







book

LinkedIn

Tik To

YouTube

### EV Charging Station

SCU provides complète solutions for electric vehicle charging infrastructure, energy storage, UPS, and data centers...



14&15 No.319.Xiangjiang Street High-Tech Zone. Shijiazhuang 050035 China

- +86 311 85903762
- enquiry@scupower.com
- https://www.scupower.com

Due to the continuous upgrading of products, the product information designed in this catalogue should be based on the physical object, we reserve the right to update or modify the data and other information at any time. The fin interpretation right belongs to SCU.

/ersion: 25.04-V1



# SCU ELECTRIC VEHICLE CHARGING INFRASTRUCTURE OVERALL SOLUTION

Sicon Chat Union Electric Co., Ltd



### **ABOUT US**

SICON Chat Union Electric Co., Ltd.(Abbreviation:SCU) Focuses on energy, power electronics and control technology, providing complete solutions for three major business areas:data center infrastructure,new energy vehicle charging, and green energy storage,offering sustainable energy and power management systems for global customers.





2003
established

2015
went public

500+

### **PRODUCT SERIES**

Charging Station















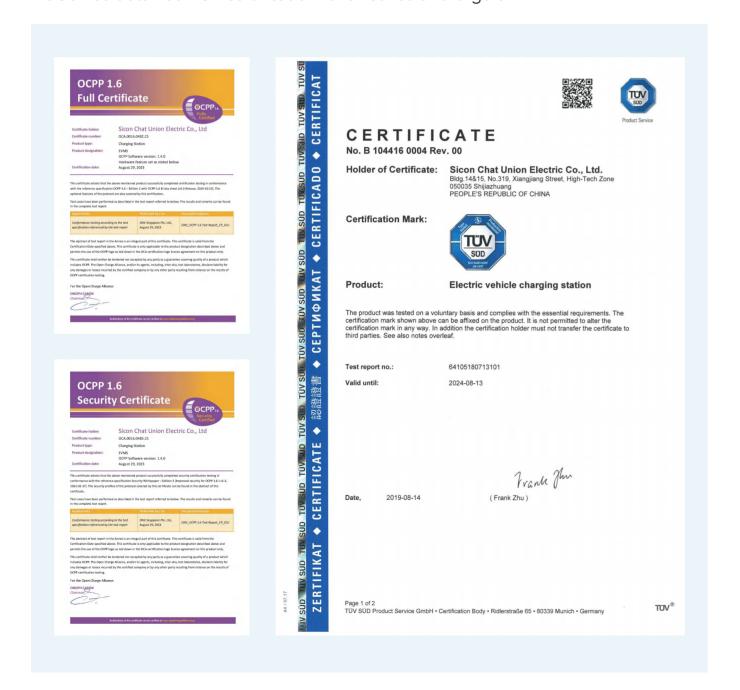


### **CERTIFICATIONS**

SCU is a certified charger vendor of OCA (Open Charge Alliance).

SCU Chargers are already compatible with complicated OCPP functions like Smart Charging with all 3 profiles, Composite Schedule, Whole Charger Reservation, Secured Connections etc.

SCU ensures to their clients that the implementation has been validated on conformance to the OCPP specifications by an approved independent test laboratory. Buyers of OCPP 1.6 compliant products can check which products are certified and are successfully tested for conformance to OCPP. SCU has obtained TUV certification for all series of chargers.



Application: public operations such as highway rest stops, petrol stations, airport etc.. private operations such as EV dealers, EV fleets etc.

Compatible vehicles: BMW, Volkswagen, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, OPEL, Fiat, Tesla, Smart, Mercedes Benz, BYD, Mazda, HONDA, Skoda, VOLVO, hyunori, JAGUAR, MorrisGarages, TataMotors, citroen, Mitsubishi, etc..





The PRO Series Charging Station is able to charge all current and next generation vehicles with CCS, CHAdeMO and AC Type 2.

The power covers 80kW ~ 480kW, and can be configurable dual connectors to meet the changing charging needs of customers.





