 2 Plug	SAEJ1772 Type 1 Plug

32A WALL BOX

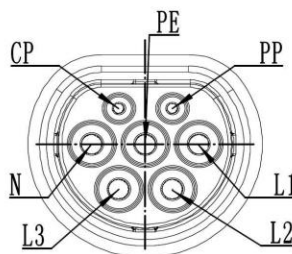
AC EV CHARGER

Features

- Ideal choices for residential community and commercial EV charging
- Optional wired/wireless connection for back office management
- Convenient operation of plug and charge
- Input: 200Vac~240Vac
- IP67 rated for indoor/outdoor applications
- Firmware updates through remote connection
- SAE J1772 (Type 1) or IEC 62196-2(Type 2)



TYPE 1



TYPE 2



Applications

- Highway gas / service station
- Home use or commercial use
- EV dealer workshops
- Parking garage
- EV infrastructure operators and service providers

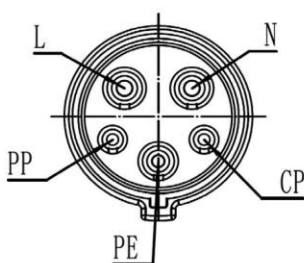
Electric Features

CATEGORY		HKAC SERIES	
Model Name		CS- HKAC 32S (EU)	CS- HKAC 32 (US)
AC Input	Input Rating	230 Vac / Single Phase	208-240 Vac / 1-phase (AC Level 2)
	AC Input Connection	L/N/PE	
	Max. Input Current (A)	32	
	Frequency (Hz)	45~65	
	Residual Current Device (Type B Optional)	Type A: I Δ n 30 mA Type B: I Δ n 30 mA + dc 6 mA	CCID 20
User Interface & Control	Display Information	Current, Energy	
Environmental	Operating Temperature (°C)	-30 ~ 50	
	Humidity (%)	5 ~ 95 RH non-condensong	
	Altitude (m)	≤2500m	
	IP Level	IP54	NEMA TYPE 3R
	Cooling method	Natural Cooling	
Mechanical	Dimension(WxDxH mm)	308*112.3*400	
	Weight(kg)	≤6	
	Cable Length(m)	5	
Protection	Input Protection	OCP: <35.2A / OVP: >275V / UVP: <160V	
	Output Protection	OCP: <35.2A / OVP: >275V / UVP: <160V	
	Ground Fault Protection	Lost input ground connection	
Regulation	Certificate	IEC 61851-1:2017 IEC 61851-21-2	UL2594 , UL2231-1/-2
	Safety	CE	UL/cUL
	Charging Interface	IEC 62196-2:2016, Type 2 Plug	SAEJ1772 Type 1 Plug

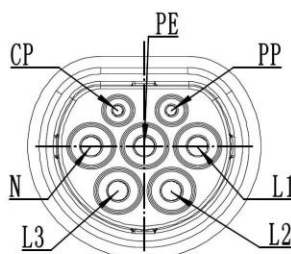
63A FLOOR MOUNTED AC EV CHARGER

Features

- Ideal choices for residential, community, and commercial AC EV charger
- Input: 400Vac \pm 15%
- Stylish, ergonomic and customizable design
- IP54 rated for indoor/outdoor applications
- Firmware updates through remote connection
- Optional wired/wireless connection for back office management
- Optional RFID card reader for user identification and management
- Charging interface: IEC 62196-2 (Type 2)



TYPE 1



TYPE 2



Applications

- Highway gas / service station
- Commercial operators
- EV dealer workshops
- Parking garage
- EV infrastructure operators and service providers

