



SSE PRODUCT DATA SHEET



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Charging the Zero Carbon Future



As an innovation leader in electric vehicle (EV) charging technology, SSE develops full range of charging products and “SSE Cloud” platform independently. With years of engineering experience and core technology, SSE can offer customers the most cost-effective, profitable charging solutions and “one-stop service” for charging stations. SSE also achieves an highly efficient use of comprehensive energy by launching solar + storage + charging integrated system.

SSE products have been successfully applied in over 60 countries around the world, widely recognized in the international market. SSE is trying its best to enable global customers enjoy safe, clean, efficient green energy with its experience and expertise.

100,000+
Capacity (units)

70+
Automaker partners

60+
Countries covered

60,000+
Chargers delivered

42,000,000+
Charging amount (kWh)

420,000+
Carbon emission reduction (T)

Leading Charging Technology



Broad product portfolio

Full range of charging equipments, suitable for diversified EVs and compatible with vehicles of various brands



International standards

Multiple standards available: CCS, CHAdeMO, GB/T, etc.



High intelligence

Intelligent temperature control, independent current sharing, intelligent power distribution



Smart management

Free “SSE Cloud” platform, support OCPP 1.6, enable smart monitoring, remote maintenance and online update with back office system or app



User-friendly interface

- Multi-language intelligent touch screen HMI
- Various payment methods supported, including credit card quick pass



High reliability

CE certified, high IP level and multiple protections, to ensure long-term and stable operation in harsh environment

Why SSE

Strong R & D Strength

- 3 R & D Centers
- 5 R & D platforms
- 150+ Patents
- Research Cooperation: Tsinghua University, Huazhong University of Science and Technology, Tongji University, etc.



Lean Production

- Cutting-edge facilities and process flow, automatic production
- Adopting intelligent operation system, more safe and green
- Scale production, flexible response to bulk orders

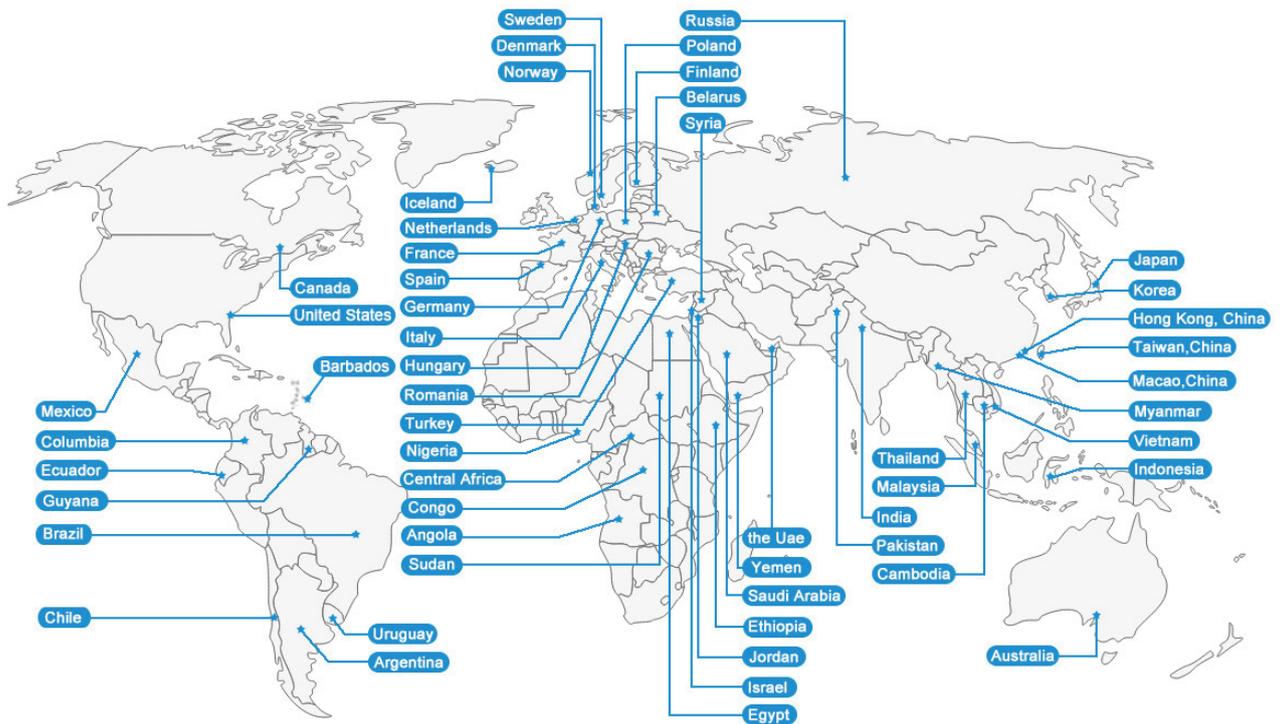


Strict Quality Control

- Comply with the latest international quality testing standards, CE/TUV/CQC certified, etc.
- ISO9001, ISO50001, ISO14001 and IATF16949, certified
- Real-time control for production process with MES/ERP/bar code system, etc.



Global Market



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PRODUCT PORTFOLIO

3-1200kW AC and DC fully covered
CCS, CHAdeMO, GB/T

Residential /
Commercial charging



7-80kW
AC charger



30-60kW
DC charger



44-50kW
AC&DC charger

Bus depot
Public fast charging station



60-360kW
DC charger



600-1200kW
charging container

Airport



60-360kW
DC charger



120kW HV-LV
integrated charger



180-360kW
DAU charger

Special vehicle
Construction machinery



7-45kW
portable charger



20-80kW
forklift charger



240-360kW
DC charger



300-600kW
truck charger

CCS2 EV AC Charger



SSE CCS2 AC chargers are available in wall-mounted and floor-mounted types with output current in 16A, 32A and 63A. The charger is reliable, flexible, fast and easy to operate, fully tested by authorities, suitable for public and residential parking lots, highway service areas, etc.



Flexibility & convenience

- Small size in wall-mounted and floor types, easy to install and carry
- Optional and customizable charging modes and payment methods



Higher intelligence

- Support cloud platform management, offer big data monitoring
- Allow search, navigation, inquiry and charging reservation via mobile app
- 4.3 inch display, enable communication with superior control and management system, support Ethernet, 4G, etc.



Strong security

- Key switch and swipe-card start, equipped with anti-theft holes
- Anti-shock and various protections to ensure the safety of personnel and vehicles



Higher reliability

- Protection level up to IP54, support full outdoor work, can endure harsh environments



Technical Data

Model	SASE07-H/V1XX	SASE14-H/V2XX	SATE22-H/V1XX
Rated power (kW)	7	14	22
Power connection	1P+N+PE	1P+N+PE	3P+N+PE
Rated input/output voltage (VAC)	230	230	400
Input/output voltage range (VAC)	176-276	176-276	305-478
Frequency (Hz)		50±10%	
Plugs	Single	Double	Single
Rated current per plug (A)		32	
AC plugs		IEC62196-2 AC Type2	
RFID		IC card	
LCD	4.3" TFT Color touch screen, human-computer interaction interface		
Communication		4G /Ethernet/ WIFI	
IP level		IP54	
MTBF		>20000 hours	
Operating temperature (°C)		-20 to 60	
Humidity		5%-95%	
Working Altitude		2000m(80kPa)	
Lightning protection		6000V Surge	
Dimensions (W×D×H:mm)	280×120×400 (W)	280×120×400 (W)	394×170×554 (W)
W: wall-mounted F: floor type	280×120×1500 (F)	280×120×1500 (F)	394×170×1500 (F)
Weight (kg)	9 (W), 17(F)	12 (W), 20(F)	12 (W), 20(F)

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

Support hotline: +86 710 2309484

Email: enquiry@sse-international.com

EU Standard Electric Vehicle AC Charger



SSE AC chargers are available in wall-mounted and floor-mounted types with output current in 32A and 63A(two connectors). The charger is reliable, flexible, fast and easy to operate, fully tested by authorities, suitable for public and residential parking lots, highway service areas, etc.



Flexibility & convenience

- Small size in wall-mounted and floor types, easy to install and carry
- Optional and customizable charging modes and payment methods



Higher intelligence

- Support cloud platform management, offer big data monitoring
- Allow search, navigation, inquiry and charging reservation via mobile app
- 4.3 inch display, enable communication with superior control and management system, support Ethernet, 3G, 4G, etc.