UPTO 480kW HIGH POWER CHARGING

**80kW** to **480kW** DC

21"/34"/43" touchscreen display

97% overall efficiency

Max 760A charging current

150-1000V output voltage range



43 inch Display

15 inch Display



- Comply with multiple standards as CCS2, CHAdeMO, NACS, GB/T
- Supports 2 DC Connectors to form charging station simultaneously
- Overall efficiency > 97-%
- The standby consumption is 0W for the power module and < 30W for the charger
- equipped with three-type controller that integrates communication, control and monitoring, and supports

  Contactless charging terminals (Nayax)
- Perfect cable management, suspended storage to prevent cables from touching the ground
- High Resoulation Touch Screen Display:15/21/32/43 inch
- Fully Compatible with OCPP Protocol
- Supports RFID, APP, Debit/Credit Card reader
- Low operational noise
- Supports Multiple Languages
- Customizable

#### Model EVDS-80 EVDS-240 AC Input Power connection 3P+N+PE Voltage range 400VAC±20% Frequency 50/60Hz 364 A Nominal input current 115 A 240 kW 80 kW Power Power factor > 0.997 Overall efficiency ≥97% DC Output Voltage 50-1000VDC Constant power voltage 300-1000VDC Max Current 250 A 200 A **General Specifications** Output mode Multi-standard DC outputs (Mode-4), with AC (Mode-3) Connectors CCS2, CCS1, CHAdeMO, GB/T, NACS, AC Type 2 Display 15/21/34/43 inch (optional) ISO/IEC14443A, Mifare; RFID system 4G | LAN | Wi-Fi(Auto Switching from LAN to 4G) Network connection OCPP1.6J (OCPP 2.0 upgradable) Communication Protocols Environment Indoor / outdoor Operating temperature $-20^{\circ}$ C ~ $70^{\circ}$ C ( $-20^{\circ}$ C ~ $-35^{\circ}$ C, heating required) Storage Temperature -40 °C ~ +70 °C Operating humidity ≤95% non-condensing Altitude Up to 2000 m Protection degree IP55, IK10 < 65 dB Acoustic noise Compliance and safety CE, EN61851, EN62196, DIN70121, ISO15118, OCPP 1.6 Full Certificate, OCPP 1.6 Security Certificate

# SCU | 8 CLASSIC Series Charging Station The CLASSIC Series Charging Station is able to charge all current and next generation vehicles with CCS, CHAdeMO and AC Type 2. The power covers 80kW ~ 240kW, and can be configurable single, dual or triple connectors to meet the changing charging needs of customers.

9 SCU SCU | 10



#### **Applications:**

Highway rest stops, gas stations, airports, and other public operation sites; electric vehicle dealerships, electric vehicle fleets, and other private operation sites.

#### Compatible Vehicles:

Fully compatible with all major modern electric vehicles, including but not limited to: Tesla, BMW, Mercedes-Benz, Audi, Porsche, Volkswagen, BYD, NIO, XPENG, Li Auto, Volvo, Polestar, Hyundai, Kia, Nissan, Toyota, Honda, Mitsubishi, Peugeot, Citroën, Renault, Ford, General Motors (Chevrolet, Cadillac), Lucid, Rivian, Fisker, and more.







- OCA Full+Security Certified
- Comply with multiple standards as CCS, CHAdeMO, NACS, AC Type 2
- Multiple outputs:DC power covers 80kW ~ 240kW,AC
   Reliable, robust, modular system hardware power up to 43kVA
- The standby consumption is 0W for the power module
- and < 30W for the charger equipped with three-type controller that integrates communication, control and monitoring, and supports • Low operational noise Contactless charging terminals(Nayax)
- Supports CCS, CHAdeMO , NACS, and AC Type 2 charging outputs simultaneously Cloud based Remote Maintenance System
- Easy & fast Installation
  - High Resoulation Touch Screen Display
- Fully Compatible with OCPP Protocol Supports RFID, APP, Debit/Credit card reader

  - Supports Multiple Languages Customizable

Model	EVMS-60, EVMS-90, EVMS-120, EVMS-150, EVMS-180,EVMS-240	
AC Input for the DC Output		
Power connection	3P + N + PE	
Voltage range	400 Vac ± 20 %	
Frequency	50 Hz or 60 Hz	
Nominal input current & power	87A, 60KW / 130A,90KW / 174A,120kW / 217A,150kW / 260A,180kW	
Power factor	> 0.997	
Overall efficiency	97%(Power Module), 96.5% (System)	
DC Output		
Voltage	50Vdc-1000Vdc	
Max Current	200A(60kW) / 250A(200A optional)	
Nominal Power	60kW / 90kW / 120kW / 150kW / 180kW	
AC Output		
Voltage	400 VAC	
Current	63 A(default) / 32 A(optional)	
Nominal Power	43 kVA(default) / 22 kVA(optional)	
General Specifications		
Output mode	Multi-standard DC outputs (Mode-4), with AC (Mode-3)	
Connectors	CCS1, CCS2, CHAdeMO, NACS,AC Type 2	
	TYPE 2 Plug 43KW (default)	
AC-Interface	TYPE 2 Plug 22KW (optional)	
	TYPE 2 Socket 22KW (optional)	
Display	10.4" TFT Touch screen	
RFID system	ISO/IEC14443A, Mifare;	
Network connection	4G   LAN   Wi-Fi (Auto Switching from LAN to 4G)	
Communication Protocols	OCPP1.6J (OCPP 2.0 upgradable)	
Environment	Indoor / outdoor	
Operating temperature	$-35^{\circ}$ C ~ $60^{\circ}$ C( $-35^{\circ}$ C ~ $-20^{\circ}$ C heating required)	
Storage Temperature	-40 °C to +70 °C	
Operating humidity	≤95% non-condensing	
Altitude	Up to 2000 m	
Protection degree	IP55 , IK10	
Acoustic noise	<65 dB	
Compliance and safety	CE, IEC EN 61851, EN 62196, DIN 70121, ISO 15118, OCPP 1.6 Security Certificate	
Size(W*D*H, mm)	dual 1150*625*2000; triple 1250*625*2000	

