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EV CHARGING SOLUTION

Reliable EV Charging Equipment Provider



Shenzhen Kehua EV Charger

About Kehua

Founded in 1988, Kehua was listed on the Shenzhen A-share market in 2010 (Stock Code: 002335). In 2001, the company established its subsidiary, Shenzhen Kehua Hengsheng Technology Co., Ltd., committed to providing reliable EV charging equipment, supporting charging infrastructure development, and driving a sustainable future.

With over 37 years of expertise in power electronics, Kehua boasts a team of more than 1,000 R&D engineers, offering comprehensive EV charging solutions. Its product portfolio includes DC charging modules, AC chargers, DC fast chargers, high-power distributed charging systems, megawatt-level charging systems, V2G charging equipment, and PV + energy storage systems. Kehua has received numerous industry accolades, including the Best EV Charging & Battery Swapping Equipment in China and the Core Module Brand in China's EV Charging & Swapping Industry.

Kehua operates six manufacturing bases worldwide, covering 416,000 square meters, with an annual production capacity of up to 2 million units. The company is certified with IATF 16949, ISO 14001, and ISO 9001 quality management systems, and its products comply with CE, CB, and UL international standards, ensuring exceptional quality and global market adaptability.



Corporate Spirit

- Passion
- Unity
- Win-Win Collaboration



Value

- Customer Success
- Integrity & Pragmatism
- Continuous Innovation
- Striving & Win-Win Spirit



Mission

Powering green mobility with technological innovation



Vision

Become a world-leading supplier of integrated solution for EV charging & swapping infrastructure

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Applications | EV Charging

Product Overview



240-480kW Distributed Charging System



600-800kW Distributed Charging System



60-180kW Integrated DC Charger



240-400kW Integrated DC Charger



240-480kW Power Unit



600-800kW Power Unit



30kW CE Charging Module



30kW UL Charging Module



40kW CE/UL SiC Charging Module



30kW V2G Bidirectional Power Module

Core Principle

High-Quality Product Design

Co-developing with customers

Listening to 1,000+ real users

Applying scientific management

Early adopter of IPD

Committed to long term value

Focused on lifecycle performance

High-Quality R&D Innovation

37 years of expertise

- Power electronics mastery
- Charging & Swapping
- New Energy

Pioneering advanced tech

- Module life balancing
- Intelligent efficiency optimization
- Eight-layer safety protection

Rigorous high standard testing

- Strict internal testing (200+)
- Certified by CE/UL/CQC/CCC

High-Quality Intelligent Manufacturing

Six manufacturing bases

- Proprietary KPS lean system
- Automotive-grade standards

State-of-the-art equipment

- Process-driven
- Standardized
- Intelligent

Rigorous factory inspection

160+ tests before release

High-Quality Field Performance

Multi-protocol compatibility

- Passenger EVs
- Commercial EVs & vessels

Reliable in harsh conditions

- Heat, cold, altitude resistant
- Salt, humidity, dust proof

Trusted by global customers

- 80+ service locations worldwide
- Professional service

Business Layout



EV Charger



Critical Power



Renewable Energy



Data Center

1988

Founded



2010

Public Company Since



37

Years

Expertise in the Power Electronics



10+

Years

Experience in the EV Charging and Battery Swapping Industry



Industry Achievements



300,000+

DC Charging Equipment
Successfully Deployed



100+

Serving Countries and
Regions



100 Million+

User Service Times via
Charging & Swapping
Equipment



No.1

HPC Equipment with Leading
Quality in China



V2G

First to Achieve Large-scale
Application of V2G in China



First

The First PV-ESS-Charging-
Swapping Application in
China

Development History

1988

- Kehua Tech founded in Zhangzhou, China

2001

- Shenzhen Kehua was established and started a new journey

2010

- Kehua Tech listed on the A-share market of Shenzhen Stock Exchange (Stock No. 002335)

2014

- Laid out the EV charging and swapping field in China and launched 10kW charging module

2015

- Released 15kW charging module and sold well in China

2016

- Won the title of National Key High-Tech Enterprise

2019

- Released 20kW charging module with high power density

2020

- Released 30kW ultra-wide voltage charging module

2021

- Launched 30kW V2G bidirectional module
- Pioneered the intelligent transportation energy solution
- First released full liquid-cooling high-power charging product

2023

- Released 40kW high efficiency SiC charging module

2024

- First released MW level air-cooling charging system

2025

- Released CE & CB certified DC Charger
- Released 40kW liquid-cooling power module



Honors & Qualifications

Honor

Winner

The Smarter E Award

No.1

Annual Quality Gold Award
in China's Charging Facility
Industry

Top 10

Influential Brands in China's
EV Charging and Swapping
Industry

Core

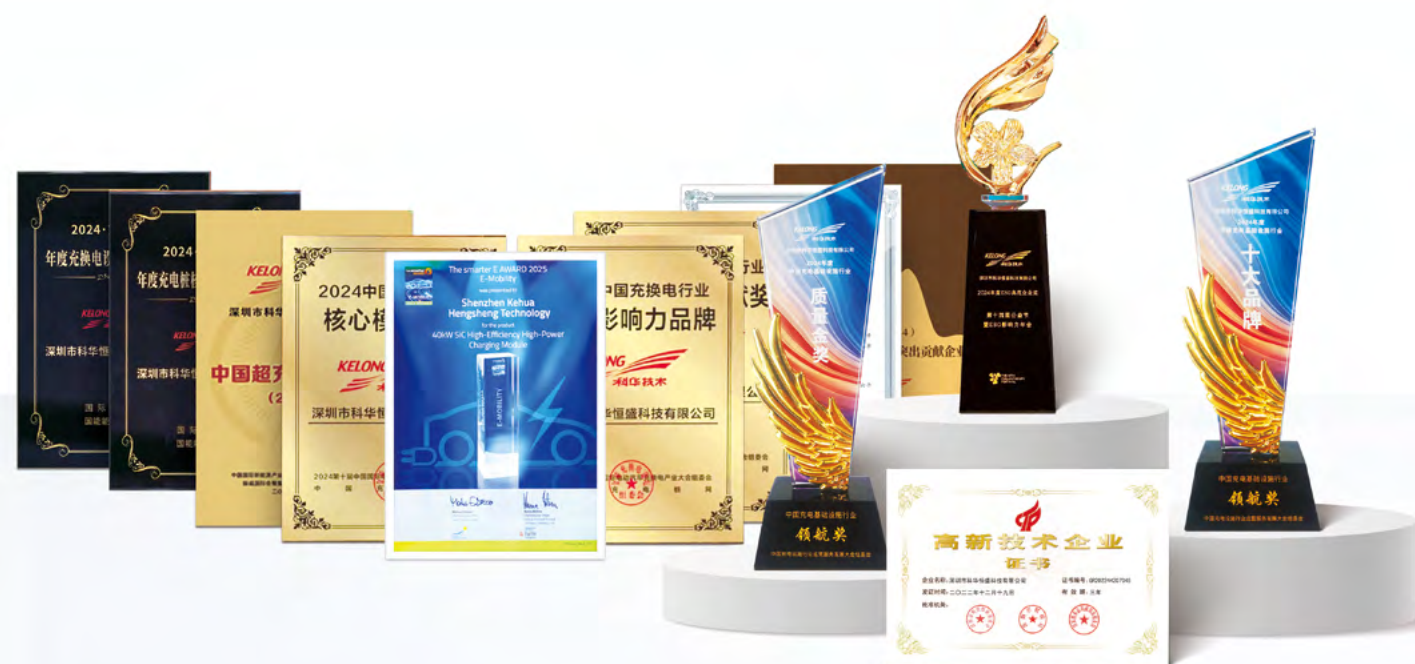
Module Brand in China's
EV Charging and Swapping
Industry

Leader

in High-Power DC Charging
Technology

Low-Carbon

Enterprise with Influence in
Carbon Neutrality Practices



Patent

With over **2,300+** national patents and software copyrights, including **150+** charging-related patents and software copyrights, we actively contribute to the development of **260+** national and industry standards, including **30+** standards and white papers related to the EV charging and swapping industry.