Electric Features

CATEGORY		HKAC SERIES
Model Name		CS - HKAC63F
AC Input	Input Rating	400Vac $\pm 15\%$ Three phase
	AC Input Connection	3P + N + PE
	Max. Input Current (A)	63
	Frequency (Hz)	45~65
	Residual Current Device (Type B Optional)	Type A: $I_{\Delta n}$ 30 mA, Type B: $I_{\Delta n}$ 30 mA + dc 6 MA Manual recovery after protection triggers
User Interface & Control	Display	7 inch Touch Screen
	User Authentication	RFID ISO/IEC 14443A/B
	Display Information	Current, Energy
Communication	External	Ethernet/4G/3G
	Internal	OCPP 1.6 JSON
Environmental	Operating Temperature ($^{\circ}\text{C}$)	-30 ~ 50
	Humidity (%)	5 ~ 95 RH non-condensong
	Altitude (m)	<2500m
	IP Level	IP54
	Cooling method	Natural Cooling
Mechanical	Dimension(WxDxH mm)	386*339*1740
	Weight(kg)	60
	Cable Length(m)	5
Protection	Input Protection	OVP: >460V / UVP: <340V
	Output Protection	OVP: >460V / UVP: <340V
	Ground Fault Protection	Lost input ground connection
Regulation	Certificate	IEC 61851-1:2017 IEC 61851-21-2
	Safety	CE
	Charging Interface	IEC 62196-2:2016, Type 2 Plug, Type 2 Socket

16A PORTABLE AC EV CHARGER

Mode 2, chargers can use a circuit ranging from 8Amp to16Amp with a local standard AC input plug installed for operation



Features

- Provides over and under current, overvoltage and shortcircuit protection
- Protected against strong jets of water from all directions
- Continuously monitors/supervises the ground connection between the AC Supply and EV to ensure safe and reliable charging

CATEGORY		HKAC SERIES	
Model Name		CS-HIEE16(EU)	CS-HIEE16(US)
AC Input	Input Rating	Single phase : 220 ~ 240 VAC \pm 10%	
	AC Input Connection	CEE7/7 (L/N/PE)	NEMA 6-20 (L/N/PE)
	Max. Input Current (A)	16	
	Frequency (Hz)	45~65	
Environmental	Operating Temperature (°C)	-30 ~ 50	
	Humidity (%)	5 ~ 95 RH, non-condensing	
	Altitude (m)	\leq 2000m	
	IP Level	IP66	
	Cooling method	Natural Cooling	
Mechanical	Weight(kg)	<3	
	Cable Length(m)	3M	
Protection	Input Protection	OCP: <18A / OVP: >275V / UVP: <160V	
	Output Protection	OCP: <18A / OVP: >275V / UVP: <160V	
	Ground Fault Protection	Lost input ground connection	
Regulation	Certificate	IEC 61851-1:2017, IEC 62752(IC-CPD)	(US)UL2594, UL2231-1/-2
	Safety	CE	UL/cUL
	Charging Interface	(EU)IEC 62196-2:2016 Type 2	(US)SAE J1772 Type 1

Applications

- Highway gas / service station
- Parking garage
- Commercial operators
- EV infrastructure operators and service providers
- EV dealer workshops



DC EV CHARGER

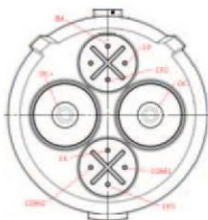
- Wall-mounted
- Floor-mounted
- Split Type

30kW WALL BOX

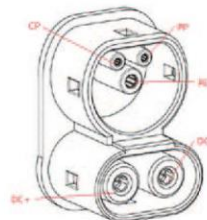
DC FAST CHARGER

Features

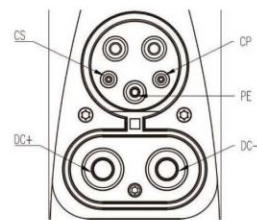
- 30kW DC fast charger supporting CCS and CHAdeMO standards
- IEC62196 Combo 2, SAE J1772 Combo 1, CHAdeMO 1.0
- PF>0.99 (APFC)
- Efficiency>94%
- OCPP 1.6 JSON Supported
- Intelligent RFID card reader, ISO14443 A/B
- 7" touch screen and friendly HMI interface support English, French, Russian and Spanish
- 4G/Ethernet based connection for central office management
- IK10, IP54
- Customization available
- Easy installation and maintenance