Strong security

- Key switch and swipe-card start, equipped with anti-theft holes
- Anti-shock and various protections to ensure the safety of personnel and vehicles



Higher reliability

- Protection level up to IP54, support full outdoor work, can endure harsh environments



Technical Data

Model	ZEVQC-16-J-BQTE	ZEVQC-16-J-BQT2E	ZEVQC-32-J-BQTE
Rated input voltage (V)	AC400±10%		
Rated input frequency (Hz)	50/60		
AC power connection	3P + N + PE		
Output current (A)	16 (3 phase)	16+16 (3 phase)	32 (3 phase)
Output power (kW)	11 (1 gun)	22 (2 guns)	22 (1 gun)
Output efficiency (%)	≥98		
Insulation resistance (mΩ)	≥10		
Leakage current (mA)	<30		
Charging interfaces	1 or 2		
Communication interface	Ethernet		
Operating temperature (°C)	-20 to 50		
Storage temperature (°C)	-40 to 70		
Humidity (%)	5-95 (non-condensing)		
Altitude (m)	≤2000		
Pollution gradation	≤Level II		
Cable length (m)	4		
Environment	No acid, alkaline or other corrosive gases or explosive gases in the ambient air, rain and snow prevention measures required		
Protection level	IP54		
Electric meter	MID (Measuring Instruments Directive)		
HMI	Glare-free 7-inch touch screen, Display of the charging		
User Authentication	RFID		
Protections	Over-current, over-voltage, under voltage, leakage, anti-lightning, emergency stop, pull-out to power-off, full autostop		
Installation	Wall-mounted or floor-mounted		
Dimensions (HxWxD,mm)	600 x 450 x 203		
Conformity and safety	CE		
Standards	IEC 62196 Mode 3 type 2, connection standard: EN 61851-1		

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Technical Data

Model	ZEVQC-32-J-BQT2E	ZEVQC-63-J-BQTE	ZEVQC-63-J-BQT2E
Rated input voltage (V)	AC400±10%		
Rated input frequency (Hz)	50/60		
AC power connection	3P + N + PE		
Output current (A)	32+32 (3 phase)	63 (3 phase)	63+63 (3 phase)
Output power (kW)	44 (2 guns)	44 (1 gun)	80 (2 guns)
Output efficiency (%)	≥98		
Insulation resistance (mΩ)	≥10		
Leakage current (mA)	<30		
Charging interfaces	1 or 2		
Communication interface	Ethernet		
Operating temperature (°C)	-20 to 50		
Storage temperature (°C)	-40 to 70		
Humidity (%)	5-95 (non-condensing)		
Altitude (m)	≤2000		
Pollution gradation	≤Level II		
Cable length (m)	4		
Environment	No acid, alkaline or other corrosive gases or explosive gases in the ambient air, rain and snow prevention measures required		
Protection level	IP54		
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CCS2 Electric Vehicle DC Charger(30-150kW)



The ZEVQC series EV fast chargers adopt European standard interface, integrating setting control, management, query, display, remote monitoring and other functions. The entire charging process is under intelligent control. With one or two connectors and optional charging modes, the devices are ideal choices for bus depots, airports, highway service areas, charging stations, etc.



Ultra-fast charging

Charging for 5 mins, running for 120 mins



Optional charging modes

One connector charging on 100% output, two connectors charging two vehicles simultaneously or alternately



Strong security

Multiple protections: auto power off, overcharge protection and failure isolation, etc.



CE certified

Adopting CCS2 charging interface, CE certified



Wide output voltage range

200V to 750V wide output voltage range, compatible with multiple vehicle types



Higher reliability

Effective heat dissipation, waterproof, dustproof, stable operation in a wide range of temperatures; resistant to rain, snow and other harsh environments



Friendly interface

Multi-language intelligent human-machine interface, easy to operate



Higher intelligence

Cloud platform management, mobile App intelligent monitoring, real-time data collection



Technical Data

Model	ZEVQC-30/750-UE	ZEVQC-45/750-UE	ZEVQC-60/750-UE
Line voltage (VAC)		AC 400 ± 10%	
AC power connection		3P + N + PE	
Frequency (HZ)		50 ± 5%	
Power factor		≥ 0.99	
Current THD value		≤ 5%	
Output current (A)	0-50	0-75	0-100
Voltage regulation accuracy		≤ ± 0.5%	
Steady current accuracy		≤ ±1%	
Ripple peak factor		≤ 0.5%	
Output voltage range (VDC)		200-750	
Charging interfaces		1 or 2 (optional)	
Output power (kW)	30	45	60
Packaging		Wooden packing	
Dimensions (W×D×H:mm)		750 x 770 x 1900 (in kind prevail)	
Cable length (m)	5	5	7
IP level		IP54	
Communication		PLC (charger to vehicle) Ethernet (charger to charger)	
Cooling		Air Cooled	
Full load efficiency		≥ 94%	
Versatility		IEC/EN 61851, IEC/EN 62196	
Protection		Overvoltage, undervoltage, overload, short circuit, earthing, lightning protection, power outage, auto power off protection	
Ambient temperature (°C)		-20 to +50	
Storage temperature (°C)		-40 to +70	
Humidity		5%-95% no frost	
Altitude (m)		≤ 2000	
Noise (dB)		≤ 70	

Technical Data

Model	ZEVQC-75/750-UE	ZEVQC-90/750-UE	ZEVQC-120/750-UE	ZEVQC-150/750-UE
Line voltage (VAC)	AC 400 ± 10%			
AC power connection	3P + N + PE			
Frequency (HZ)	50 ± 5%			
Power factor	≥ 0.99			
Current THD value	≤ 5%			
Output current (A)	0-125	0-150	0-200	0-200
Voltage regulation accuracy	≤ ±0.5%			
Steady current accuracy	≤ ±1%			
Ripple peak factor	≤ 0.5%			
Output voltage range (VDC)	200-750			
Charging interfaces	1 or 2 (optional)			
Output power (kW)	75	90	120	150
Packaging	Wooden packing			
Dimensions (W×D×H:mm)	750 x 770 x 1900 (in kind prevail)			
Cable length (m)	7 or 10 (optional)			
IP level	IP54			
Communication	PLC (charger to vehicle) Ethernet (charger to charger)			
Cooling	Air Cooled			
Full load efficiency	≥ 94%			
Versatility	IEC/EN 61851, IEC/EN 62196			
Protection	Overvoltage, undervoltage, overload, short circuit, earthing, lightning protection, power outage, auto power off protection			
Ambient temperature (°C)	-20 to +50			
Storage temperature (°C)	-40 to +70			
Humidity	5%-95% no frost			
Altitude (m)	≤ 2000			
Noise (dB)	≤ 70			

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CCS2 Electric Vehicle DC Charger (160-360kW)



With a wide variety, complete functions and excellent performance, ZEVQC series EV DC fast chargers are suitable for large-scale electric bus depots, highway service areas, EV charging stations, etc. SSE offers DC fast charging for all kinds of EVs. European versions have been widely used in many countries around the world.



Ultra-fast charging

Charging for 5 mins, running for 120 mins



Optional charging modes

Two connectors charging two vehicles simultaneously or alternately; both connectors charging one vehicle is also enabled



Strong security

Multiple protections: auto power off, overcharge protection and failure isolation, etc.



CE certified

Adopting CCS2 charging interface, CE certified



Wide output voltage range

150V to 1000V wide output voltage range, compatible with multiple vehicle types



Higher reliability

Effective heat dissipation, waterproof, dustproof, stable operation in a wide range of temperatures; resistant to rain, snow and other harsh environments



Friendly interface

Multi-language intelligent human-machine interface, easy to operate



Higher intelligence

Cloud platform management, mobile App intelligent monitoring, real-time data collection



Technical Data

Model	ZEVQC-160/1000-U1E	ZEVQC-180/1000-U1E	ZEVQC-160/1000-U2E	ZEVQC-180/1000-U2E
Line voltage (VAC)	AC 400 ± 10%			
AC power connection	3P + N + PE			
Frequency (HZ)	50 ± 5%			
Power factor	≥ 0.99			
Current THD value	≤ 5%			
Output current (A)	0-200			0-400
Voltage regulation accuracy	≤ ±0.5%			
Steady current accuracy	≤ ±1%			
Ripple peak factor	≤ 0.5%			
Output voltage range (VDC)	150 - 1000			
Charging interfaces	CCS2			
Charging connectors	1			2
Output power (kW)	160	180	160	180
Packaging	Wooden packing			
Dimensions (W×D×H:mm)	840 x 980 x 2000 (in kind prevail)			
Cable length (m)	7 or 10 (optional)			
IP level	IP54			
Communication	PLC (charger to vehicle) Ethernet (charger to charger)			
Cooling	Air Cooled			
Full load efficiency	≥ 94%			
Versatility	EN 61851-1, EN 62196, IEC 61851-21-2, EN 61851-23, EN 61851-24			
Protection	Overvoltage, undervoltage, overload, short circuit, earthing, lightning protection, power outage, auto power off protection			
Ambient temperature (°C)	-30 to +50			
Storage temperature (°C)	-40 to +70			
Humidity	5%-95% no frost			
Altitude (m)	≤ 2000			
Noise (dB)	≤ 70			