#### SCU | 12

# BASE Series Charging Station

The BASE Series Charging Station is able to charge all current and next generation vehicles with CCS, CHAdeMO, NACS, and GB/T. Configured with DPM1000/40 charging modules, Built-in DSP in the charging module realizes intelligent management and digital control functions. Support RFID Card charging(Mobile app optional) ,and support reservation function. The power covers 200kW~320kW, and can be configurable dual connectors to meet the changing charging needs of customers. Self-identifying electric vehicle BMS protocol function, mufti-models compatible charging.



### Overview

Multiple Power Options: 120kW, 160kW, 240kW, 320kW, 480kW

Wide Output Range: DC output voltage: 50-750VDC / 50-1000VDC

Constant power voltage range: 300–1000VDC

Unique Cooling Design: Separate air ducts for hot and cold airflow

Dual-Gun Charging: Supports simultaneous charging of one vehicle with two connectors



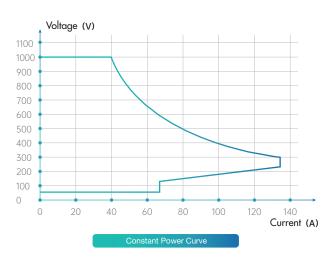


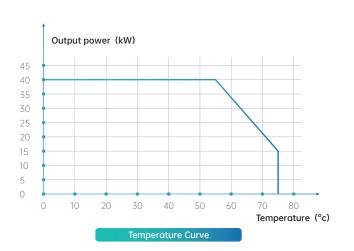
- OCA Full+Security Certified
- Comply with multiple standards as CCS, CHAdeMO, NACS, GB/T
- Multiple outputs: DC power covers 200kW~320kW, and 2 DC Connectors could be used simultaneously
- The standby consumption is 0W for the power module and < 30W for the charger equipped with three-type controller that integrates communication, control and monitoring, and supports contactless charging terminals(Nayax)
- Supports CCS, CHAdeMO, NACS, and GB/T, any one or two standards to form charging station
- Cloud based Remote Maintenance System
- Reliable, robust, modular system hardware
- Easy & fast Installation
- High Resoulation Touch Screen Display
- Fully Compatible with OCPP Protocol
- Supports RFID, APP, Debit/Credit Card reader
- Low operational noise
- Customizable
- Supports Multiple Languages