IEC62196-3: CHAdeMO



IEC62196-3: CCS Combo 2



IEC62196-3: CCS Combo 1



Applications

- Highway gas / service station
- Commercial operators
- EV dealer workshops
- Parking garage
- EV infrastructure operators and service providers

Electric Features

CATEGORY		HK SERIES
Model Name		CS-DC30
AC Input	AC Input Connection	400VAC \pm 15% 3P + N + PE
	Max. Input Current (A)	55
	Frequency (Hz)	45~65
	Power Factor	\geq 0.99
	Efficiency(%)	\geq 94
DC Output	Output Voltage Range	150~1000VDC (30kW)
	Max. Output Current	100
	Max. Output Power(kW)	30kW
	Voltage Accuracy(%)	\pm 0.5
	Current Accuracy(%)	\pm 1
User Interface & Control	Display	7 inch touch screen
	Push Buttons	Emergency Stop
	Display Information	Charging process and status / Alarm and warning messages
	Internal	CANbus / RS485
Environmental	Operating Temperature (°C)	-30-50, power derating from 50 and above
	Humidity (%)	5~95RH, non-condensing
	Altitude (m)	<2500m
	IP Level	IP54
	Cooling method	Fan cooling
Mechanical	Dimension(WxDxH mm)	500*339*720 (Wall Mounted Type) 500*339*1619 (Floor Mounted Type)
	Weight(kg)	\leq 80kg (Wall Mounted Type) \leq 130kg (Floor Mounted Type)
	Cable Length(m)	5 (CHAdeMO) / 5 (CCS)
Protection	Input Protection	OVP, OCP, OPP, OTP, UVP, Residual current detection, Surge protection, Cabinet-open detection (rear door)
	Output Protection	SCP, OCP, OVP, LVP, OTP, Residual current detection
Regulation	Certificate	IEC 61851-1 , IEC 61851-23 , IEC 61851-21-2
	Safety	CE,UL
	Charging Interface	CHAdeMO 1.0, ISO15118, DIN 70121

60-160kW

DC FAST CHARGER

Features

- Could be charged up to 80% within 30 minutes
- PF>0.99 (APFC)
- Efficiency>94% at nominal output power
- OCPP1.6 JSON
- Intelligent RFID card reader, ISO14443A (M1/MIFARE Card)
- 7" touch screen and friendly HMI interface could support English, French, Spanish and Russian
- Ethernet/4G/3G
- IK10, IP54
- Customization available
- Easy installation and maintenance





Applications

- Highway gas / service station
- Commercial passenger bus operators
- EV dealer workshops
- Parking garage
- EV infrastructure operators and service providers

Electric Features

CATEGORY		HK SERIES
Model Name		CS-80/120/160(1000VDC) CS-60/120/150(750VDC)
AC Input	Input Rating	Three phase
	Input Voltage	400Vac \pm 15%
	AC Input Connection	3P + N + PE
	Max. Input Current (A)	110 / 146 / 220 / 275 / 293
	Frequency (Hz)	45~65
	Power Factor	>0.99 @ 50% or higher load
DC Output	Output Voltage Range	150~750Vdc (CCS) with 15kW module 150~1000Vdc (CCS) with 20kW module
	Max. Output Current	200A(CCS)
	Output Power Range(kW)	60-160
	Voltage Accuracy (%)	\pm 0.5
	Current Accuracy (%)	\pm 1
User Interface & Control	Display	7 inch touch screen
	Push Buttons	Emergency Stop
	User Authentication	RFID system ISO / IEC14443A/B
	Display Information	Charging process and status / Alarm and warning messages
Communication	External	Ethernet / 4G/3G
	Internal	CANbus / RS485
Environmental	Operating Temperature (°C)	-30 ~ +50, power derating from 50 and above
	Humidity (%)	5~95RH, non-condensing
	Altitude (m)	\leq 2500
	IP Level	IP54
	Cooling Method	Fan cooling
Mechanical	Weight(kg)	330 ~ 465
	Cable Length(m)	5
Protection	Input Protection	OVP, OCP, OPP, OTP, UVP, Residual current detection, Surge protection, Cabinet-open detection (rear door)
	Output Protection	SCP, OCP, OVP, LVP, OTP, Residual current detection
Regulation	Certificate	IEC 61851-1:2017, IEC 61851-23, IEC 61851-24, IEC 61851-21-2
	Safety	CE, TR25
	Charging Interface	ISO15118, DIN 70121