Production System

Kehua is certified to **IATF 16949, ISO 9001, ISO 14001 ect.**



Product Certification

Additionally, Kehua products have obtained **CE, CB, UL** and other international certifications.



Factory

6
manufacturing bases

416,000m²
manufacturing area

2 million
units of annual production



Xiamen
Headquarter in Xiamen



Jiaomei
Jiaomei factory in Zhangzhou, Fujian



Zhangzhou
Zhangzhou factory in Zhangzhou, Fujian



Xiang'an
Xiang'an factory in Xiamen

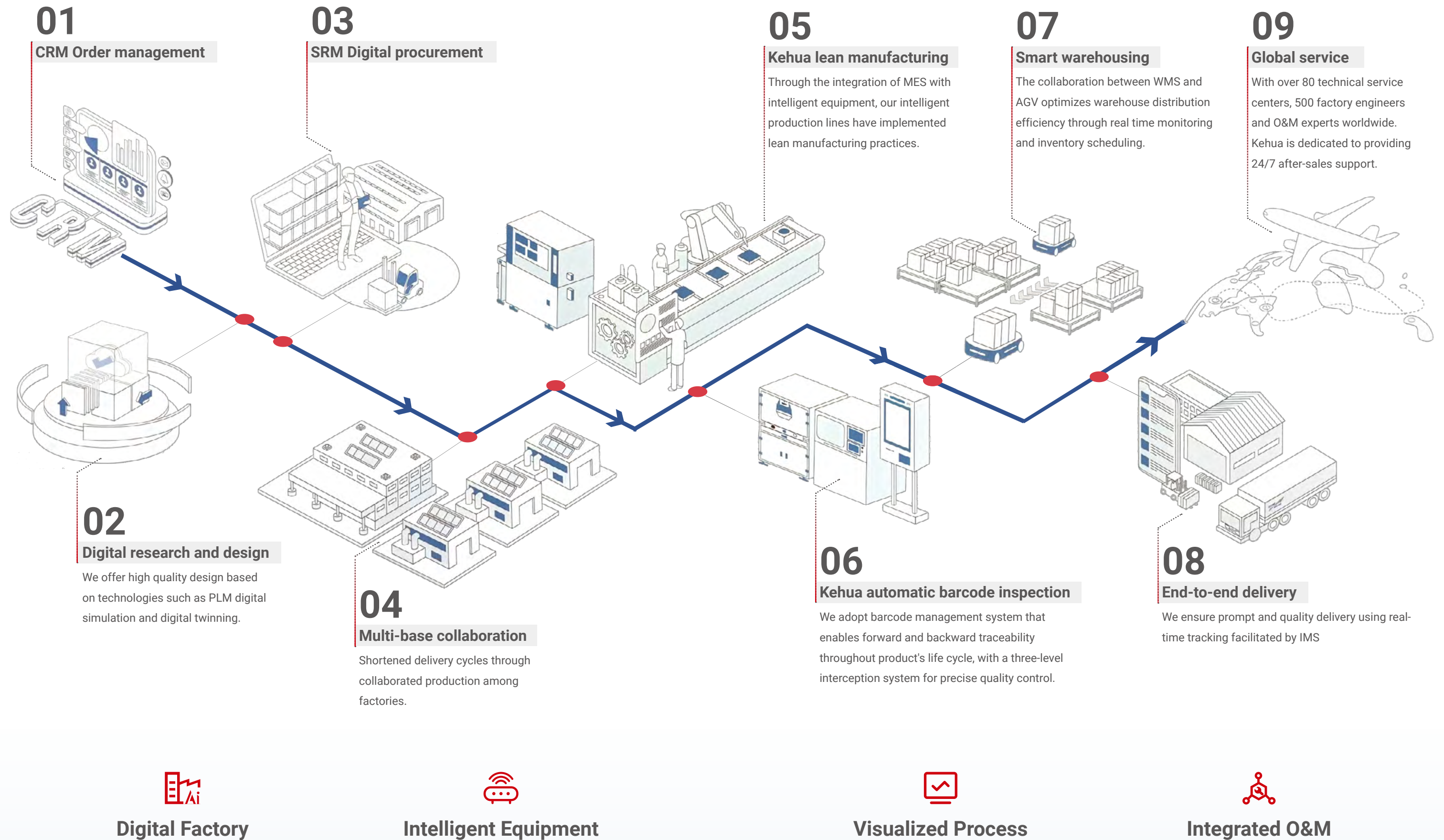


Foshan
Foshan factory in Guangdong



Malaysia
Malaysia factory in Johor

Production System

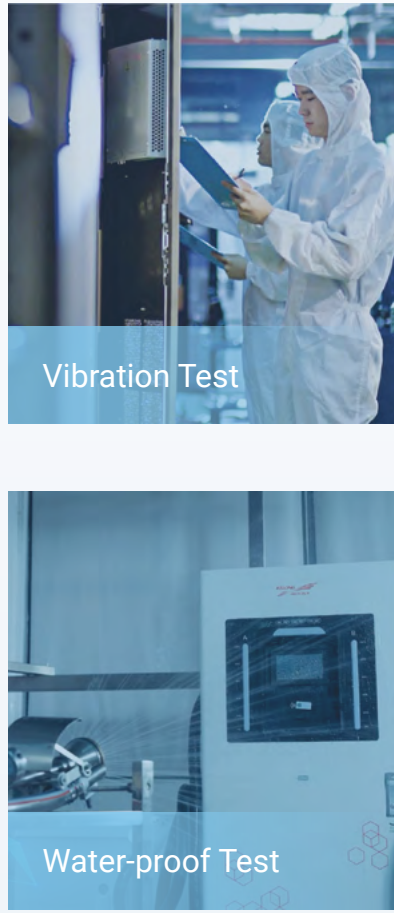
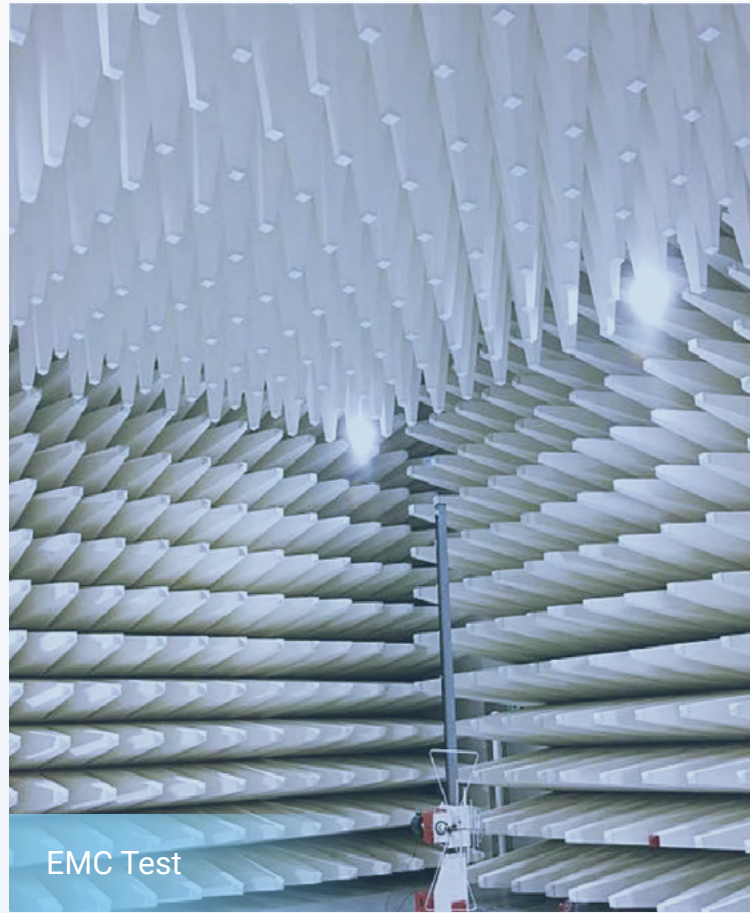


R&D Strength

As a recognized national high-tech enterprise, Kehua leads the way in power electronics innovation—powered by advanced R&D, testing, and laboratory centers that set the benchmark for the industry.