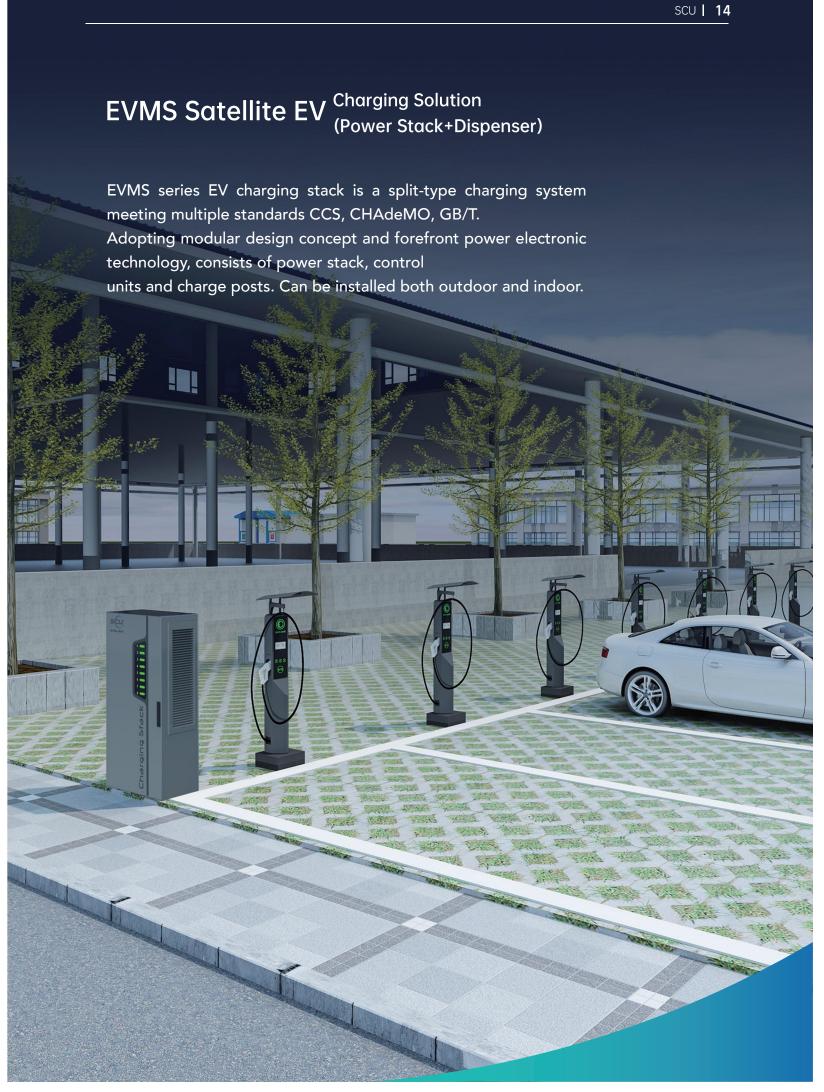
Model	EVDS-240	EVDS-320	
AC Input for the DC Output			
Power connection	3P + N + PE		
Voltage range	400 Vac ±	= 20 %	
Frequency	50 Hz or	60 Hz	
Nominal input current	348A	462 A	
Power factor	> 0.9	97	
Overall efficiency	97%(Power Module),	96.5% (System)	
DC Output			
Voltage	50 ~ 1000	OVDC	
Constant power voltage	300 ~ 100	00VDC	
Max Current	250A(300A /400	OA optional)	
Nominal Power	120 ~ 240kW	160 ~ 320kW	
General Specifications			
Output mode	Multi-standard DC o	outputs (Mode-4)	
Connectors	CCS1, CCS2, CHAde	CCS1, CCS2, CHAdeMO, NACS, GB/T	
Display	10.4" TFT Co	10.4" TFT Color screen	
RFID system	ISO/IEC14443	BA, Mifare;	
Network connection	4G   LAN   Wi-Fi(Auto Swit	ching from LAN to 4G)	
Communication Protocols	OCPP1.6J (OCPP 2	2.0 upgradable)	
Environment	Indoor/o	Indoor / outdoor	
Operating temperature	-35°C ~ 60°C ( -20°C ~ -3	5°C, heating required)	
Storage Temperature	-40 °C ~ -	-40 °C ~ +70 °C	
Operating humidity	≤95% non-co	≤95% non-condensing	
Altitude	Up to 20	Up to 2000 m	
Protection degree	IP55 , IK10		
Acoustic noise	<65 dB		
Compliance and safety	CE, EN 61851, EN 62196, DIN 70121, ISC	15118, OCPP 1.6 Security Certificate	
Size(W*D*H, mm)	dual 1150*625*2000; triple 1250*625*2000		

#### **Constant Power Curve**

\_\_\_\_\_







### Overview

Application: Parking lots and charging station where multiple DC charging service required.





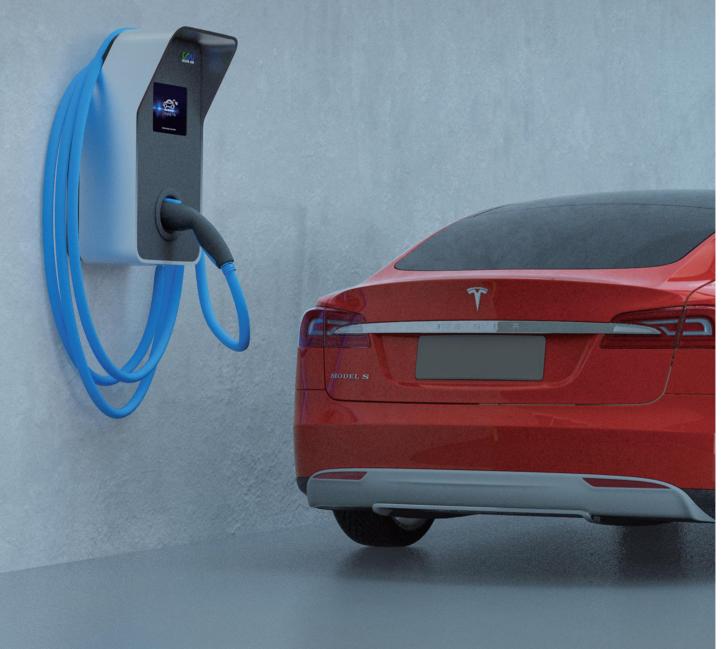
- Comply with CCS, CHAdeMO, NACS,GB/T; Output current 200A,250A,300A,400A or 500A (liquid-cooled).
- Flexible power distribution function, dynamically adjust output power according to the demand of electric vehicles
- 21-inch display supports charging operation and advertising video playback at the same time.
- Supports Web & mobile based payment methods.
- Insulation monitoring function, automatically turn off output to ensure safe charging.
- High adaptability of temperature range, isolated heat dissipation air ducts, power heat dispassion is separat-
- ed from control circuit to ensure dust-free control unit.
- High efficiency, high reliability, ultra low radiation, fast maintenance, flexible capacity expansion, energy
  efficiency and environmental protection.