60kW/120kW/180kW

MULTI-STANDARDS FAST CHARGER

Features

- 60kW/120kW/180kW multi-standards fast charger supporting free combination of CHAdeMO, GB/T 20234, CCS1, CCS2 and type 2 AC
- PF>0.99 (APFC)
- Efficiency>94% at nominal output power
- OCPP1.6 JSON
- Intelligent RFID card reader, ISO14443A (M1/MIFARE Card)
- 7" touch screen and user-friendly interface support English, French, Russian and Spanish
- Ethernet/4G/3G
- IK10, IP55
- Customization available
- Easy installation and maintenance





Applications

- Highway gas / service station
- Commercial operators
- EV dealer workshops
- Parking garage
- EV infrastructure operators and service providers

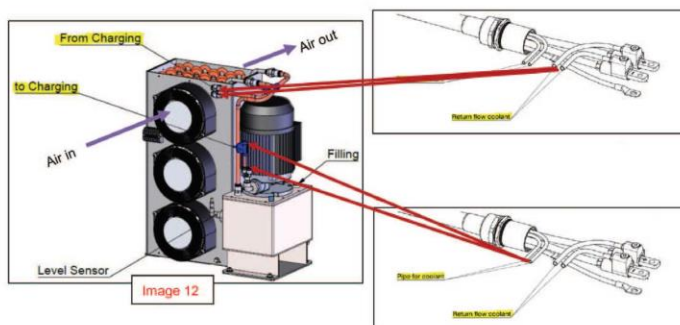
Electric Features

CATEGORY		HK SERIES
Model Name		CS-HKEJE60/120/180
AC Input	Input Rating	400 VAC \pm 15%
	Input voltage	400
	AC Input Connection	3P + N + PE
	Max. Input Current (A)	110A / 220A / 330A
	Frequency (Hz)	45 ~ 65
	Power Factor	>0.99
DC Output	Output Voltage Range	50~500Vdc (CHAdeMO) 150~1000Vdc (CCS) 340~460Vac (type 2 AC)
	Max. Output Current	125A(CHAdeMO)/200A(CCS)/63A(type 2)
	Output Power Range(kW)	60kW/120kW/180kW
	Voltage Accuracy (%)	\pm 0.5
	Current Accuracy (%)	\pm 1
User Interface & Control	Display	7 inch touch screen
	Push Buttons	Emergency Stop
	User Authentication	RFID ISO14443A (M1/MIFARE Card)
	Display Information	Charging process and status / Alarm and warning messages
Communication	External	Ethernet/4G/3G
	Internal	CANbus / RS485
Environmental	Operating Temperature (°C)	-30 ~ +50, power derating from 50 and above
	Humidity (%)	5~95RH, non-condensing
	Altitude (m)	\leq 2500m
	IP Level	IP55
	Cooling Method	Fan cooling
Mechanical	Dimension(WxDxH mm)	750*630*1800
	Weight(kg)	\leq 450 / \leq 480 / \leq 510
	Cable Length(m)	5
Protection	Input Protection	OVP, OCP, OPP, OTP, UVP, Residual current detection, Surge protection, Cabinet-open detection (rear door)
	Output Protection	SCP, OCP, OVP, LVP, OTP, Residual current detection
Regulation	Certificate	IEC 61851-1 , IEC 61851-23 , IEC 61851-21-2
	Safety	CE,UL
	Charging Interface	CHAdeMO 1.0, ISO15118, DIN 70121