Our facilities include a **10m method EMC laboratory, intelligent charging test platform, megawatt-level vehicle simulation test system, high-altitude laboratory, environmental reliability lab, intelligent MW-level power testing platform, semiconductor discrete device testing platform, MW-level reliability aging lab, battery lab, simulation lab, IP protection lab, and enthalpy difference lab**, ensuring comprehensive testing capabilities.

Certified by **TÜV Rheinland, CNAS, UL, and GMPI**, our laboratories guarantee compliance with global standards.



7-9% R&D Investment

3 R&D centers

5 Senior experts with special allowance from State Council of China

40+ National-level major special projects

260+ National and industrial standards development

1000+ R&D engineers account for a quarter of the total number of employees

2300+ Copyrights & Patents

Service



Canada



America



Mexico



Brazil

Germany



France



Poland



Italy



Kazakhstan



Dubai



India

China



Vietnam



South Korea



Indonesia



Australia

South Africa

100+

Countries & Regions

16

Technical service centers

500+

Professional engineers

20+

Local and global marketing departments

80+

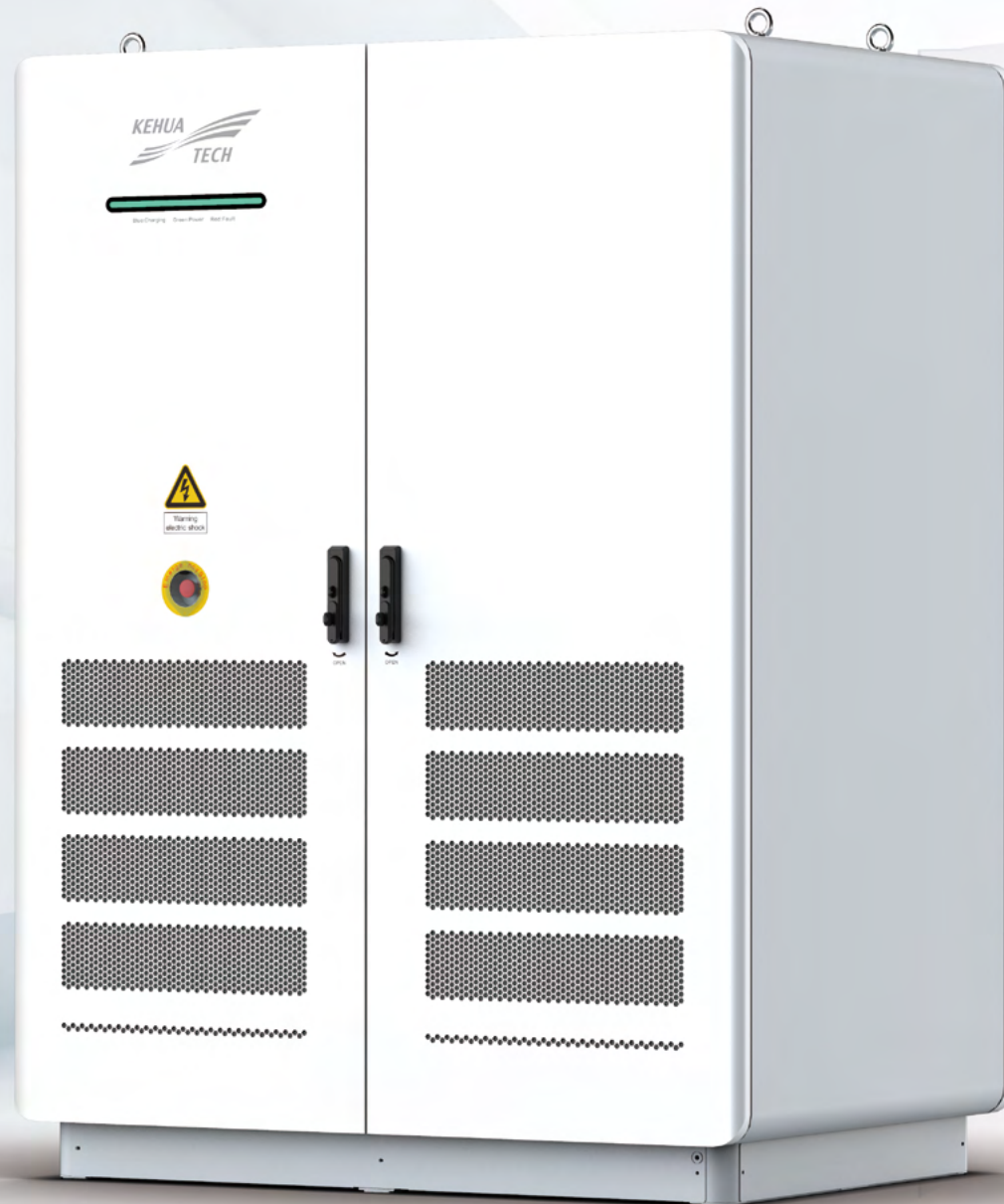
Domestic and overseas service outlets

Partial Partners



240-480kW Distributed Charging System

EVD-240SF/EVD-360SF/EVD-400SF/EVD-480SF



CE CB



More Efficient

- Max. 600A ultra-fast charging
- Max. efficiency up to 96.5%
- Acoustic noise $\leq 65\text{dB}$ though innovative airflow architecture
- Fully output power without derating up to $+50^{\circ}\text{C}$



More Intelligent

- Scalable power from 240-480kW
- Flexible configuration of air & liquid-cooled dispensers
- Innovative efficiency & power optimization algorithm
- Dual cabinet expansion up to 960kW



More Reliable

- IP55 protection & C4-H anti-corrosion
- Comprehensive protection measures ensure charging safety
- Charging modules in-position detection
- Charging modules lifespan balanced algorithm



More User-friendly

- Supports multiple authentication and payment options
- Swing arm CMS delivers an intuitive & seamless experience
- Barrier-free design for easy access
- Cloud platform & Web-interface allow for remote configuration, monitoring, diagnostics, and OTA updates

Technical Specification

Technical parameters		EVD-240SF/EVD-360SF/EVD-400SF/EVD-480SF Power Unit
AC INPUT	Nominal voltage	3 / N / PE, 400 Vac (±15 %)
	Nominal frequency	45~65 Hz
	Power factor	≥ 0.99 at full load
	Total harmonic distortion (THDi)	< 5 % at full load
	Overvoltage category	III
DC OUTPUT	Max. output power	480kW
	Min. granularity of output power	40kW
	Output voltage range	150~1000 Vdc
	Max. number of output	8
	Max. efficiency	96.5%
Mechanical Specification	Dimensions (W*D*H)	1400*1000*1900 mm
	Enclosure rating	IP55
	Impact resistance	IK10
	Anti-corrosion degree	C4-H
	Mounting	Floor mounted
Environment Specification	Operating temperature	-30°C up to +55°C (with derating above +50°C)
	Operating humidity range	5%~95% (non-condensing)
	Operating altitude	≤ 2000 m
	Noise emission	≤ 65 dB (A) at 1 m distance / 25°C, at full output power
	Ventilation	Air-cooled
User Interface	Display	LED indicator
	Emergency stop button	Yes
	Communication interface	Ethernet / 4G
	Firmware update	Over-the-air update
Protection	Over/Under voltage protection	Yes
	Overload protection	Yes
	Over temperature protection	Yes
	Leakage current protection	Yes
	Surge protection	Yes
	Short-circuit protection	Yes
Standards & Compliance	Compliance	EN IEC 61851-1、EN IEC 61851-21-2、EN IEC 61851-23、EN IEC 61851-24、EN IEC 62311