Technical Data

Model	ZEVQC-200/1000-U2E	ZEVQC-240/1000-U2E	ZEVQC-300/1000-U2E	ZEVQC-360/1000-U2E
Line voltage (VAC)	AC 400 ± 10%			
AC power connection	3P + N + PE			
Frequency (HZ)	50 ± 5%			
Power factor	≥ 0.99			
Current THD value	≤ 5%			
Output current (A)	0-400			
Voltage regulation accuracy	≤ ±0.5%			
Steady current accuracy	≤ ±1%			
Ripple peak factor	≤ 0.5%			
Output voltage range (VDC)	150 - 1000			
Charging interfaces	CCS2			
Charging connectors	2			
Output power (kW)	200	240	300	360
Packaging	Wooden packing			
Dimensions (W×D×H:mm)	840 x 980 x 2000 (in kind prevail)			
Cable length (m)	7 or 10 (optional)			
IP level	IP54			
Communication	PLC (charger to vehicle) Ethernet (charger to charger)			
Cooling	Air Cooled			
Full load efficiency	≥ 94%			
Versatility	EN 61851-1,EN 62196,IEC 61851-21-2,EN 61851-23,EN 61851-24			
Protection	Overvoltage, undervoltage, overload, short circuit, earthing, lightning protection, power outage, auto power off protection			
Ambient temperature (°C)	-30 to +50			
Storage temperature (°C)	-40 to +70			
Humidity	5%-95% no frost			
Altitude (m)	≤ 2000			
Noise (dB)	≤ 70			

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

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High-power Liquid Cooled Fast Charger



SSE high-power liquid cooled fast charger is composed of a charging host and two charging terminals with liquid-cooled connectors. Each charging interface complies with European or Chinese standard, and can independently achieve high-power ultra fast charging. It can be widely used in highway service areas, bus depots, electric vehicle charging stations etc., suitable for electric vehicles of different voltage levels, different brands, and different standards



Ultra-fast charging

Liquid-cooled connectors enables high current and high power fast charging, with the max. output current of a single gun up to 500A



Strong adaptability

CCS2 or GB/T supported, 200V to 1000V wide output voltage range, compatible with multiple vehicle types



High flexibility

Charging cables with smaller diameter, light and flexible, more friendly charging experience



High reliability

Service life extended with the temperature rise reduced, high IP level to ensure stable operation in harsh environments



Strong security

Multiple protections to ensure the safety of users and vehicles, such as auto power off, overcharge protection and failure isolation, etc.



Optional charging modes

Two connectors charging two vehicles simultaneously or alternately or on smart power distribution



Easy operation

Multi-language intelligent human-machine interface, easy to operate



Smart management

OCPP supported, intelligent monitoring, remote maintenance and online upgrade available with back office system or mobile app



Technical Data

Input voltage (V)	AC400±10% (3P+N+PE)
Max. input current (A)	≤581
Rated frequency (Hz)	50±5%
Power factor	≥0.99
Total Rated power (kW)	360
Output voltage (V)	DC200-1000(DC50-1000 for China)
Output current of single gun (A)	0-500
Voltage regulation accuracy	≤±0.5%
Steady current accuracy	≤±1%
Current - unbalance	≤5%
Ripple peak factor	≤±0.5%
Efficiency	≥0.94
No. of charging terminals	2
No. of charging connectors	2
Cable length (m)	5
Connector type	CCS2 or GB/T
Cooling (for connectors)	liquid cooled
Charging mode	two connectors charging simultaneously, alternately or on smart power distribution
Standards	PLC, IEC 61851; CAN, GB/T27930-2015
HMI	touch screen
Metering	DC watt-hour meter to measure the output power
Communication	Ethernet
Installation	Floor standing
Dimensions (W×D×H:mm)	840 × 880 × 2000 (host)
	650 × 600 × 2000 (terminals)
IP level	IP54 (Outdoor)
Cooling	Forced air cooled
Ambient temperature (°C)	-30 to 50 (normal output); 50 to 75 (derating output)
Storage temperature (°C)	-40 to 75
Humidity	5%-95% no frost
Altitude (m)	≤2000 (full load output)

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

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Multi-standard DC Fast Charger



The ZEVQC-U2M series multi-standard fast chargers are designed based on international standards to meet multiple charging interface types on the market. The charger is equipped with two connectors, available in CCS2 & CHAdeMO, GB/T & CCS2 and GB/T & CHAdeMO combo, suitable for diversified EV models



Strong adaptability

Free combination of charging connectors comply with CCS2, CHAdeMO or GB/T, suitable for various EV models



High efficiency and stability

Efficiency up to 96%; AC and DC filtering technology is adopted with anti-interference and low pollution to the power grid



Intelligent power distribution

Automatic power distribution for two connectors to maximize the efficiency of the charger



Easy operation

High-definition touch screen display, one button to charge or stop, easy to operate and maintain



Various charging modes

Including constant current charging, constant voltage charging, constant power charging, etc.



Smart management

Support OCPP, enable intelligent monitoring with back office system and mobile app; can achieve real-time monitoring of power modules



Higher reliability

Adopt advanced DSP control, complete protection functions, higher system reliability



Easy maintenance

Modular design, easy to expand and maintain, support remote maintenance and online update



Technical Data

Rated power (kW)	60-360
Input voltage (V)	AC400±10% (3P+N+PE)
Rated frequency (Hz)	50
Power factor	≥0.99
Output voltage (V)	DC200-1000
Efficiency	0.96
HMI	7-inch anti-glare touch screen
Metering	DC electricity meter
IP level	IP54
Ambient temperature (°C)	-20 to +50
Storage temperature (°C)	-40 to +75
Humidity	5%-95%
Networking	Ethernet (standard), 4G (optional)
Standards	IEC 61851-1, IEC 61851-23, IEC 61851-24, JEVS G105
Communication protocol	OCPP1.6 or SSE platform protocol
Protections	Overvoltage, undervoltage, short circuit, over temperature, over current, leakage, insulation grounding, battery reverse connection, abnormal connection, emergency stop, alarm protections

Model	ZEVQC-U2M (CCS2 & CHAdeMO)	
Connector type	CCS Combo Typ2	CHAdeMO/JEVS G105
Output voltage (V)	DC200-1000	DC200-500
Max. output current (A)	200	125
Cable length (m)	5/7/10	5/7/10

Model	ZEVQC-U2M (GB/T & CCS2)	
Connector type	GB/T	CCS Combo Typ2
Output voltage (V)	DC200-1000	DC200-1000
Max. output current (A)	250	200
Cable length (m)	5/7/10	5/7/10

Model	ZEVQC-U2M (GB/T & CHAdeMO)	
Connector type	GB/T	CHAdeMO/JEVS G105
Output voltage (V)	DC200-1000	DC200-500
Max. output current (A)	250	125
Cable length (m)	5/7/10	5/7/10

AC & DC 3-in-1 Charger



The charger integrates AC and DC charging and is equipped with three connectors (AC*1, DC*2), to provide users with multiple charging options. It's based on international standards IEC 61851 and IEC 62196, suitable for charging at large bus parking lots, highway service areas, busy urban areas, etc.



AC & DC integration

With 3 charging connectors, max. AC output of 44kW and DC output of 50kW, can offer AC and DC fast charging simultaneously



Higher efficiency

Ultra-high DC charging efficiency, designed to deliver full output power continuously



User friendly

- Multi-language intelligent touch screen HMI
- Support various payment methods, including credit card quick pass
- Independent operating interface for AC and DC side



Easy maintenance

- Modular design, easy to expand and maintain
- Support remote maintenance and online update



Wide applicability

- wide output voltage range, suited for various vehicles
- Comply with European and Japanese standard



Smart management

Support the open communication protocol OCPP 1.6, enable intelligent monitoring with back office system and mobile app



Higher reliability

Either for indoor or outdoor use, efficient heat dissipation, resistant to rain, snow, high or low temperature, long-term and stable operation in a harsh environment



Strong security

Multiple protections, including auto power off, overcharge protection and failure isolation, etc.



Technical Data

Model		ZEVQC-44-50-U3M		
Input	AC power connection	3P + N + E		
	Input voltage range (V)	400AC ± 10% (50 Hz)		
	Max. rated input current (A)	150		
	Max. rated input power (kVA)	100		
	Power factor (full load)	> 0.99		
Output		AC output	Combo Typ 2	CHAdeMO
	Max. output power (kW)	44	50	50
	Output voltage range (V)	400 ± 10%	200-750 DC	200-500 DC
	Max. output current (A)	63AC	125 DC	125 DC
	Efficiency	99%	95%	95%
	Connection standard	EN 61851-1:2010	EN 61851-23/DIN 70121 Combo Typ 2	CHAdeMO 1.0
	Connector type	IEC 62196 Mode 3, Typ 2	Combo Typ 2	CHAdeMO/JEVS G105
General	Payment	Visa/Master card (Induction type)		
	RFID-System	Visa/Master card (password required or not depends on the authority granted by the credit card issuing bank)		
	Networking	Ethernet (standard), 3G/4G (optional)		
	Communication protocol	OCPP		
	HMI	Glare-free 7-inch touch screen, display of the charging process		
	Electric meter	MID (Measuring Instruments Directive) 2004/22/EG		
	Protection	IP54		
	Operating noise (dBA)	≤65		
	Cable length (m)	5		
	Dimensions: WxDxH (mm)	750x700x1900		
Environmental	Surroundings	Indoor / outdoor		
	Operating temperature (°C)	-30 to +55		
	Storage temperature (°C)	-40 to +70		
	Conformity and safety	CE		

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.

- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

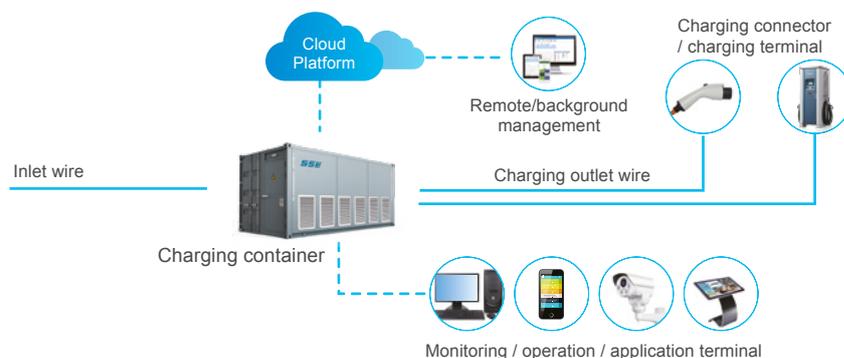
Support hotline: +86 710 2309484

Email: enquiry@sse-international.com

ZEVQC Series Smart Charging Container



ZEVQC series smart charging container is a pre-installed structure, which highly integrates distribution switchgear, DC chargers, intelligent control system, metering, protection, communication, monitoring and other system modules and functions. It provides DC power supply for numerous charging terminals as needed, meeting the charging requirements of various vehicles and different powers, and has been applied in lots of countries around the world



Power sharing

Centralized control and management is allowed for all DC chargers, can achieve real-time regulation of power output according to transformer capacity by dynamic load dispatch or setting fixed load



Flexible charging

Automatically allocate the charging module output based on the results of communication with multiple BMSs, to realize flexible power distribution on demand



Power scheduling

The charging power can be dynamically adjusted by the monitoring system, quickly recharge during the day and charge in turn or evenly at night, to cut station investment and improve the utilization of charging facilities



Unattended operation

Automatic charging after plug in, easy to operate; fault alarm and emergency call, no manual inspection is needed



Advantages



Certified by TÜV CE, support OCPP1.6



Flexible distribution of charging power, higher charging efficiency and higher utilization of power load



Standardized, pre-installed container design, small area occupied, easy to transport and install, saving civil construction cost and construction time



Modular and integrated design of power transformer and distribution, easy to expand, flexible in configuration and complete in function



High-protection outdoor design, efficient heat dissipation, resistant to rain, snow, high or low temperature, stable operation in a harsh environment



Adopting active power filter and reactive compensation technology, power factor up to 0.998 and THD less than 3%



Supporting cloud platform management and mobile app intelligent monitoring, to achieve real-time data collection and unattended operation



Multi-language intelligent HMI, easy to operate



Complete design of environmental control system, fire protection system, grounding system, etc., more safe and reliable

Technical Data

Input	Input voltage (V)	AC380-400		
	AC incoming line	L1,L2,L3,N,PE		
	Frequency (Hz)	50		
	Power factor	>0.99		
Output	Output voltage (V)	DC200-750 (Continuously adjustable)		
	Rated output power (kW)	600/750/900/1080/1200	600/750/900/1080	
	Charging interfaces	12/24		
	Output current (A)	1000/1250/1500/1800/2000	1000/1250/1500/1800	
	Chargers	6/12		
	Regulated voltage accuracy	≤±0.5%		
	Charging mode	cycle or simultaneous charging		
	Steady current accuracy	≤±1%		
	Efficiency	≥0.94		
	Communication interface	PLC (charger to vehicle)	CAN (charger to vehicle)	
		Ethernet (charger to back stage)		
Dimensions: WxDxH (mm)	6058*2250*2550 (container); 680×500×1700 (charger)			
IP level	IP54 (outdoor)			
Connector Type	CCS2	GB/T		

Dynamic Allocation Unit Flexible Charger



SSE dynamic allocation unit(DAU) flexible charger is designed based on power distribution units. Any charging gun can call any charging module. The product features flexible system configuration and flexible power distribution. It is especially suitable for scenes with diversified charging needs, like airports and bus depots, etc.



Multiple charging terminals

Equipped with multiple charging terminals, which can provide DC fast charging for multiple vehicles at the same time



Intelligent power distribution

Dynamic switching of charging modules and any charging gun connected to any module is enabled, to meet the charging needs of different powers and maximize the efficiency of the charger



Optional charging modes

Optional charging modes for users, such as average distribution and priority allocation of charging modules, etc.



Modular design

Pluggable power distribution module for fast operation, maintenance and troubleshooting



Higher reliability

Multiple protections like auto power off on abnormal charging, overcharge protection, failure isolation, etc. The failure of any single terminal does not affect the normal operation of the others



Smart management

Cloud platform management, mobile App intelligent monitoring, real-time data collection



Technical Data

Model	ZEVQC-180/1000-S6	ZEVQC-360/1000-S12
Input voltage (V)	AC380±10%	
Input current (A)	290	580
Frequency (Hz)	50±10%	
Power factor	>0.99	
Output voltage (V)	DC50-1000	
Rated output power (kW)	180	360
Max. Output current (A)	600	1200
Max. Output current of single gun (A)	250	
No. of charging guns	6	12
Voltage regulation accuracy	≤±0.5%	
Steady current accuracy	≤±1%	
Ripple peak factor	≤±0.5%	
Efficiency	≥0.94	
Standards of charging interfaces	9-core DC charging gun, GB/T20234.3-2015	
Cable length (m)	5/7	
Charging mode	Intelligent power distribution	
Auxiliary power supply	12V/24V 10A	
HMI	touch screen	
Metering	DC meter	
Dimensions (W×D×H, mm)	1150×850×1800	1960×850×1800
Protection level	IP54 (outdoor)	
Protocol	CAN, GB/T27930-2015	
Communication interface	Ethernet(standard), 4G (optional)	
Cooling	Air Cooled	

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

Support hotline: +86 710 2309484

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Electric Heavy Truck Fast Charger



The charger is designed for quick and reliable charging of electric heavy-duty trucks. With an all-in-one outdoor enclosure, it's composed of 75kW high-power charging modules with independent air ducts, electrical control systems, charging terminals and heat dissipation system, etc. The output current of two guns is up to 500A, which is suited for fast charging of large trucks such as electric tractors, trucks, and dump trucks.

- 75kW charging module with independent air duct, sensitive devices are unventilated
- Fewer charging modules for reduced complexity and higher reliability
- Suited for mines, construction sites, ports, logistics and other areas, industries or large load centers that require high-power fast charging
- Multiple application solutions, like separate or integrated type
- All-in-one design, small footprint, easy to install and maintain
- Less harmonic, stable and durable, safe and reliable
- Optional charging power and strong adaptability makes it perfect for the charging of large vehicles
- Supports "cloud platform" management and mobile APP, can offer big data monitoring



High power

250A full current per gun can be ensured within the range of 200 to 750VDC



Modular design

The whole cabinet is composed of high-power charging modules in parallel, easy to install and maintain



Strong adaptability

- 200 to 750V wide voltage range on the DC side;
- Compliant with Chinese and EU standard EVs



Robust design

Equipped with low-temperature touch screen and charging gun, which can be used under severe environmental conditions of -25 to 50°C



Technical Data

AC Input voltage (V)	380±10% (45-65Hz) three-phase five-wire
Rated output power (kW)	300
Output voltage (V DC)	200-750
Max. Output current of single gun (A)	250
Max. Output current of double-gun (A)	500
Power factor	≥0.95
Efficiency	≥95%
THDi	≤5%
Output voltage error	±0.5%
Output current error	≤1% (≥30A)
Voltage regulation accuracy	≤0.5% (When load current changes from 0% to 100%)
Steady current accuracy	≤1% (When load current changes from 10% to 100%)
Ripple peak factor	≤1% (When load current changes from 0% to 100% or load voltage changes from 90% to 110%)
Current - Unbalance	≤3%
Starting impulse current	≤110% of input current
Charging mode	Constant current, constant voltage, constant power
Display	HMI
Communication	RS485/CAN/Ethernet (optional)
Data collection speed (s)	≤1
Metering	DC meter
Protection level	IP54
Altitude (m)	≤2000
Ambient temperature (°C)	-20 to 50
Humidity	≤95%
Storage temperature (°C)	-30 to 70
Dimensions (W×D×H, mm)	800×1000×2200
Weight (kg)	400
Standards	GB/T 18487.1-2015, GB/T 18487.2-2017, GB/T 20234.1-2015, GB/T 20234.3-2015, GB/T 27930-2015
Protections	Overvoltage, undervoltage, overcurrent, undercurrent, short circuit, output reverse connection, automatic shutdown, anti-reverse connection protection module, manual emergency stop button, independent overvoltage protection device, etc.

Service & Support

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ZEVQC-P1 Series Portable EV Fast Charger



For the onboard and fast charging requirements of new energy vehicles such as electric logistics vehicles, etc., SSE has developed the ZEVQC-P1 series of portable EV fast chargers. Adopting high-frequency switching rectifier modules with adjustable DC output voltage, DSP digital control, resonant soft switching and active PFC and other core technologies, the chargers are of high efficiency, high reliability, easy operation and light weight.