360kW SPLIT TYPE LIQUID COOLING DC CHARGING SYSTEM

Features

- An ideal fast charging solution for EV with 150~1000V battery
- Liquid cooling and up to 500A output current
- Modular design for easy installation and maintenance
- Split type design improve user comfort
- 7" touch screen and friendly HMI interface could support English, French, Russian and Spanish
- OCPP1.6 JSON
- IK10, IP55
- Customization available





Applications

- EV bus station
- Highway gas / service station
- Parking garage
- EV dealer workshops
- Commercial operators
- EV infrastructure operators / service providers

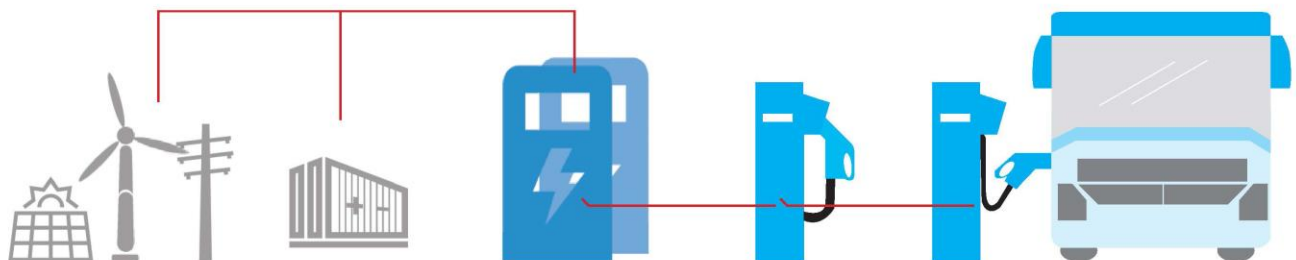
Electric Features

CATEGORY		HK SERIES	
Model Name		CS-HK-C360-1000-E1	CS-HK-E360-1000-E1
AC Input	Input Rating	400VAC \pm 15%	
	AC Input Connection	3P + N + PE	
	Max. Input Current (A)	660A	
	Frequency (Hz)	45~65	
	Power Factor	>0.99 @ 50% or higher load	
	Efficiency (%)	94	
DC Output	Output Voltage Range	150 ~1000VDC	
	Max. Output Current	500A	
	Output Power Range(kW)	360kW	
	Voltage Accuracy (%)	\pm 0.5	
	Current Accuracy (%)	\pm 1	
User Interface & Control	Display	7 inch touch screen	
	Push Buttons	Emergency Stop	
	User Authentication	RFID system ISO / IEC14443A/B	
	Display Information	Charging process and status / Alarm and warning messages	
Communication	External	Ethernet/4G/3G	
	Internal	CANbus / RS485	
Environmental	Operating Temperature (°C)	-30 ~ +50, power derating from 50 and above	
	Humidity (%)	5 ~ 95 RH, non-condensing	
	Altitude (m)	\leq 2500	
	IP Level	IP54	IP55
	Cooling method	Liquid cooling	
Mechanical	Dimension(WxDxH mm)	820*800*1980	600*380*2300
	Weight(kg)	\leq 650	\leq 150
	Cable Length(m)	5	
Protection	Input Protection	OVP, OCP, OTP, OPP, UVP, Residual current detection, Surge protection, Cabinet-open detection (real door)	
	Output Protection	SCP, OVP, OCP, OTP, UVP, Residual current detection	
Regulation	Certificate	CE	
	Safety	IEC 61851-1:2017, IEC 61851-23, IEC 61851-24,	
	Charging Interface	DIN70121, ISO15118	

300kW SPLIT TYPE FAN COOLING DC CHARGING SYSTEM

Features

- An ideal fast charging solution for EV with 150~1000V battery
- Modular design for easy installation and maintenance
- 7" touch screen and friendly HMI interface could support English, French, Russian and Spanish
- Split type design improve user comfort
- OCPP1.6 JSON
- Could support up to 5 charging terminals combined by different charging standards
- IK10, IP55
- Customization available