Technical parameters		Air-cooled dispenser	Liquid-cooled dispenser
DC OUTPUT	Cable configuration		Dual cable
	Cable connection options	250A / 350A (boost 500A)	500A (boost 600A)
	Cable length	5m / 7m (optional)	5m
	Output voltage range	150~1000 Vdc	
	Connector type	CCS2	
Mechanical Specification	Dimensions (W*D*H)	600*400*2010 mm (with CMS) 600*400*1850 mm (without CMS)	
	Enclosure rating	IP55	
	Impact resistance	IK10 (enclosure)	
	Anti-corrosion degree	C4-H	
	Mounting	Floor mounted	
Environment Specification	Operating temperature	-30°C up to +55°C (with derating above +50°C)	
	Operating humidity range	5%~95% (non-condensing)	
	Operating altitude	≤ 2000 m	
	Noise emission	≤60 dB (A) at 1 m distance / 25 °C, at full output power	
	Cooling method	Air-cooled	Liquid-cooled
User Interface	Display & operation	10 "color touchable screen + LED indicator + 4 buttons	
	Emergency stop button	Optional	
	Cable management system	2 x self-retracting swing arm (optional)	
	Authentication methods	RFID-card / QR code / Auto-charge/ Credit card (optional)	
	Energy meter	MID-certified DC energy meter (optional)	
	Communication interface	Ethernet / 4G	
	Communication to EV	DIN70121 , ISO15118	
	Communication to backend	OCPP 1.6 J Ready for OCPP 2.0.1	
	Firmware update	Over-the-air update	
	Multilanguage system	English Other languages available by firmware upgrade	
Standards & Compliance	Compliance	EN IEC 61851-1、EN IEC 61851-21-2、EN IEC 61851-23、EN IEC 61851-24、EN IEC 62311	
Others	Warranty	2 years (standard)	

600-800kW Distributed Charging System

EVD-600SF/EVD-640SF/EVD-720SF/EVD-800SF



CE CB



More Efficient

- Max. 600A ultra-fast Charging
- Max. efficiency up to 96.5%
- Acoustic noise $\leq 65\text{dB}$ though innovative airflow architecture
- Fully output power without derating up to $+50^{\circ}\text{C}$



More Intelligent

- Scalable power from 600-800kW
- Flexible configuration of air & liquid-cooled dispensers
- Innovative efficiency & power optimization algorithm
- Dual cabinet expansion up to 1.2-1.6MW



More Reliable

- IP55 protection & C4-H anti-corrosion
- Comprehensive protection measures ensure charging safety
- Charging modules in-position detection
- Charging modules lifespan balanced algorithm



More User-friendly

- Supports multiple authentication and payment options
- Swing arm CMS delivers an intuitive & seamless experience
- Barrier-free design for easy access
- Cloud platform & Web-interface allow for remote configuration, monitoring, diagnostics, and OTA updates

Technical Specification

Technical parameters		EVD-600SF/EVD-640SF/EVD-720SF/EVD-800SF Power Unit
AC INPUT	Nominal voltage	3 / N / PE, 400 Vac (±15 %)
	Nominal frequency	45~65 Hz
	Power factor	≥ 0.99 at full load
	Total harmonic distortion (THDi)	< 5 % at full load
	Overvoltage category	III
DC OUTPUT	Max. output power	800kW
	Min. granularity of output power	80kW
	Output voltage range	150~1000 Vdc
	Max. number of output	8
	Max. efficiency	96.5%
Mechanical Specification	Dimensions (W*D*H)	1400*1000*1900 mm
	Enclosure rating	IP55
	Impact resistance	IK10
	Anti-corrosion degree	C4-H
	Mounting	Floor mounted
Environment Specification	Operating temperature	-30°C up to +55°C (with derating above +50°C)
	Operating humidity range	5%~95% (non-condensing)
	Operating altitude	≤ 2000 m
	Noise emission	≤ 65 dB (A) at 1 m distance / 25 °C, at full output power
	Ventilation	Air-cooled
User Interface	Display	LED indicator
	Emergency stop button	Yes
	Communication interface	Ethernet / 4G
	Firmware update	Over-the-air update
Protection	Over/Under voltage protection	Yes
	Overload protection	Yes
	Over temperature protection	Yes
	Leakage current protection	Yes
	Surge protection	Yes
	Short-circuit protection	Yes
Standards & Compliance	Compliance	EN IEC 61851-1、EN IEC 61851-21-2、EN IEC 61851-23、EN IEC 61851-24、EN IEC 62311

Technical parameters		Air-cooled dispenser	Liquid-cooled dispenser
DC OUTPUT	Cable configuration	Dual cable	
	Cable connection options	250A / 350A (boost 500A)	500A (boost 600A)
	Cable length	5m / 7m (optional)	5m
	Output voltage range	150~1000 Vdc	
	Connector type	CCS2	
Mechanical Specification	Dimensions (W*D*H)	600*400*2010 mm (with CMS) 600*400*1850 mm (without CMS)	
	Enclosure rating	IP55	
	Impact resistance	IK10 (enclosure)	
	Anti-corrosion degree	C4-H	
	Mounting	Floor mounted	
Environment Specification	Operating temperature	-30°C up to +55°C (with derating above +50°C)	
	Operating humidity range	5%~95% (non-condensing)	
	Operating altitude	≤ 2000 m	
	Noise emission	≤ 60 dB (A) at 1 m distance / 25 °C, at full output power	
	Cooling method	Air-cooled	Liquid-cooled
User Interface	Display & operation	10 "color touchable screen + LED indicator + 4 buttons	
	Emergency stop button	Optional	
	Cable management system	2 x self-retracting swing arm (optional)	
	Authentication methods	RFID-card / QR code / Auto-charge/ Credit card (optional)	
	Energy meter	MID-certified DC energy meter (optional)	
	Communication interface	Ethernet / 4G	
	Communication to EV	DIN70121 , ISO15118	
	Communication to backend	OCPP 1.6 J Ready for OCPP 2.0.1	
	Firmware update	Over-the-air update	
	Multilanguage system	English Other languages available by firmware upgrade	
Standards & Compliance	Compliance	EN IEC 61851-1、EN IEC 61851-21-2、EN IEC 61851-23、EN IEC 61851-24、EN IEC 62311	
Others	Warranty	2 years (standard)	

60-180kW Integrated DC Charger

EVD-60TF/EVD-80TF/EVD-120TF/EVD-160TF/EVD-180TF



More Intelligent

- Supports charging an EV with dual cables simultaneously
- Unique airflow design for noise reduction
- Dynamic load management to optimize EV charging

More Reliable

- Multiple protection measures ensure charging safety
- Power module in-position detection improves reliability
- IP55 protection for harsh environments

User Friendly

- High-brightness touch screen & physical touch buttons
- Cable management system for premium user experience
- Supports multiple payment options
- Barrier-free design for easy access

Easy O&M

- Intelligent O&M with OTA upgrades
- Quick replacement of dust filter in 5 minutes
- Supports local interaction data storage with fault logging