	EVDS-240	EVDS-320	EVDS-480	
Environment	Outdoor / Indoor			
System capacity	240kW	360kW	480kW	
Maximum outlets	6	8	12	
Output capacity of each route	0~120 kW or 0~120 kW	0~160 kW or 0~320 kW	0~240 kW or 0~480 kW	
Input voltage		400VAC±20%		
Input voltage range	260V~530V	(260V~304Vac, output power de	erating 50%)	
Current share precision		<3%		
Power factor		>0.997		
Working frequency		50/60HZ		
Output voltage		50Vdc-1000Vdc		
Current regulation accuracy	<1%			
Voltage regulation accuracy	<0.5%			
Current share precision		<3%		
Overall efficiency	97%	97%(Power Module), 96.5% (System)		
BMS auxiliary power supply		12V/10A		
RFID system		ISO/IEC14443A, Mifare;		
Network connection	4G   LAN	Wi-Fi (Auto Switching from LA	N to 4G)	
Communication Protocols	C	OCPP1.6J (OCPP 2.0 upgradable)		
Operating temperature	-35°C	-35°C ~ 60°C(-20°C ~ 35°C heating required)		
Storage Temperature		-40°C ~ +70°C		
Operating humidity	≤95%, non-condensing			
Altitude		Up to 2000meters		
Protection degree		IP55, IK10		
Acoustic noise		< 65dB		
Compliance and safety	CE, IEC EN61851, EN62196, DIN70121, ISO15118, OCPP 1.6 Security Certificate			

# EVMS DC Wallbox charger

The EVMS DC Wallbox charger is able to charge all current and next generation vehicles with CCS and CHAdeMO.

The 30kW charging station is a configurable single or dual outlet wall mounted DC fast charger, supporting the changing needs of each customer. With compact, space-saving and attractive design, it is ideal for a wide range of installations, both indoors and outdoors available.





#### Application:

Service station, Public corridor charging along the highways, Commercial fleet operators, EV Infrastructure operators, EV Garage and EVSE providers.





- OCA Full+Security Certified
- DC power up to 30kW
- Supports a single Ccs1/CCS2/CHAdeMO/NACS connector
- Cloud based Remote Maintenance System
- Overall efficiency > 96.5%
- Easy & fast Installation
- High Resoulation Touch Screen Display
- Built-in safety measures
- Robust design
- Fully Compatible with OCPP Protocol
- Supports RFID, APP, Debit/Credit Card reader
- Low operational noise
- Supports Multiple Languages

**19** | SCU

Model	EVMS-30	
System capacity	30kW	
Input parameters		
Voltage	400Vac, 3P+N+PE	
Voltage rage	304V~456Vac	
Power factor	>0.997	
Frequency	50/60Hz	
Output parameters		
Output interface	Single output CCS1/CC2/ CHAdeMO/ NACS/ GB/T	
Voltage	50 ~ 1000Vdc	
Current	Maximum 100A, maximum 30kW	
Power	30kW	
Overall efficiency	97%(Power Module), 96.5% (System)	
Other parameters		
Display	10.4" TFT Touch screen	
RFID system	ISO/IEC14443A, Mifare;	
Network connection	4G   LAN   Wi-Fi (Auto Switching from LAN to 4G)	
Communication Protocols	OCPP1.6J (OCPP 2.0 upgradable)	
Operating temperature	$-35^{\circ}$ C ~ $60^{\circ}$ C( $-20^{\circ}$ C ~ $35^{\circ}$ C heating required)	
Storage Temperature	-40°C ~ +70°C	
Working Humidity	5%~95%, non-condensing	
Operating humidity	≤95%, non-condensing	
Altitude	Up to 2000meters	
Protection	IP55, IK10	
Use environment	outdoor/indoor	
Acoustic noise	<55dB	
Environment	outdoor/indoor	
	Leakage detection and protection ; Over-voltage and Under-voltage protection	
Custom protection	; Self-checking recover ; Over-temperature protection ; Double Lightning	
System protection	protection; Emergency stop button protection; Power failure data records.	
Compliance and safety	CE, IEC EN61851, EN62196, DIN70121, ISO15118	
Dimension(W*D*H)	460*345*735	