- Strong adaptability, suitable for all kinds of new energy vehicles
- Various charging modes: constant current charging, constant voltage charging, constant power charging, etc.
- Simple structure design, at most 2 internal connection lines
- High-speed CAN communication bus for real-time detection and monitoring of power modules
- Adopt advanced 6th generation DSP control, higher system reliability, can realize online upgrade
- With online self-diagnosis function, convenient system maintenance
- Multiple protections: automatic power-off for abnormal charging, overcharge protection and failure isolation, etc.
- Optional installation methods, can be placed anywhere, or wall mounted
- Simple operation interface, one-button switch



Easy to operate

- Charging anywhere with a 32A/16A 220V AC power supply
- One-button power on/off, one-button switch for the display



High efficiency & energy saving

- Rated efficiency up to 94%
- Power factor ≥ 0.99 , standby power loss $< 12W$, harmonic current $\leq 5\%$



High power density

- Volume of 6.6kW charger: 433×158×240mm
- Modular design, easy to integrate and maintain



Easy to carry

- Small volume, weighs only 10kg
- Handle design, easy to move and carry



Technical Data

Model	ZEVQC-7/550-P1	ZEVQC-7/750-P1
Input voltage (V AC)	176 - 264	
Input frequency (Hz)	45 - 65	
Power factor	≥0.99	
Rated input current (A)	32 (220V AC input)	
Input surge current (A)	48 (25°C, cold boot)	
Output power (kW)	6.6	6.6
Output current (A)	20	13.2
Output voltage (V DC)	200 - 550	200 - 750
Charging connectors	1	
Steady current accuracy	≤±1%	
Voltage regulation accuracy	≤±0.5%	
Ripple factor	≤0.5%	
Efficiency	≥94%	
Noise (dB)	≤65	
Auxiliary power supply	12V/5A	
Standby power loss (W)	≤12 (No main output and auxiliary power output)	
Storage temperature (°C)	-40 to 70	
Operating temperature (°C)	-20 to 40 (derating output from 40 to 65°C)	
Humidity	5% - 95%, no frost, no condensation	
Altitude (m)	≤2000	
IP level	IP21	
Standard conformity	GB/T18487, GB/T20234, GB/T27930, NB/T33001, NB/T33008	
Dimensions (W×D×H:mm)	433×158×240	
Body material	metal	
Input cable length (m)	5	
Output cable length (m)	2.5	
Protection	Over-voltage, under-voltage, over-current, short circuit, over-temperature, battery reversal, communication failure, urgent stop protection	
LED	√	
Emergency stop button	√	
Multiple charging modes	√	
Online update	√	

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

Support hotline: +86 710 2309484

Email: enquiry@sse-international.com

ZEVQC-P1 Series Mobile EV Fast Charger



ZEVQC-P1 series mobile electric vehicle fast charger adopts wheel design, easy to carry and move. With high efficiency and reliability, it can be widely used in changeable charging sites, emergency power supply or places with no room for fixed charging points, like 4S stores, auto plants, tourist attractions, road rescue or delivery of EVs.

- Applicable to various EVs such as electric cars, trucks, buses, etc.
- Strong adaptability, covering multiple voltage and power levels
- Modular design, easy to expand and maintain
- Higher power density and smaller size
- High-speed CAN communication bus to realize real-time detection and monitoring communication of modules
- Comprehensive protection, safer and more reliable



Efficiency & flexibility

- Fast charging with high current, efficiency up to 94%
- Wheel design, easy to move and carry
- Suitable for all kinds of EV models



User-friendly design

- Modular design, easy to replace, maintain and expand
- One-button switch for simpler operation
- Friendly HMI with charging data display



Higher reliability

- Reduce energy consumption, control sensitive, safe and reliable
- Reduce pollution to the grid
- Adapt to a wider range of voltage fluctuations



Multiple protections

- Featured fan failure, battery reverse and insulation fault protection, etc.
- Various auto power-off protections



Technical Data

Model	ZEVQC-20/750-P1	ZEVQC-40/750-P1
Rated input voltage (VAC)	380±20%	
Input voltage range (VAC)	260 - 475	
Input current (A)	≤32	≤65
Rated output power (kW)	20	40
Rated output current (A)	33	67
Output voltage (VDC)	200-750	
Peak-to-peak noise	≤±1%	
Regulated Current Accuracy	≤±1%	
Regulated Voltage Accuracy	≤±0.5%	
Current - Unbalance	≤±5%	
Efficiency	≥94%	
Frequency (Hz)	50±10%	
Power factor	≥0.99	
THD	≤5%	
Operating temperature (°C)	-20 to +50	
Humidity	5%-95%, no condensation	
Altitude (m)	≤2000 full load output	
Insulation strength	Insulation resistance>10M (normal air pressure, humidity<90%, no condensation, 1000VDC)	
LV auxiliary power supply	12V/24V 10A	
MTBF	> 20000h	
Standards	GB/T27930, NB/T33008.1	
Input cable length (m)	3	
Output cable length (m)	2	
Dimensions (W×D×H:mm)	550x310x540 (in kind prevail)	
Weight (kg)	<50	
Protection	overvoltage, undervoltage, overcurrent, short circuit, fan failure, battery reversal, insulation fault protection, etc.	

Service & Support

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Megatron Series Intelligent Electric Forklift Charger



The Megatron series electric forklift charger adopts the integrated design. It can dynamically adjust the charging parameters according to DSP software settings, the charging process will be automatically set to achieve smart management of EV charging.

- First obtained CE certificate in the industry
- Wide application: electric forklifts, golf carts, sanitation vehicles and other low-speed electric vehicles
- Dual-conversion design, advanced topology technology, Vienna rectifier, tri-level phase shifting half-bridge
- Adopting high-frequency isolation, integrating multiple charging curves, stepless current limiting
- Wide input voltage and frequency range, adapt to harsh grid environment
- Supporting cloud platform management and mobile app
- Various charging information and alarms to ensure high safety and reliability of the battery system
- Intelligent charging with maximum charging power, shortening charging time
- Pulse charging design, effectively extend the battery life



Efficient and Energy Saving

- Rated efficiency up to 93.6%
- Input PF > 0.99, harmonic current < 5%



Higher Power Density

Smallest volume: 430x230x100mm
Modular design, easy expansion,
easy maintenance



Easy Installation & Carrying

- Wall-mounted design, saving space
- Portable design, easy to carry
- Mobile design, flexible and light



Higher Reliability

Adopting advanced 6th generation
DSP control, higher system reliability,
can realize online maintenance



Technical Data

Model	T-48-100	T-60-100	T-80-75
Rated Power (kW)		6	
Rated Input Voltage (V AC)		380/400/415, three-phase four-wire	
Rated Frequency (Hz)		50	
Input Voltage Range (V)		304-525	
Input Frequency Range (Hz)		45-55	
Input Power Factor		≥0.99	
Input Current Harmonic		≤5%	
Rated Output Voltage (V)	48	60	80
Max Output Current (A)	100	100	75
Regulated Voltage Accuracy		±0.5%	
Output Ripple Voltage		≤1%	
Load Regulation		±0.5%	
Grid Regulation		±0.1%	
Regulated Current Accuracy		±1%	
Current - Unbalance		±5%	
Dynamic response recovery time(μs)		≤200	
Dynamic response overshoot		±2%	
Booting Time (S)		3-8	
Overshoot Amplitude		≤2%	
Peak Efficiency		0.94	
Applicable Battery Type		Lead-acid battery	
Protection	overvoltage, undervoltage, default phase, current-limiting, short circuit, over-temperature, fan failure, battery reversal, etc.		
Working Temperature (°C)	-20~60(booting≥-20°C, derating over 40°C)		
Forced Cooling	Inlet from the front and outlet from the back of the fan. Intelligent speed regulation of input current and power according to the temperature		
IP Level		IP20	
L x W x H (mm)		430×230×100	
Weight (kg)		9	

Service & Support

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- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

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Megatron Series Intelligent Electric Forklift Charger



SSE intelligent electric forklift charger adopts the integrated design. It can dynamically adjust the charging parameters according to DSP software settings, the charging process will be automatically set to achieve smart management of EV charging.