Technical Specification

Technical parameters		EVD-60TF / EVD-80TF /EVD-120TF/ EVD-160TF / EVD-180TF
AC INPUT	Nominal voltage	3 / N / PE, 400 Vac (±15 %)
	Frequency range	45~65 Hz
	PF	≥ 0.99
	THDi	< 5 % at full load
DC OUTPUT	Rated Output power	60kW / 80kW / 120kW / 160kW / 180kW
	DC output voltage	150~1000 Vdc
	Constant power output voltage range	300~1000 Vdc
	Number of charging connector	2
	Type of charging connector	CCS2
	Output Current	60kW: 200A 80/120kW: 250A (Boost 300A) 160/180kW: 250A (Boost 300A) / 350A (Boost 500A)
	Cable length	Standard: 5 meters (Other lengths can be customized)
	Peak efficiency	≥ 95.5%
User Interface & Standard	Display & operation	10 "color touchable screen + LED indicator + 4 buttons
	Emergency stop button	Yes
	Authentication methods	RFID-card / QR code / Auto-charge/ Credit card (Optional)
	Communication interface	Ethernet / 4G
	Communication to backend	OCPP 1.6 J Ready for OCPP 2.0.1
	EV protocol	DIN 70121 / ISO 15118
	Firmware update	Over-the-air update
	Multilanguage system	Other languages available by firmware upgarde
OTHERS	Noise level	< 65 dB (Rated conditions, 25°C, 1m distance)
	Cooling method	Air-cooled
	Cable management system	Optional
	EMC	Class A
	Certification	CE CB
ENVIRONMENT	Operating altitude	≤ 2000 m
	Operating temperature	-30~55°C, (Reduced output power for temperature above 50°C)
	Storage temperature	-40~70°C
	Relative humidity	5%~95% (Non-condensing)
MECHANICAL SPECIFICATIONS	IP level	IP55
	IK level	IK10 (enclosure)
	Size (W*D*H)	850*700*1950 mm (Not included CMS) 850*700*2115 mm (Included CMS)

240-400kW Integrated DC Charger

EVD-240TF/EVD-300TF/EVD-320TF/EVD-360TF/EVD-400TF



More Intelligent

- Max. efficiency up to 96.5%
- Supports charging an EV with dual cables simultaneously
- Unique airflow design for noise reduction
- Dynamic load management to optimize EV charging

More Reliable

- Multiple protection measures ensure charging safety
- Power module in-position detection improves reliability
- IP55 protection for harsh environments

User Friendly

- High-brightness touch screen & physical touch buttons
- Cable management system for premium user experience
- Supports multiple payment options
- Barrier-free design for easy access

Easy O&M

- Intelligent O&M with OTA upgrades
- Quick replacement of dust filter in 5 minutes
- Supports local interaction data storage with fault logging

Technical Specification

Technical parameters		EVD-240TF/EVD-300TF/EVD-320TF/EVD-360TF/EVD-400TF
AC INPUT	Nominal voltage	3 / N / PE, 400 Vac (±15 %)
	Frequency range	45~65 Hz
	PF	≥ 0.99
	THDi	< 5 % at full load
DC OUTPUT	Rated Output power	240kW / 300kW / 320kW / 360kW / 400kW
	DC output voltage	150~1000 Vdc
	Constant power output voltage range	300~1000 Vdc
	Number of connectors	2
	Type of connector	CCS2
	Output Current	240 / 300 / 320kW: 250A (Boost 300A) / 350A (Boost 500A) 360 / 400kW: 350A (Boost 500A)
	Cable length	Standard: 7 meters (Other lengths can be customized)
	Peak efficiency	≥ 96.5%
User Interface & Standard	Display & operation	10 "color touchable screen + LED indicator + 4 buttons
	Emergency stop button	Yes
	Authentication methods	RFID-card / QR code / Auto-charge/ Credit card (Optional)
	Communication interface	Ethernet / 4G
	Communication to backend	OCPP 1.6 J Ready for OCPP 2.0.1
	EV protocol	DIN 70121 / ISO 15118
	Firmware update	Over-the-air update
OTHERS	Multilanguage system	Other languages available by firmware upgarde
	Noise level	< 65dB (Rated conditions, 25°C, 1m distance)
	Cooling method	Air-cooled
	Cable management system	Optional
	EMC	Class A
ENVIRONMENT	Certification	CE CB
	Operating altitude	≤ 2000 m
	Operating temperature	-30~55°C,(Reduced output power for temperature above 50°C)
	Storage temperature	-40~70°C
MECHANICAL SPECIFICATIONS	Relative humidity	5%~95% (Non-condensing)
	IP level	IP55
	IK level	IK10(enclosure)
	Size (W*D*H)	850*900*1950 mm (Not included CMS) 850*900 *2115 mm (Included CMS)

240-480kW Power Unit

EVD-240SF/EVD-360SF/EVD-400SF/EVD-480SF



More Efficient

- Max. 480kW output power
- Max. efficiency up to 96.5%
- Acoustic noise ≤ 65dB though innovative airflow architecture
- Fully output power without derating up to +50°C

More Reliable

- IP55 protection & C4-H anti-corrosion
- Comprehensive protection measures ensure charging safety
- Charging modules in-position detection
- Charging modules lifespan balanced algorithm

More Intelligent

- Scalable power from 240-480kW
- Flexible configuration of air & liquid-cooled dispensers
- Innovative efficiency & power optimization algorithm
- Dual cabinet expansion up to 960kW

Carefree O&M

- Quick replacement of dust filter in 5 minutes
- Hot-swap and plug-and-play auto-addressing enable effortless charging module replacement
- Cloud platform & Web-interface allow for remote configuration, monitoring, diagnostics, and OTA updates

Technical Specification

Technical parameters		EVD-240SF/EVD-360SF/EVD-400SF/EVD-480SF
AC INPUT	Nominal voltage	3 / N / PE, 400 Vac (± 15 %)
	Nominal frequency	45~65 Hz
	Power factor	≥ 0.99 at full load
	Total harmonic distortion (THDi)	< 5 % at full load
	Overvoltage category	III
DC OUTPUT	Max. output power	480kW
	Min. granularity of output power	40kW
	Output voltage range	150~1000 Vdc
	Max. number of output	8
	Max. efficiency	96.5%
Mechanical Specification	Dimensions (W*D*H)	1400*1000*1900 mm
	Enclosure rating	IP55
	Impact resistance	IK10
	Anti-corrosion degree	C4-H
	Mounting	Floor mounted
Environment Specification	Operating temperature	-30°C up to +55°C (with derating above +50°C)
	Operating humidity range	5%~95% (non-condensing)
	Operating altitude	≤ 2000 m
	Noise emission	≤ 65 dB (A) at 1 m distance / 25 °C, at full output power
	Cooling method	Air-cooled
User Interface	Display	LED indicator
	Emergency stop button	Yes
	Communication interface	Ethernet / 4G
	Firmware update	Over-the-air update
Protection	Over/Under voltage protection	Yes
	Overload protection	Yes
	Over temperature protection	Yes
	Leakage current protection	Yes
	Surge protection	Yes
	Short-circuit protection	Yes
Standards & Compliance	Compliance	EN IEC 61851-1、EN IEC 61851-21-2、EN IEC 61851-23、EN IEC 61851-24、EN IEC 62311
Others	Warranty	2 years (standard)

600-800kW Power Unit

EVD-600SF/EVD-640SF/EVD-720SF/EVD-800SF



More Efficient

- Max. 800kW output power
- Max. efficiency up to 96.5%
- Acoustic noise ≤ 65dB though innovative airflow architecture
- Fully output power without derating up to +50°C

More Reliable

- IP55 protection & C4-H anti-corrosion
- Comprehensive protection measures ensure charging safety
- Charging modules in-position detection
- Charging modules lifespan balanced algorithm

More Intelligent

- Scalable power from 600-800kW
- Flexible configuration of air & liquid-cooled dispensers
- Innovative efficiency & power optimization algorithm
- Dual cabinet expansion up to 1.2-1.6MW

Carefree O&M

- Quick replacement of dust filter in 5 minutes
- Hot-swap and plug-and-play auto-addressing enable effortless charging module replacement
- Cloud platform & Web-interface allow for remote configuration, monitoring, diagnostics, and OTA updates