# EVMS-ONE SERIES EV CHARGER

The ONE Series is an innovative EV charging solution that integrates a lithium battery-based energy storage system (ESS) to support and enhance charging performance. By combining stored energy with grid power, it effectively manages energy flow, reducing the load on the grid during peak hours and ensuring reliable charging even in areas with limited power infrastructure. This system is designed to deliver high charging power with lower grid dependency, making it ideal for applications where power availability is restricted or where energy costs fluctuate. Its sleek, compact form makes it a perfect fit for both commercial & industrial fleet.

Built with a modular, service-friendly architecture, the EVMS ONE Series ensures stable operation, easy installation, and flexible expansion options. Intelligent features like automatic plug detection and dynamic charging schedules streamline operation, improve energy utilization, and enhance the user's charging experience.





-----

- Space-Efficient and Quiet Operation: Designed with a slim profile and minimal footprint, the charger fits seamlessly into tight parking environments. It ensures stable performance, straightforward user interaction, and ultra-low noise during operation.
- High Output, Low Input Demand: Delivers powerful charging performance even when the grid input
  is constrained, offering higher output capacity than many conventional superchargers in limited
  infrastructure scenarios.
- Modular Battery Expansion: Easily scalable with optional battery modules—expandable up to 2×76.8kWh. Smart internal architecture ensures optimal power allocation between modules for maximum efficiency.
- Enhanced User Interaction: Supports automatic connector detection and intelligent charging initiation.
   LED indicators provide clear, real-time feedback on charging status and battery levels, enhancing convenience and usability.
- Smart Grid Integration with AI: Combines on-site battery storage with limited grid supply to deliver output from 60kW up to 480kW. Equipped with an AI-powered system that integrates weather forecasting, dynamic pricing from aggregators, and advanced energy management protocols.
- Future-Proof and Broad Compatibility: Supports OCPP 1.6J protocol with upgradability to OCPP 2.0.1. Compatible with the vast majority of electric vehicles currently on the market, ensuring flexible and future-ready operation.





**EVMS-ONE** 

**EVMS-ONE +** 

Model		EVMS ONE	EVMS ONE+	
	Charging power	60 ~ 240kW	320 ~ 480kW	
Charaina	Output voltage range	300 VDC-1,000 VDC		
Charging Function		300 VDC-1,00	0 VDC	
-unction	Maximum output current	250A		
	Output mode	2*CCS2 (NACS, GB/T, CHAdeMO optional)		
	Cable length	5m		
	Input power supply	3-phase+N+PE		
Maina Innut	Power supply type	TN-S		
Mains Input	Input frequency	50Hz		
	Input mains range	400V( ± 10	%)	
	PCS power	50kW		
	BATT type	LFP		
Dotton.	BATT voltage	768Vdc		
Battery	BATT capacity	76.8kwh	2*76.8kwh	
Parameters	BATT cabinet	1	2	
	Discharge rate	3C		
	BATT lifecycle	25°C 2C 80%DOD EO	L80% ≥4000次	
Mechanical	Battery heat dissipation	Air conditioning cooling		
	System heat dissipation	Air-cooled cooling		
Data	Housing material	Sheet metal ho	ousing	
Advertisement	Dimension and resolution	43 inches, 2K (19	20*1080)	
	Advertisement content update	Local USB, Ethernet update or remote update		
Display	Night mode	Automatic adjustment of monitor		
	UV resistance	Available		
	HMI	43 inch high-definition	n touch screen	
Jser Interface	RFID	Available (supportin	ng M1 card)	
	Payment terminal	NAYAX		
	Dimension (H*W*D, m)	2200*1000*1900	4400*1000*1900	
	Total weight (t)	1.2	1.8	
	Certification	IEC 61851-23, ISO 15118, DINspec70121, OCPP 1.6 Security Certificate		
	Protection type	Charging system: IP54;Ba	ttery system: IP67;	
	and degree	LCD screen: IK8;Payment terminal: IK8;		
	Operating temperature range	-20°C ∼ +4	0°C	
General Data	Communication protocol	OCPP 1.6J, developed u	ip to OCPP 2.0.1	
	DC meter	MID integrated DC meter, with the meter exposed.		