- Suited for all kinds of low-speed EVs, such as electric forklifts, golf carts, sanitation or sightseeing vehicles, etc.
- Dual-conversion design, advanced topology technology, Vienna rectifier, tri-level phase shifting half-bridge
- Adopting high-frequency isolation, integrating multiple charging curves, stepless current limiting
- Wide input voltage and frequency range, adapt to harsh grid environment
- Compatible with lead-acid batteries and lithium batteries
- Support cloud platform management and APP, to provide big data monitoring
- Intelligent charging curve and pulse charging design to effectively extend battery life and shorten charging time



Efficient and Energy-Saving

- Constant power and current maximum output, rated efficiency up to 94%
- Input PF > 0.99, harmonic current < 5%



Strong adaptability

DC40~120V, DC40~200V low voltage range output, effectively matching all kinds of low voltage electric vehicles



Higher Reliability

With the advanced 6th generation DSP control, the system reliability is higher, online maintenance is enabled



Higher Intelligence

Intelligent temperature control, independent current sharing, intelligent power distribution and other smart control functions



Technical Data

Model	ZEVQC-20/100-U1	ZEVQC-40/100-U1(2)	ZEVQC-80/200-U1(2)
Input voltage (V)		AC 380 (3P+N+PE)	
Rated input current (A)	32	65	129
Frequency (Hz)		50±1	
Power factor		≥0.99	
Output voltage (V)	DC40-120	DC40-120	DC40-200
Rated output power (kW)	20	40	80
Output current (A)	200	400	500
Regulated voltage accuracy		≤±0.5%	
Regulated current accuracy		≤±1%	
Ripple peak factor		≤±0.5%	
Efficiency		≥0.94	
Connector Type		GB/T, comply with GB/T20234.3-2015	
Cable length (m)		5 or 7 (optional)	
No. of charging connectors	1	1 or 2 (optional)	
Charging mode		full power output (single gun) or smart power sharing(dual gun)	
Auxiliary power supply		12V 10A	
HMI		touch screen	
Metering		DC watt-hour meter to measure the output power	
Dimensions (W×D×H:mm)	351x 650x1505	750x600x1650	750x600x1650
Protection level		IP54 (outdoor)	
Protocol		CAN, GB/T27930-2015	
Communication		Ethernet	
Cooling		Forced air cooled	
Standards		GB/T 18487.1, GB/T 20234.1, GB/T 20234.3, NB/T 33001, GB/T 27930	
Protections		Overvoltage, undervoltage, overcurrent, short circuit, over temperature, insulation grounding, battery reverse, abnormal connection, emergency stop protection; soft start time (3-8s), alarm and display	
Ambient temperature (°C)		-20 to 50 (normal output); 50 to 75 (derating output)	
Storage temperature (°C)		-40 to 75	
Humidity		5%-95% no frost	
Altitude (m)		≤2000 (full load output)	
Installation vertical obliquity		≤5°	

Service & Support

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- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

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Megatron Series Low-speed EV Charger



The Megatron series low-speed electric vehicle charger developed by SSE adopts integrated design and consists of a power conversion unit, a charging indicator lamp and a charging connector, etc., to provide an integrated centralized power supply solution. It can dynamically adjust the charging parameters according to DSP software settings, the charging process will be automatically set to achieve smart management of EV charging

- Widely applicable to all kinds of low-speed electric vehicles such as electric motorcycles and electric golf carts etc., AGV tractors
- Dual-conversion design, advanced topology technology
- High-frequency isolation, integrating multiple charging curves, stepless current limiting
- Wide input voltage and frequency range, adapt to harsh grid environment
- Compatible with lead-acid batteries, lithium batteries
- Intelligent charging, giving charging curves according to the capacity, making full use of the batteries' charging characteristics, to maximize the charging power and shorten the charging time
- Pulse charging design, effectively extend the battery life
- Various charging information and alarms to ensure high safety and reliability of the battery system
- Removable dust gauze, easy to maintain



High efficiency & energy saving

- Rated efficiency up to 94%
- Input power factor > 0.99, harmonic current < 5%



High power density

- Volume of 3.6kW charger: 383×81×131mm
- Adopt PCB vertical structure, better dust proof



Easy installation & carrying

Handle design, weighs only 4kg, easy to carry



Higher reliability

Adopt advanced 6th generation DSP control, higher system reliability, can realize online maintenance



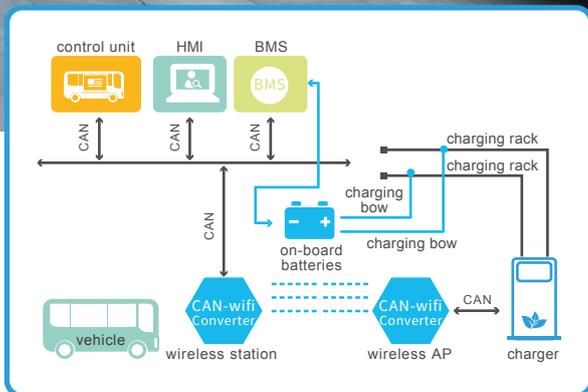
Technical Data

Model	T-48-60	T-60-60
Rated power (kW)	3.6	
Rated input voltage (V AC)	220+PE	
Rated frequency (Hz)	50/60	
Input voltage range (V)	176~264	
Input frequency range (Hz)	45~55	
Input power factor	≥0.99	
Input current harmonics	≤5%	
Rated output voltage (V)	48	60
Max. output current (A)	60	60
Regulated voltage accuracy	≤±0.5%	
Output ripple voltage	≤1%	
Load regulation	≤±0.5%	
Grid regulation	≤±0.1%	
Steady current accuracy	≤±1%	
Dynamic response recovery time (us)	≤200	
Dynamic response overshoot	≤±2%	
Booting time (s)	3~8	
Overshoot amplitude	≤2%	
Peak efficiency	94%	
Compatible batteries	Lead-acid battery / lithium battery	
Protections	Overvoltage, undervoltage, default phase, current-limiting, short circuit, over-temperature, fan failure, battery reversal, etc.	
Ambient temperature (°C)	-20~60 (booting temperature>-20°C, derating over 40°C)	
Forced cooling	Inlet from the front and outlet from the back of the fan. Intelligent speed regulation of input current and power according to the temperature	
IP level	IP20	
Dimensions (W×D×H:mm)	383×81×131	
Weight (kg)	4	

Service & Support

- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

Bow-type Fast Charger



The bow-type fast charger developed by SSE allows urban electric buses to be quickly recharged during the operation.

The system is mainly composed of a ground charger, a charging bow, a wifi module, a connecting cable, etc. The vehicle will be connected to the bow by a wireless wifi when it needs charging, the rectified output direct current of the charger is sent to the bow, the vehicle pantograph rises and contacts the collector of the bow to charge.

- **Fast charging:** With multiple charging modes. Charging for 30s, running for 5km
- **Easy to operate:** charging with the advanced and novel down-pressure charging bow, one button to start and the charging bow will be automatically pressed and connected to the vehicle, the signal will be automatically confirmed to start charging
- **Easy to expand:** modular design, flexible configuration, complete functions
- **Strong suitability:** compatible with multiple vehicle brands and types
- **Interconnection:** support OCPP, compatible with various charging service platform
- **Remote management:** with multiple communication interfaces, to achieve remote monitor for the whole charging process
- **Big data monitoring:** real-time gathering and storing operating data, support "SSE Cloud" platform management and mobile APP, providing big data monitoring
- **Human-machine interaction:** 7-inch color LCD touch screen, complete and rich display information, easy to operate, with operation interfaces such as card area, emergency stop button, etc.
- **Safe & reliable:** with multiple protections; emergency stop button is equipped to stop charging immediately and disconnect the power supply from the charger system to ensure safe charging
- **Soft start:** charger with soft start, less impact on the power grid and battery system, ensuring safe and efficient output
- **Identification:** adopt auto or card identification system
- **Vehicle location:** with position sensor, guiding the vehicle to automatically locate
- **Charging bow judgement:** the down state of the bow can be monitored with the camera, a pressure sensor is equipped to confirm the reliability of the electrode connection

Technical Data

Input voltage (V)	AC380 (3P+N+PE)
Max. input current (A)	≤500
Frequency (HZ)	50/60
Power factor	>0.99
Output voltage (V)	DC250-750 continuously adjustable
Rated output power (kW)	300
Rated output current (A)	500
Voltage regulation accuracy (%)	≤±0.5
Steady current accuracy (%)	≤±1
Soft start time (s)	3~8
Module current-unbalance	≤5%
Ripple factor (%)	≤±0.5
Work efficiency	≥0.94
Charging interface standard	4-pole pantograph; DC+/DC/CP/PE
Charging bow specification	One unit of down-stroke bow, same power level as the charger
Output mode	Single charging mode, max. output current 400A,max.output voltage 750VDC via the charging bow
Auxiliary power supply	UPS equipped
Communication protocol	CAN, wifi IEE 802.11a
Measurement	AC/DC power meter, metering the output power
Communication mode	Ethernet, 3G, 4G
IP level	Charging bow IP65, charger IP54, wifi module IP65
Cooling	Forced air cooling
Compatibility	Dual-connector charging mode available (charger and pantograph cannot be used at the same time)
Reliability	Lifetime of key components≥10 years, time between failures≥1 year
Standard conformity	GB/T18487, GB/T20234, GB/T27930, NB/T33001, NB/T33008
Ambient temperature (°C)	-20°C~50°C normal operation; 50°C~75°C derating output
Relative humidity	5%~95%
Altitude (m)	≤2000 (full load output)

Service & Support

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Email: enquiry@sse-international.com

Natural Gas EV Charger



The natural gas EV charger adopts integrated design of outdoor container, powered by natural gas generator sets and charging EVs through AC/DC rectifier modules. It consists of a natural gas generator set, AC/DC rectifier modules, electrical control system, charging terminals, heat dissipation system, fire fighting system, etc.

- Ideal choice for power shortage areas or large load centers like highway service areas, transportation junctions, refueling or gas stations, bus terminal parking lots, etc.
- Optional applications: split type, all-in-one type, mobile type
- Integrating fuel, power generation, power distribution and charging
- More clean and efficient, more energy saving and environmental protection
- Integrated design, small floor space, easy to install and maintain
- Less harmonics, stable and durable, safe and reliable
- Chargers with strong compatibility, adapt to all kinds of EVs
- Support SSE Cloud platform management and mobile app, offer big data monitoring



Wide power range

Generator set power: 100~600kW



Mute & anti-flaming design

Container divided into separate spaces, lower noise, featured anti-flaming, heat dissipation and preservation, etc.