Technical Specification

Technical parameters		EVD-600SF/EVD-640SF/EVD-720SF/EVD-800SF
AC INPUT	Nominal voltage	3 / N / PE, 400 Vac (± 15 %)
	Nominal frequency	45~65 Hz
	Power factor	≥ 0.99 at full load
	Total harmonic distortion (THDi)	< 5 % at full load
	Overvoltage category	III
DC OUTPUT	Max. output power	800kW
	Min. granularity of output power	80kW
	Output voltage range	150~1000 Vdc
	Max. number of output	8
	Max. efficiency	96.5%
Mechanical Specification	Dimensions (W*D*H)	1800*1000*1900 mm
	Enclosure rating	IP55
	Impact resistance	IK10
	Anti-corrosion degree	C4-H
	Mounting	Floor mounted
Environment Specification	Operating temperature	-30°C up to +55°C (with derating above +50°C)
	Operating humidity range	5%~95% (non-condensing)
	Operating altitude	≤ 2000 m
	Noise emission	≤ 65 dB (A) at 1 m distance / 25 °C, at full output power
	Cooling method	Air-cooled
User Interface	Display	LED indicator
	Emergency stop button	Yes
	Communication interface	Ethernet / 4G
	Firmware update	Over-the-air update
Protection	Over/Under voltage protection	Yes
	Overload protection	Yes
	Over temperature protection	Yes
	Leakage current protection	Yes
	Surge protection	Yes
	Short-circuit protection	Yes
Standards & Compliance	Compliance	EN IEC 61851-1、EN IEC 61851-21-2、EN IEC 61851-23、EN IEC 61851-24、EN IEC 62311
Others	Warranty	2 years (standard)

30kW CE Charging Module

EV3102-030K-HR1



More Efficient

- $\geq 96\%$ efficiency to minimize energy loss
- $< 7.5\text{W}$ standby power consumption minimizes idle power usage
- EMC Class B compliance streamlines charger design

More Reliable

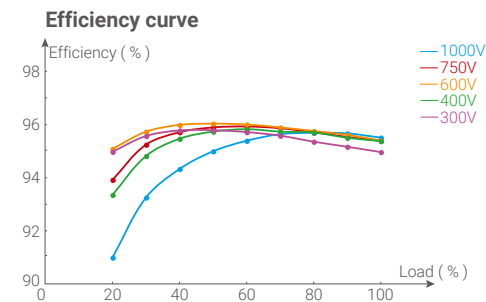
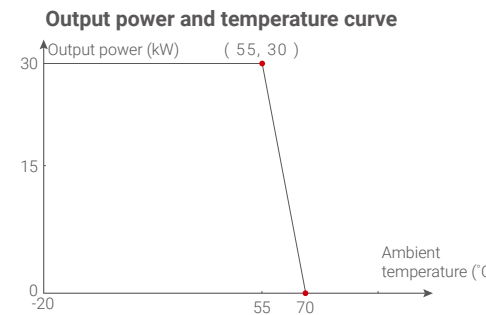
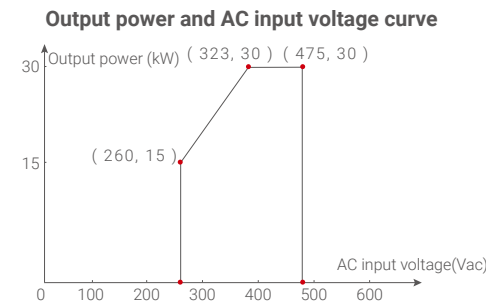
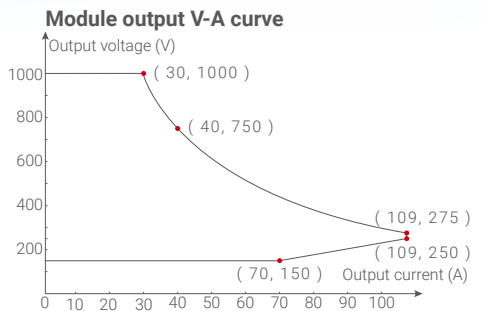
- 60+ protection and alarm functions for better overall safety
- Module in-position detection enhances reliability
- Integrated battery reverse-current and discharge protection circuits
- Automotive-grade manufacturing ensures durability in harsh environments

More Compatible

- 150~1000V ultra-wide output range supports a wide range of EVs
- 275~1000V ultra-wide constant power output boosts profitability
- -20°C to 70°C operating temperature, covering most climates

More Intelligent

- DSP digital control for faster voltage/current regulation
- Four-dimensional fan with intelligent speed control, supporting silent mode
- Hot-swappable module design simplifies maintenance
- Automatic module address setup for improved O&M efficiency



Technical Specification

Technical parameters		EV3102-030K-HR1
AC INPUT	AC input voltage range	260~475 Vac (3W+PE)
	Max. input current	58A
	Frequency range	45~65 Hz
	PF	≥ 0.99
	THDi	$\leq 5\%$
DC OUTPUT	Efficiency	$\geq 96\%$
	DC output voltage range	150~1000 Vdc
	Constant power output voltage range	275~1000 Vdc
	Output power	30kW
	Max. output current	109A ($< 30^{\circ}\text{C}$) / 100A ($\geq 30^{\circ}\text{C}$)
OTHER INFORMATION	Stand-by power consumption	$\leq 7.5\text{W}$
	Noise level	$< 65\text{ dB}$ (Rated)
	Current regulation accuracy	$\leq \pm 1\%$
	Voltage regulation accuracy	$\leq \pm 0.5\%$
	Output voltage error	$\leq \pm 0.5\%$
	Output current error	$\leq \pm 0.3\text{A}$, load current less than 30A; $\leq \pm 1\%$, load current no less than 30A, load current within 20%~100%
	Starting impulse current	$< 110\%$
	Temperature coefficient	$\leq \pm 0.02\%$ (Reference value $+20^{\circ}\text{C}$)
	Uniform flow unbalance	$\leq \pm 3.0\%$ ($\geq 20\text{A}$) with load within the range of 50%~100%
	Output voltage ripple	Ripple voltage peak coefficient $< 1\%$ Effective value coefficient $< 0.5\%$
	Boot time	3~5s (stable rated input to required output voltage)
	Dimension (W*D*H)	300*462*86 mm
	Weight	$\leq 16.5\text{ kg}$
	Input standby reactive power	750 Var
	EMC	Class B
CONFIGURATION AND PROTECTION	Operation indicator	Power, alarm, fault
	Communication	(500kbit/s)+Digital enable signal
	AC input three phase unbalance protection	Yes
	AC input over/under voltage protection	Yes
	DC output over/under voltage protection	Yes
	Over-temperature protection	Protect on temperature over 70°C , and automatically recover when $\leq 65^{\circ}\text{C}$
	Output current limit protection	Yes
	Short-circuit protection	Yes
WORKING ENVIRONMENT	Altitude	$\leq 2,000\text{ m}$
	Working temperature	$-20\sim 70^{\circ}\text{C}$, derating output for temperature above 55°C
	Storage temperature	$-40\sim 75^{\circ}\text{C}$
	Humidity	5%-95% (non-condensing)

30kW UL Charging Module

EV3102-030K-HR1(UL)



More Efficient

- $\geq 96\%$ efficiency to minimize energy loss
- $< 7.5\text{W}$ standby power consumption minimizes idle power usage
- EMC Class B compliance streamlines charger design

More Reliable

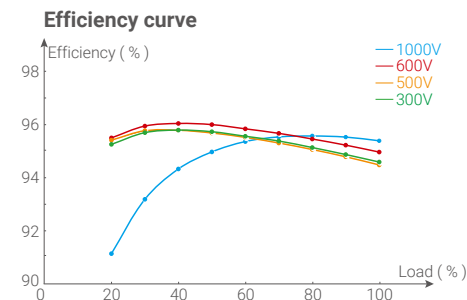
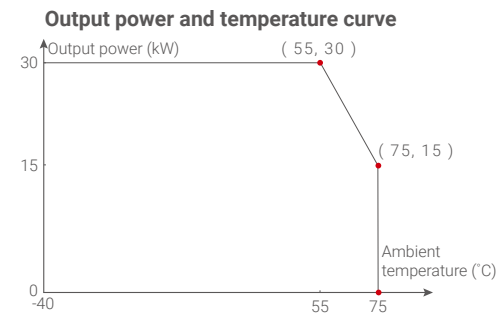
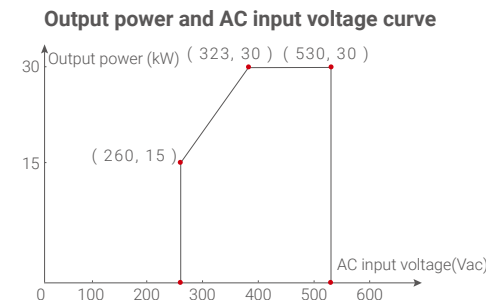
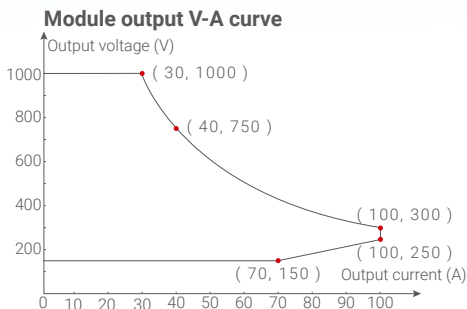
- 60+ protection and alarm functions for better overall safety
- Module in-position detection enhances reliability
- Integrated battery reverse-current and discharge protection circuits
- Automotive-grade manufacturing ensures durability in harsh environments