Applications

- EV bus station
- Highway gas / service station
- Parking garage
- EV dealer workshops
- Commercial operators
- EV infrastructure operators / service providers

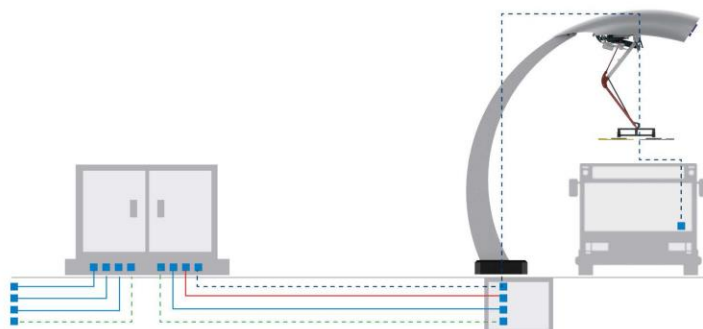
Electric Features

CATEGORY		HK SERIES	
Model Name		CS-HK-C300-1000-E1	CS-HK-D200-1000-E1
AC Input	Input Rating	400VAC \pm 15%	
	AC Input Connection	3P + N + PE	
	Max. Input Current (A)	550	
	Frequency (Hz)	45~65	
	Power Factor	>0.99 @ 50% or higher load	
	Efficiency (%)	94	
DC Output	Output Voltage Range	150 ~1000VDC	
	Max. Output Current	200A	
	Output Power Range(kW)	300kW	
	Voltage Accuracy (%)	\pm 0.5	
	Current Accuracy (%)	\pm 1	
User Interface & Control	Display	7 inch touch screen	
	Push Buttons	Emergency Stop	
	User Authentication	RFID system ISO / IEC14443A/B	
	Display Information	Charging process and status / Alarm and warning messages	
Communication	External	Ethernet/4G/3G	
	Internal	CANbus / RS485	
Environmental	Operating Temperature (°C)	-30 ~ +50, power derating from 50 and above	
	Humidity (%)	5 ~ 95 RH, non-condensing	
	Altitude (m)	\leq 2500	
	IP Level	IP54	IP55
	Cooling method	Fan cooling	
Mechanical	Dimension(WxDxH mm)	820*820*1980	300*396*1505
	Weight(kg)	\leq 800	\leq 78
	Cable Length(m)	5 (ccs1, ccs2, CHAdeMO)	
Protection	Input Protection	OVP, OCP, OTP, OPP, UVP, Residual current detection, Surge protection, Cabinet-open detection (real door)	
	Output Protection	SCP, OVP, OCP, OTP, UVP, Residual current detection	
Regulation	Certificate	CE, TR25	
	Safety	IEC 61851-1:2017, IEC 61851-23, IEC 61851-24, IEC 61851-21-2	
	Charging Interface	DIN70121, ISO15118	

300kW/600kW SPLIT TYPE PANTOGRAPH SYSTEM

Features

- WIFI communication mode adopted to achieve data exchange
- SCHUNK brand pantograph adopted, with falling type/rising type optional
- OPPCHARGE technology followed to ensure smart and automatic charging
- Self-adjustment function ensure good communication quality
- Inter-lock function design concept ensure safe charging
- Cabinet + terminal split type design idea to reduce noise and increase customer satisfaction