Strong compatibility

- Chargers with DC200 to 750V output, offering fast charging for electric buses and cars;
- Meet European, Chinese standards, etc., applicable to various EVs



Strong adaptability

With low-temperature touch screen and charging connector, functioning well at -25 to 50 C



Technical Data

Model	ZEVQC-120G	ZEVQC-240G	
	Fuel	Natural gas	
Generation	Fuel Consumption @ 100% Load	42m ³	65m ³
	Rated Output Power	120kW	240kW
	Phase / Line	3 phases + neutral + PE	
	Voltage & Frequency	400 Vac, 50 Hz; 480/208Vac, 60Hz optional	
DC Output	Configuration	All-in-one (optional), 1 container with 2 chargers	
	Max. Power Output	60kW x 2	120kW x 2
	Voltage	200 - 750 Vdc	
	Current	0-125A/gun	0-250A/gun
	Efficiency	>95%	
System	Protections	Overload, surge, overvoltage, undervoltage, short circuit, leakage, grounding, overheat, lightning, emergency stop protections	
	DC Plug	GB/T Combo T2 (CCS / Combo-2)	
	Interface	English/Chinese	
	Display	HTMI	
	Network Access	3G (GSM or CDMA) LAN Wi-Fi	
	Communication Protocol	OCPP2.0	
	Installation	Outdoor	
	Altitude	<2000 m	
	Protection Level	IP54	
	Operating Temperature	-25 °C ~ 50°C	
	Storage Temperature	-40 °C ~ 60 °C	
	Humidity	5 % ~ 95 %	
	Standards	GB/T 18487.1-2015, GB/T 20234.1-2015, GB/T 34658-2017, GB/T 34657.2-2017	
	Working noise	58-70dBA @ 7m	
Optional Configuration	Battery Tractor	<input type="radio"/>	<input type="radio"/>
	LNG Fuel Tank 1000L	<input type="radio"/>	<input type="radio"/>
	Parts Package for Extremely Cold Areas	<input type="radio"/>	<input type="radio"/>

Remarks: optional

Service & Support

- Professional team provides technical support and customized solutions
- With specialized after-sales service agencies, providing 24/7 telephone support, on-site service, return and repair service, etc.
- With user information database, which can inquire the device configuration, operation, maintenance, quality, service and all the dynamic information, providing reliable technical support

Support hotline: +86 710 2309484

Email: enquiry@sse-international.com



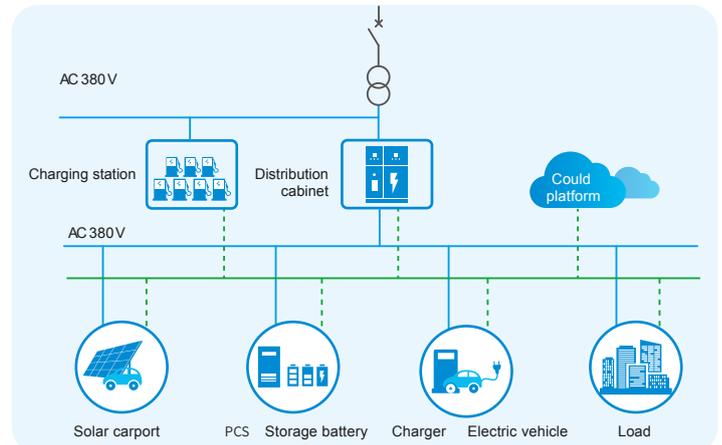
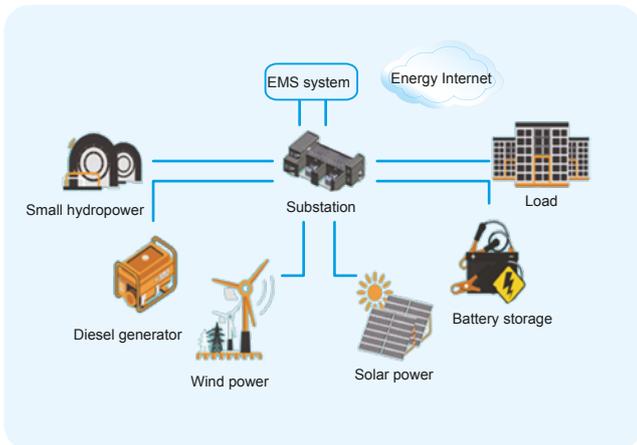
Solar + Storage + Charging Integrated Microgrid System Solution

Solar + energy storage + EV charging integrated microgrid system is an application form of the smart microgrid. It is a multi-energy complementary system which connects EV chargers to the new energy microgrid as power loads.



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SSE has independently developed a smart micro-grid and energy management system(EMS), which can integrate a variety of distributed energy sources(eg.solar, wind, diesel, small hydropower, etc.), storage devices, power loads, monitoring systems, protection devices and other subunits. Based on the cutting-edge technology such as solar, storage, EV charging, distribution energy conservation, harmonic control, and cloud platform data management etc., SSE built a smart new energy microgrid system integrating power generation, distribution and utilization. The system can achieve autonomous operation according to the intended goal, including self-management, control and protection.



Advantages

- Resource integration (solar + energy storage + charging), diverse operating modes, efficient use, and increased system economic value added
- Peak load shifting, cutting electricity costs and basic power costs, smoothing PV power, eliminating abrupt changes and improving grid quality with solar power generation and energy storage
- Introduce intelligent power management, to store peak power generation, increase PV power generation utilization, improve charging efficiency, lower the electricity costs
- Solve the problem caused by limited capacity of the distribution network and improve the network utilization, to ensure the uninterrupted charging of the chargers
- Used as backup emergency power source during power grid blackout, to satisfy the power demand in remote or power shortage areas

Features

- Intelligent energy management and power monitoring
- Modular design, flexible expansion
- Flexible operation modes, including island, grid-connection and rectifier operation, etc.
- Integrating reverse power protection, to ensure the safety of the power grid
- Solve the problems of new energy generation, including volatility, randomness and intermittent

Wide application

- Islands away from mainland and remote mountainous areas
- Industrial and mining enterprises, business centers, etc. with insufficient power supply or unstable grid
- Government agencies, research parks, and confidential departments that require uninterrupted power supply
- Traffic-intensive stations, terminals and airports, large temporary outdoor load centers
- Power plants with “black start” function
- Multi-energy complementary energy sources with fluctuating power generation quality, eg. solar power, wind power, etc.
- Power generation facilities such as nuclear energy and wind energy that need to be stored at night for daytime use
- Areas with restricted development of small thermal peaking power plants or other highly polluting power stations due to environmental issues

Core Technical Products

Bi-directional Storage Inverter



Intelligent

- Full digital control and human-machine dialog display
- Full lifecycle prediction management, efficient charging and discharging mode for batteries
- Multiple control strategies (PQ/VF/VSG, etc.) to suit different operating modes

Comprehensive

- Integrated customized solution, to support simultaneous access of load, battery, grid and solar power
- Advanced multi-parallel function, easy to expand, support redundant design
- Seamless switching between off and on grid status, uninterrupted power supply
- Strong power grid adaptability, with harmonic and three-phase unbalance suppression, wide reactive power adjustment range

Grid Solar Inverter



Flexible

- Adaptive to the voltage, frequency and phase of the grid
- Friendly human-machine interface, diverse communication methods
- Max. input voltage of 1000V, support panels of multiple specifications and string design
- Multi-directional efficient flow of energy, intelligent switching, smooth transition without fluctuation

Efficient

- Adopt new T-type three-level topology and the latest TI 4-core DSP
- MPPT tracking technology of variable step incremental admittance method, quick system response
- Efficiency up to 99%, MPPT accuracy > 99.9%, raising power generation efficiency by over 1%

Smart EV Charger



High efficiency

- Efficiency of DC charger up to 97%
- Constant power, constant current max. output

High intelligence

- Intelligent temperature control, independent current sharing, smart power distribution
- 12/24V adaptive

Optional modes

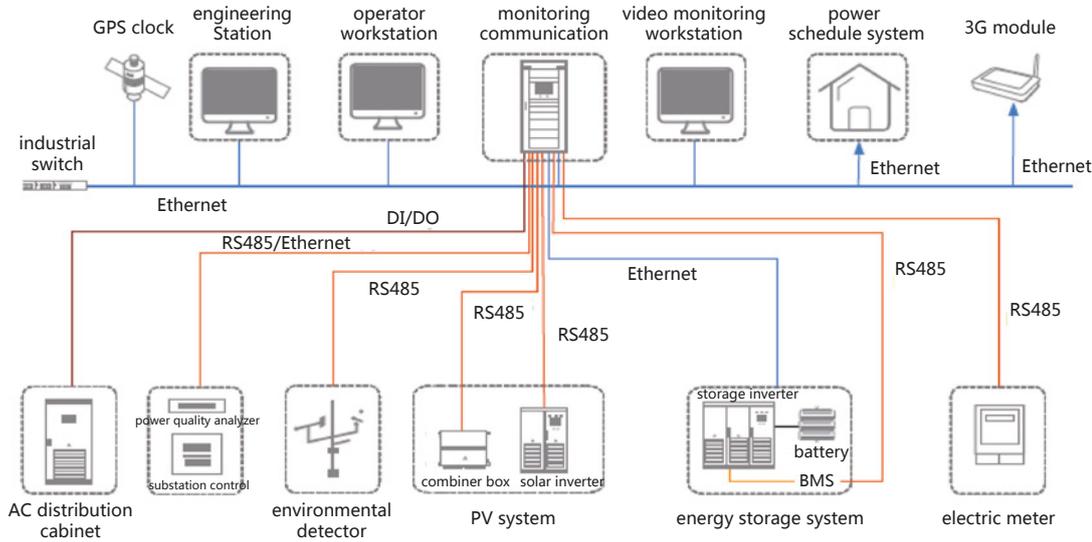
Multiple connectors with optional charging modes: cycle charging, simultaneous charging, etc.