HECS is a complete system that stores solar energy to provide backup protection in case of grid failures. The system identifies power outages, supplies power to your home and electric vehicle with backup energy, and replenishes itself using sunlight to ensure your household appliances can remain operational for extended periods.



- DC Coupling System
- Built-in PCS (15kW~25kW) , PV (15kW~25kW) , Battery storage (30kW·h~60kW·h) , EV charger (15kW~30kW) ;
- Value: Liven up public and residential charging with customized solutions
- Flexible: OCPP, Wifi, Ethernet, 4G, RFID Reader
- Remote FW Upgrade & Monitoring System
- Standard: IEC 61851, ISO 15118-20
- APP: All home appliances can be accessed by App





• Smart Management:

Monitor and control your solar inverter, battery storage, EV charger, and home appliances.

Usage Overview:

Track your energy performance in real-time and identify peak usage times for your home through usage data analysis.

Automatic Mode:

Our energy Al optimizes home energy usage automatically, minimizing grid costs for efficient utilization.

### All home appliances can be accessed by your SCU APP



## DPM Series Power Module Efficient & Reliable Charging

SCU DPM Series charging module is a built-in power module designed for DC charging stations. It is available in two versions based on the input power type: AC-DC and DC-DC. The module comes in 30kW, 40kW, and 60kW power ratings.

The charging module converts different input power sources into DC power that can be used by electric vehicles, providing a reliable DC power supply for devices requiring direct current. It features a wide DC output voltage range, ensuring compatibility with different battery packs.

The module adopts three-phase active power factor correction (APFC) technology, interleaved three-level series resonance soft-switching technology, and digital control technology, offering high reliability, availability, maintainability, efficiency, and power density.



30kW/ 40kW AC-DC Power Module

### DPM1000/30CII DPM1000/40C

Rated Power: 330kW/40kW

Input Voltage Range: 260Vac~480Vac

DC Output Voltage Range: 550Vdc~1000Vdc

Efficiency: 97.3%

Dimensions:  $300 \times 465 \times 88 \text{ (W} \times D \times H, mm)$ 



### DPM1000/60C

Rated Power: 60kW

Input Voltage Range: 260Vac~480Vac

DC Output Voltage Range: 50Vdc~1000Vdc

Efficiency: 98%

Dimensions:  $330 \times 480 \times 132$  (W × D × H, mm)





### Isolated DC-DC Power Module

### IDDM1000/30CII

Rated Power: 330kW/60kW

DC Input Voltage Range: 627Vdc~865Vdc

DC Output Voltage Range: 50Vdc~1000Vdc

Efficiency: 98%

Dimensions:  $300 \times 465 \times 88 \text{ (W} \times D \times H, mm)$ 



- Zero standby power consumption in both active and reactive power modes, reducing long-term energy costs.
- No AC contactor design lowers charger hardware cost and simplifies the system.
- Intelligent N+1 modular redundancy with flexible sleep/wake modes enhances fault tolerance and lifespan.
- Supports remote monitoring, control, and firmware upgrades without removing the module, making maintenance faster and easier
- Full SiC (silicon carbide) components ensure high-speed switching, low resistance, and high voltage endurance.
- Class B EMC design provides superior interference suppression and broad civilian application suitability.

Items	AC-DC Power Module	DC-DC Power Module
Model NO	DPM-1000/30 DPM-1000/40 DPM-1000/60	IDDM-1000/30
Output Power	30kW/40kW/60kW	30kW
Input Voltage	260Vac~480Vac(260~304VAC, output power deration 50%)	627Vdc ~ 865Vdc
Output Voltage	50-1000VDC	50-1000VDC
Constant Range (V)	300-1000VDC	300-1000VDC
Efficiency	97.3%	98%

Model		DPM-1000/30	DPM-1000/40	DPM-1000/60	IDDM-1000/30
	Rated Power	30kW	40kW	60kW	30kW
	Voltage	380VAC Three Phase		627Vdc ~ 865Vdc	
Input	Voltage Range	260V~480V (26	60~304VAC, output	deration 50% )	02/ Vac ~ 003 Vac
iiiput	Frequency		50/60HZ		/
	Power Factor		> 0.99		/
	Efficiency		97.3%		98%
	Voltage	50VDC-1000VDC			
Outout	Constant Range (V)	300-1000VDC			
Output	Flow Accuracy	< 0.5%			
	Stabilized Voltage Accuracy	< 0.5%			
	Peak to Peak Noise Voltage	< 1%			
Switch	Overshoot Amplitude	< 1%			
Slow St	art Time	≤ 5S			
EV Charging Mode		GB/T, CCS, NACS, CHAdeMO			
Cooling		Forced Air Cooling			
Working Temperature		-20°C ~+60°C, derate to 60% of rated power at 50°C ~60°C			
Relative Humidity		0~95%, 40±2°C Non-condensing			
Altitude		2000 m			
Size (W	/*D*H)mm	300*4	65*88	330*480*132	300*465*88

#### Constant Power Curve

-----









29 | SCU

### **V2G MODULE**

Application: Peak Shaving and Valley Filling for Grid; Energy Management Optimization; Emergency Backup Power Supply; Microgrid Solution, Advanced Charging Infrastructure.