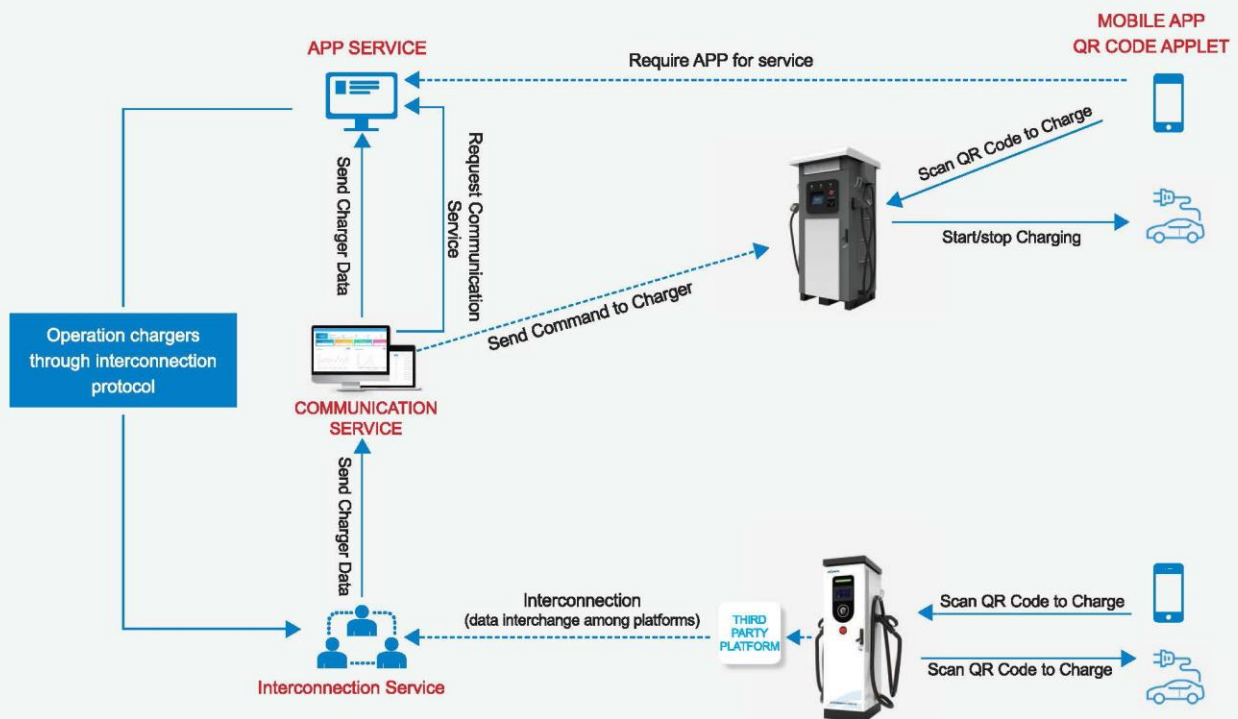


Electric Features

CATEGORY		HK SERIES	
Model Name		HK-B300-1000-E1	HK-B600-1000-E1
AC Input	Input Rating	CS- 400VAC \pm 15%	
	AC Input Connection	3P + N + PE	
	Max. Input Current (A)	550	1100
	Frequency (Hz)	45~65	
	Power Factor	>0.99 @ 50% or higher load	
	Efficiency (%)	94	
DC Output	Output Voltage Range	150 ~1000VDC	
	Output Current Range	500	800
	Output Power Range(kW)	300kW/600kW	
	Voltage Accuracy (%)	\pm 0.5	
	Current Accuracy (%)	\pm 1	
User Interface & Control	Push Buttons	Emergency Stop	
Communication	External	Ethernet/4G/3G	
	Internal	CANbus / RS485	
Environmental	Operating Temperature (°C)	-30~ +50	
	Humidity (%)	5 ~ 95 RH, non-condensing	
	Altitude (m)	\leq 2500	
	IP Level	IP54	
	Cooling method	Fan cooling	
Protection	Input Protection	OVP, OCP, OTP, OPP, UVP, Residual current detection, Surge protection, Cabinet-open detection (real door)	
	Output Protection	SCP, OVP, OCP, OTP, UVP, Residual current detection	
Regulation	Certificate	CE	
	Safety	IEC 61851-1:2017, IEC 61851-23, IEC 61851-24, IEC 61851-21-2	
	Charging Interface	WIFI	