More Compatible

- 150~1000V ultra-wide output range supports a wide range of EVs
- 300~1000V ultra-wide constant power output boosts profitability
- $-40\sim 75^{\circ}\text{C}$ working temperature, ideal for Scandinavia and the Middle East

More Intelligent

- DSP digital control for faster voltage/current regulation
- Three silent modes, minimum $\leq 55\text{dB}$
- Hot-swappable module design simplifies maintenance
- Automatic module address setup for improved O&M efficiency



Technical Specification

Technical parameters		EV3102-030K-HR1(UL)
AC INPUT	AC input voltage range	260~530 Vac (3W+PE)
	Max. input current	58A
	Frequency range	45~65 Hz
	PF	≥ 0.99
	THDi	$\leq 5\%$
DC OUTPUT	Efficiency	$\geq 96\%$
	DC output voltage range	150~1000 Vdc
	Constant power output voltage range	300~1000 Vdc
	Output power	30kW
	Max. output current	100A
OTHER INFORMATION	Stand-by power consumption	$\leq 7.5\text{W}$
	Noise level	$< 65\text{ dB}$ (Rated)
	Current regulation accuracy	$\leq \pm 1\%$
	Voltage regulation accuracy	$\leq \pm 0.5\%$
	Output voltage error	$\leq \pm 0.5\%$
	Output current error	$\leq \pm 0.3\text{A}$, load current less than 30A; $\leq \pm 1\%$, load current no less than 30A, load current within 20%~100%
	Starting impulse current	$< 110\%$
	Temperature coefficient	$\leq \pm 0.02\%$ (Reference value $+20^{\circ}\text{C}$)
	Uniform flow unbalance	$\leq \pm 3.0\%$ ($\geq 20\text{A}$) with load within the range of 50%~100%
	Output voltage ripple	Ripple voltage peak coefficient $< 1\%$ Effective value coefficient $< 0.5\%$
	Boot time	3~5s (stable rated input to required output voltage)
	Dimension (W*D*H)	300*462*86 mm
	Weight	$\leq 16.5\text{ kg}$
	Input standby reactive power	750 Var
	EMC	Class B
CONFIGURATION AND PROTECTION	Operation indicator	Power, alarm, fault
	Communication	(500kbit/s)+Digital enable signal
	AC input three phase unbalance protection	Yes
	AC input over/under voltage protection	Yes
	DC output over/under voltage protection	Yes
	Over-temperature protection	Protect on temperature over 75°C , and automatically recover when $\leq 70^{\circ}\text{C}$
	Output current limit protection	Yes
	Short-circuit protection	Yes
WORKING ENVIRONMENT	Altitude	$\leq 2,000\text{ m}$
	Working temperature	$-40\sim 75^{\circ}\text{C}$, derating output for temperature above 55°C
	Storage temperature	$-40\sim 75^{\circ}\text{C}$
	Humidity	5%-95% (non-condensing)

40kW CE/UL SiC Charging Module

EV3102-040K-HR (UC)



More Efficient

- Uses SiC components with efficiency $\geq 97\%$
- $<7.5\text{W}$ standby power consumption minimizes idle power usage
- EMC Class B compliance streamlines charger design

More Reliable

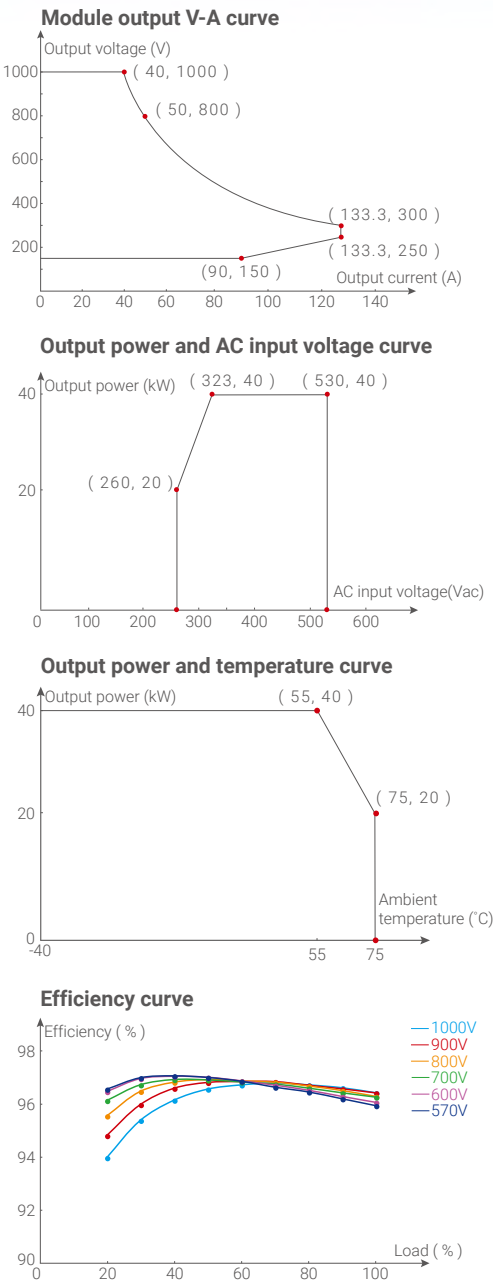
- 60+ protection and alarm functions for better overall safety
- Module in-position detection enhances reliability
- Integrated battery reverse-current and discharge protection circuits
- Automotive-grade potting for durability in harsh environment

More Compatible

- 150~1000V ultra-wide output range supports a wide range of EVs
- 300~1000V ultra-wide constant power output boosts profitability
- $-40\sim75^{\circ}\text{C}$ working temperature, ideal for Scandinavia and the Middle East
- Compliant with IEC 61851-23:2023 standards

More Intelligent

- DSP digital control for faster voltage/current regulation
- Four-dimensional fan with smart speed control minimizes noise
- Three silent modes, minimum $\leq 55\text{dB}$
- Hot-swappable module design simplifies maintenance