Safety & reliability

Multiple protections: auto power off, overcharge protection and failure isolation, etc.

Smart energy management system

The smart energy management system independently developed by SSE is a comprehensive energy management operation and maintenance system that integrates various business structures such as equipments, communication, information and applications. It can realize intelligent management for the access, dispatching, and control of solar, wind, battery storage, new energy vehicles and other energy, traditional energy and power loads. The system will guide users to improve the power usage effectiveness, develop energy efficiency solutions and control measures that meet the user's characteristics, enhances the company's own potential and the safety and stability of the power supply system. It also reserves the future access to the monitoring and management interfaces of other energy sources such as heat, gas, water and oil supply.



Main Functions

- Energy distribution management
- EV charging statistics
- City electricity statistics
- Historical curve query
- PV power generation statistics
- Power plant's benefit analysis
- Charging and discharging energy statistics of storage

Key Features

- Complete information display on the SCADA monitoring interface
- Full lifecycle management of energy generation, transmission, storage, use, measurement, analysis and improvement
- Support multiple communication protocols, standard power dispatch interface



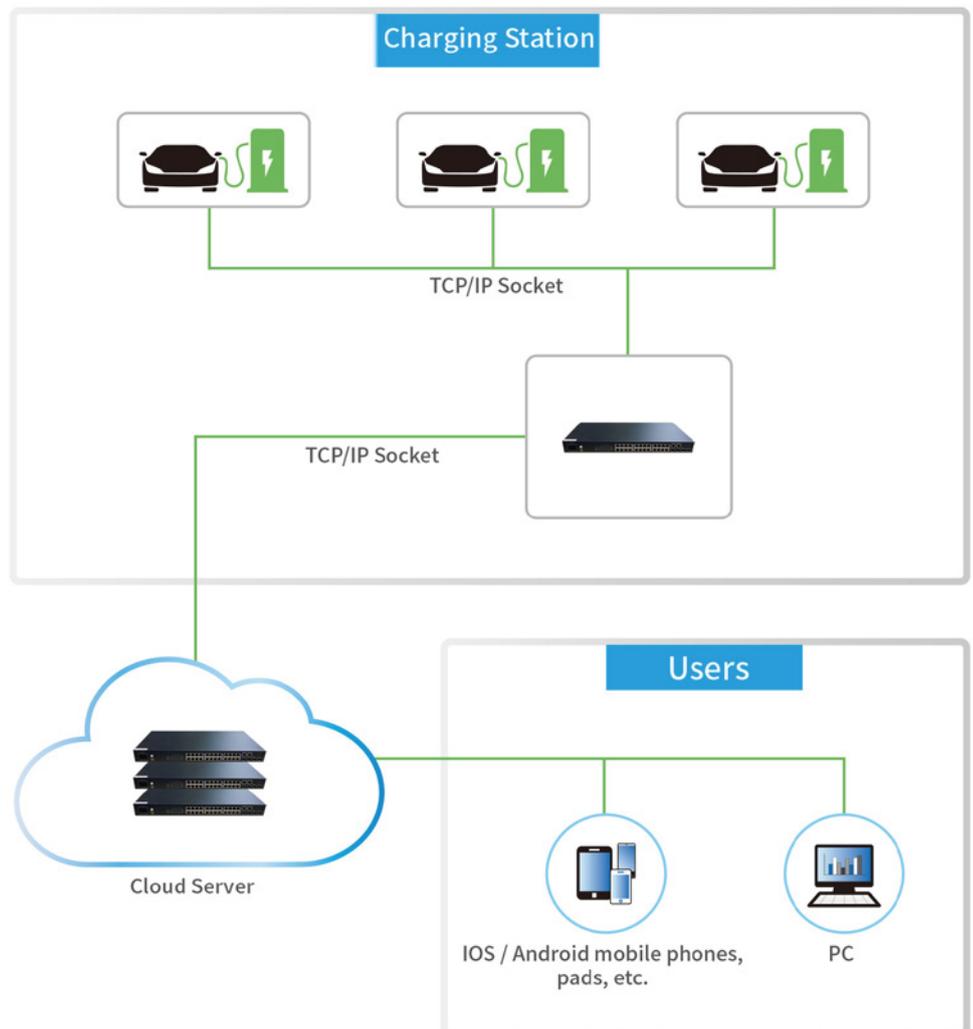
Solar+storage+charging project for SSE industry park



Solar+storage+charging project for Hubei Meiyang Automobile industry park

"SSE Cloud" Charging Management Platform

Based on new generation information technology including cloud computing, big data, IoT etc., "SSE Cloud" supports OCPP1.6. It offers a comprehensive solution of operation and maintenance management with a centralized monitoring center, big data analysis system and intelligent operation & maintenance system. The platform enables hierarchical management, data collection and analysis for charging points and stations in order to constantly improve its security and efficiency.



Advantages



Big Data/Cloud Computing

Supporting massive terminal monitoring, data storage and analysis



Open Platform

Supporting OCPP 1.6, source code open to charger manufacturers, operators and other partners



Flexible and Customizable

Providing customized development and design of industrial platform as needed



Safety and Stability

Supporting hierarchical authorization management, monitor all access interfaces and check the platform running status in real time



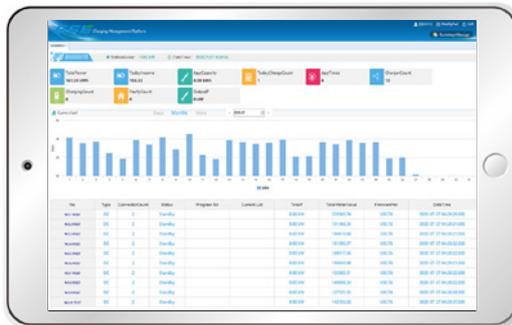
Full Service

Charging reservation, fault diagnosis, settlement, statistical analysis, real-time billing and other services

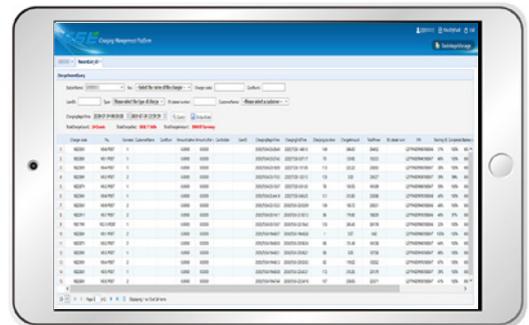
Features

- Mobile App: charging reservation, smart navigation, troubleshooting, etc.;
- Charger management: client program or mobile App (check charger status, daily/monthly report);
- Full record of charging information and alarm info for abnormal chargers
- Background collection of vehicle battery information, analysis of battery health and giving reasonable suggestions
- Customer credit analysis and management
- Processed information recordable and traceable

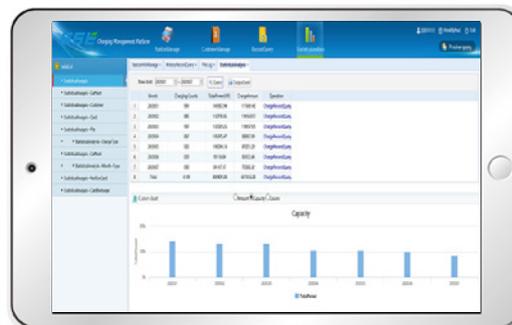
SSE Charging Management Platform



Homepage: overview, charging status



Charging record



Monthly report



Daily report

References



Bus (BYD) depot
Turku, Finland



Bus (Volvo) depot
Gothenburg, Sweden



Bus (Yutong) depot
Bergen, Norway



Beijing Daxing Airport
Solar + Storage + Charging system



Bilbao Airport, Spain



Narita International Airport
Tokyo, Japan



Chulalongkorn University
Bangkok, Thailand



Charging the first electric bus in
Canelones, Uruguay



Peshawar BRT project
Peshawar, Pakistan



CCS2 DC charger for BMWi3
Craiova, Romania



Electric truck charging project
BYD Netherlands



Liugong Electric Loader
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