EV CHARGING SOFTWARE SOLUTIONS

The EV charging software solution includes both the front-end mobile app and user interface (HMI) as well as the back end central office and cloud-based management, payment and monitoring platforms. Through the front-end mobile app, users can search for nearby chargers, make charging appointments, and monitor charging status. The HMI interface on the chargers could provide interactive charging procedures and support various payment methods. The back-end central office and cloud-based management, payment and monitoring system can monitor individual EV charger overall status and update EV charger software remotely which facilitate the long-term maintenance and management. This back-end system also allows system operators to partner with auto makers to collect charging vehicles 'battery pack, MS and related information to perform big data analysis additionally.





FRONT END SYSTEM



HMI User Interface

Display of Charging Status
Display of Multimedia Commercials
Display of Battery Info
Remote Program Update



Mobile APP

Charging Appointment
Search and Navigation to Chargers
Monitoring of Charging Status



BACK END SYSTEM



Multimedia Commercials

Management of Multimedia Commercials
Advertising Business Operation

Charging Station Operation

Maintenance / Post-sale Service
Security & Surveillance
Parking Management

Payment System Interface

Charging Payment Calculation
Bank Authorization

Charging Big Data

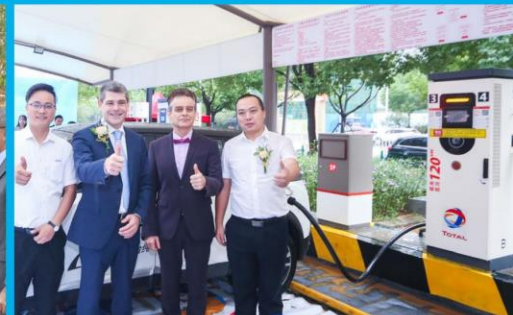
Charging Data Acquisition and Analysis
Software Update
Big Data Utilization

27⁺ COUNTRIES

200⁺ CITIES

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2 pieces DC 150kW +AC 43kw type EV charger have been applied in the first phase of New Zealand Government Infrastructure Project. For this project, customer chose to combine ccs2 fast charging and type 2 AC slow charging together into one cabinet. Two connectors could be charged simultaneously which could supply 193kW power in total. Such free combination of DC and AC type of different charging standards of GB/TcCS1CCS2 and CHAdeMO has made public charging more convenient. The government plan to order another 38 pieces of the same type for project phase II project.





The first EV charger overseas application is in England and has worked in normal state for almost 3 years. The high performance and good quality are widely recognized and highly evaluated by the customer. For now, 25 pieces of 120kw and 150kw double-plug type EV chargers in total have been applied in England, accompanied by YUTONG Bus and mainly to ensure the normal operation of the EV buses, aiming to contribute to the good future of the British Isles.





8 pieces 60kW and 120kW double-plug type EV charger have been applied in France together with YUTONG electric bus in 2018. The EV chargers were mainly installed in the bus company in Rouen and Paris to ensure the normal running of the EV buses. With the satisfaction of the performance of our EV chargers, the customer has ordered another 8 pieces double-plug type 150kW charge to prepare for 2 other charging stations.





Totally 22 pieces of 90kw single-plug type EV charger have been applied in Singapore by us as the manufacturer aiming to contribute to the new energy infrastructure construction of the called "Lion City". In this project. Our EV chargers have passed strict tests of TUV SUD authority according to Singapore rules and awarded with CE and DAKKS certificates and we are the first one awarded by this DAKKS certificate in China. The charging stations were finished in 2019 and have been operated for about one year.





In order to response "One Belt One Road" strategy and enterprise goes out policy promoted by the Government, we have supplied 15 pieces EV chargers to Sophia Bus Company in Bulgaria together with YUTONG bus company and have been successfully put into operation. Of the 15 sets EV chargers, 5 sets are 120kW and 10 sets 60kW, which have been divided to 3 charging stations. Currently, the EV chargers are all in good operation.





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