Technical Specification

Technical parameters		EV3102-040K-HR (UC)
AC INPUT	AC input voltage range	260~530 Vac (3W+PE)
	Max. input current	75A
	Frequency range	45~65 Hz
	PF	≥ 0.99
	THDi	$\leq 5\%$
DC OUTPUT	Efficiency	$\geq 97\%$
	DC output voltage range	150~1000 Vdc
	Constant power output voltage range	300~1000 Vdc
	Output power	40kW
	Max. output current	133.3A
OTHER INFORMATION	Stand-by power consumption	$\leq 7.5\text{W}$
	Noise level	$< 65\text{dB}$ (Rated)
	Current regulation accuracy	$\leq \pm 1\%$
	Voltage regulation accuracy	$\leq \pm 0.5\%$
	Output voltage error	$\leq \pm 0.5\%$
	Output current error	$\leq \pm 0.3\text{A}$, load current less than 30A; $\leq \pm 1\%$, load current no less than 30A, load current within 20%~100%
	Starting impulse current	$< 110\%$
	Temperature coefficient	$\leq \pm 0.02\%$ (Reference value $+20^{\circ}\text{C}$)
	Uniform flow unbalance	$\leq \pm 3.0\%$ ($\geq 20\text{A}$) with load within the range of 50%~100%
	Output voltage ripple	Ripple voltage peak coefficient $< 1\%$ Effective value coefficient $< 0.5\%$
	Dimension (W*D*H)	300*462*86 mm
	Weight	$\leq 17.5\text{ kg}$
	Input standby reactive power	750 Var
	EMC	Class B
	Operation indicator	LED: Power, alarm, fault; Nixie Tube: Display output voltage, current, ID code and error code, etc.
CONFIGURATION AND PROTECTION	Communication	500 kbit/s (125 / 250 / 500 kbit/s Baud rate can be set)
	AC input three phase unbalance protection	Yes
	AC input over/under voltage protection	Yes
	DC output over/under voltage protection	Yes
	Over-temperature protection	Protect on temperature over 75°C , and automatically recover when $\leq 70^{\circ}\text{C}$
	Output current limit protection	Yes
	Short-circuit protection	Yes
WORKING ENVIRONMENT	Altitude	$\leq 2,000\text{ m}$
	Working temperature	$-40\sim75^{\circ}\text{C}$, derating output for temperature above 55°C
	Storage temperature	$-40\sim75^{\circ}\text{C}$
	Humidity	5%~95% (non-condensing)

30kW V2G Bidirectional Power Module

EV3102-030K-GR



More Efficient

- $\geq 95\%$ efficiency for minimal energy losses
- 100A industry-leading max charging/discharging current
- Hardware emergency stop circuit supports high/low voltage ride-through

More Reliable

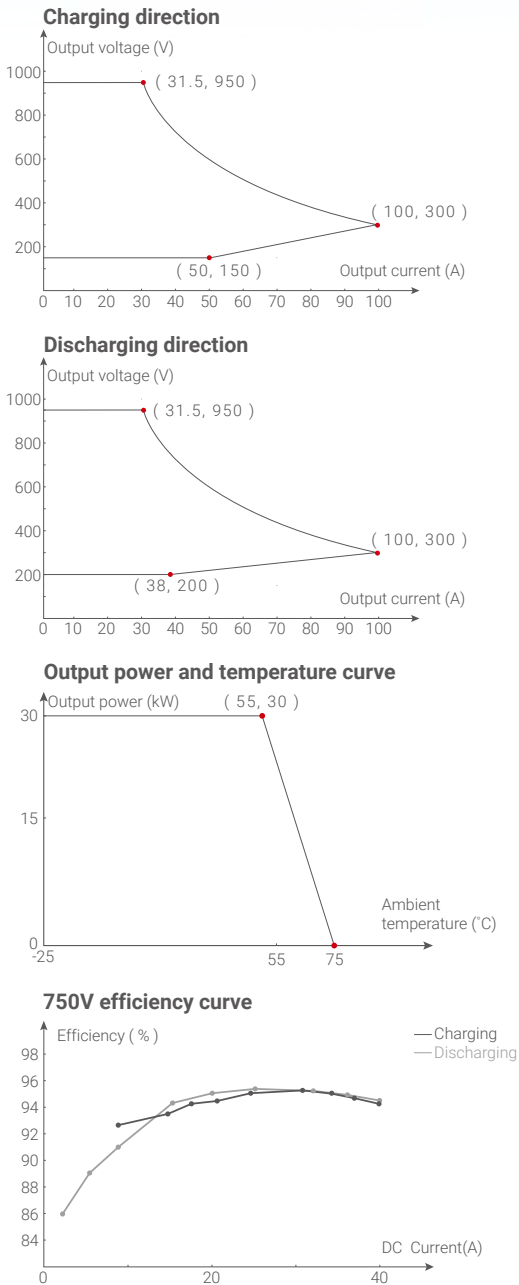
- 60+ protection and alarm functions for better overall safety
- Module in-position detection enhances reliability
- Automotive-grade manufacturing ensures durability in harsh environments

More Compatible

- 200~950V ultra-wide charging/discharging voltage range
- 300~950V ultra-wide constant power charging/discharging range
- Smart fast charge/discharge switching, transition time $< 10\text{ms}$

More Intelligent

- DSP digital control for faster voltage/current regulation
- Four-dimensional fan with intelligent speed control, supporting silent mode
- Hot-swappable module design simplifies maintenance



Technical Specification

Technical parameters		EV3102-030K-GR
AC2DC MODE-AC INPUT	AC input voltage range	323~437 Vac
	Frequency range	45~55 Hz
AC2DC MODE-DC OUTPUT	Output power	30kW
	DC output voltage range	150~950 Vdc
	Constant power output voltage range	300~950 Vdc
	Max. input current	100A
DC2AC MODE-DC INPUT	DC input voltage range	200~950 Vdc
	DC constant power input voltage range	300~950 Vdc
	Max DC input current	100A
DC2AC MODE-AC OUTPUT	AC output voltage range	323~437 Vac
	Frequency range	49~51 Hz
	Power factor	> 0.99 (100% load)
	THDi	$\leq 5\%$ (50% load)
	Current direct component	$< 0.5\%$
OTHER INFORMATION	Efficiency	$\geq 95\%$
	Stand-by power consumption	$\leq 15\text{ W}$
	Noise level	$< 65\text{dB}$ (Rated)
	Current regulation accuracy	$\leq \pm 1\%$
	Voltage regulation accuracy	$\leq \pm 0.5\%$
	Starting impulse current	$< 110\%$
	Temperature coefficient	$\leq \pm 0.02\%$ (Reference value $+20^{\circ}\text{C}$)
	Boot time	3~8s (stable rated input to required output voltage)
	Dimension (W*D*H)	385*500*110 mm
	Weight	$\leq 26\text{ kg}$
CONFIGURATION AND PROTECTION	Operation indicator	Power, alarm, fault
	Communication	(125 kbit/s)+Digital enable signal
	AC input three phase unbalance protection	Yes
	Input over/under voltage protection	Yes
	Output over/under voltage protection	Yes
	Over-temperature protection	Protect on temperature over 75°C , and automatically recover when $\leq 70^{\circ}\text{C}$
	Current limit protection	Yes
	Short-circuit protection	Yes
WORKING ENVIRONMENT	Altitude	$\leq 2,000\text{ m}$
	Working temperature	$-25\sim 75^{\circ}\text{C}$, derating output for temperature above 55°C
	Storage temperature	$-40\sim 75^{\circ}\text{C}$
	Humidity	5%~95% (non-condensing)

Applications | EV Charging

Shell (China)
Public Charging Station



China
Municipal Sanitation
Vehicle Charging



BP (China)
Public Charging Station



Thailand
E-Coach Charging



China National Offshore Oil
Megawatt-Level
Charging Station



United Arab Emirates
On-site Corporate Charging



Changxia Expressway
(TotalEnergies & Three
Gorges Corporation)
Public Charging Station



Europe/Japan/Korea
Power Unit /
Power Module



Applications | EV Charging

Shanghai
Port Charging Station



Shanghai Xinzhuang
Bus Charging Station



Liaoning -30°C ~40°C
Heavy-Duty Truck
Charging Station



Hubei
Bus Charging Station



Hubei
Construction Equipment
Charging



Yunnan
Highway Service Station



Shenzhen
Dump Truck Charging



Jilin
Highway Service Station



Applications | EV Charging

Shell & BYD (China)
PV-ESS-Charging
V2G Station
Global First



Petro China Guangxi
V2G Charging Station



PetroChina
PV-ESS Integrated V2G
Charging and Battery Swap
Station Global First



Hunan Expressway
Full Liquid
Charging Station



Chuzhou
PV-ESS+V2G
Charging Station



Wuhan Resort Area
Onshore Charging



State Grid
PV-ESS Charging &
Discharging Test &
Demonstration Pilot Station



Auto Group A
Battery Swap Station