The development of Vehicle-to-Grid (V2G) services significantly benefits the electric power system by facilitating the large-scale integration of renewable energy into the energy mix. A substantial portion of the value generated from the flexibility of electric vehicles (EVs) will be returned to end-users as rewards, conferring a competitive edge to this charging solution and offering a clear incentive for users to embrace it.



- Full high frequency isolation design to ensure safety between the battery and the grid/load
- Multiple levels of software and hardware overcurrent, overvoltage, overtemperature protection
- Dual DSP design, stable and reliable performance
- Supports module parallel and CAN communication
- Reliable parallel function, easy power expansion, up to 12 modules in parallel
- AC/DC adopts three-level technology, the max efficiency is 98%
- DC/DC adopts soft switching resonance technology, the max efficiency is 98%; With STS module.supports grid-connected to off-grid seamless switching
- Charging, inverter two functions, charge and discharge in one, low cost
- Covers multiple battery voltage levels of passenger cars (100V~750Vdc), and the battery voltage range is wide
- Supports 19-inch standard rack installation, compact structure
- Module hot swap design, flexible system configuration

			VTEE00/04		
	Model	VTE500/7	VTE500/21		
Charging					
Ac Side	Nominal voltage	220Vac (single-phase)	400Vac (three-phase)		
	Voltage range	187Vac ~ 253Vac	340Vac ~ 460Vac		
	Frequency	50 Hz or 60 Hz(Two modes of adaptive)			
	Input current	≤37	.4 A		
	Power factor	≥0.99, Full load			
	Current share precision	<3%, F	Full load		
	Output voltage	200 ~ 500Vdc			
	Nominal output current	35A	105A		
Battery Side	Nominal Power	7kW	21kW		
Parameter	Charging efficiency	95%max (40% ~ 80% load)			
	Voltage regulation accuracy	±0.5%			
	Current regulation accuracy	±1%			
	Ripple coefficient	<1%			
Dischargin	g				
Battery Side	Battery voltage range	200 ~ 5	500Vdc		
Parameter	Discharge current	35A Max	105A Max		
		V2G (Grid-connected discharge)			
A - C'-l-	Voltage range	187Vac ~ 253Vac 340Vac ~ 460Vac			
Ac Side	Frequency	50/60±5% (50Hz/60Hz (Two modes of adaptive)			
Parameter	Output power	7kW	21kW		
	Efficiency	95%max (40%	6 ~ 80% load)		
Other Pro	perties				
Protection Function	Overvoltage protection	Overcurrent protection、Short circuit prot	tection、Overtemperature protection		
	Operating temperature	-25 ~ 60 °C, Output pov	ver derates above 45 ° C		
Other	Storage Temperature	-40 ~ 75 °C			
Parameter	Acoustic noise	<60dB			
i di dillietei	Cooling	Forced air cooling			
	Operating humidity	≤95% non-condensing			
Certification Standard		IEC 61851			

SCU | 30

### **EVMS-CSU** | SECC Charging Controller

The charge controller III utilizes a powerful CPU to integrate all charge control logic, data processing, function expansion, extended communication, and data analysis, providing a "heart" for charger ,so that charger can adapt to globally recognized standard charging guns (GB/T, CCS1, CCS2, Ac Type2, CHAdeMO, NACS).





- Multiple protocol interfacing functions: The product can interface with multiple large domestic operating
- platforms; interface with the international OCPP 1.6J (2.0) protocol operation platform; and achieve
- ISO15118PnC charging function.
- Compatible with multiple charging standards: GB/T、CCS1、CCS2、Ac Type2、CHAdeMO、NACS
- Powerful extended functions: It allows for extended functions including large-sized advertising screens,
- multi-channel communication, and charging terminals
- Independent CPU, efficient data processing and analysis capabilities
- Support multilingual systems from around the world.
- Compatible with multiple metering gauges
- Support remote communication, remote data maintenance, and remote fault handling for charging piles

Type III Charge Controller		
Model	Content	
Charge mode	GB、CCS1、CCS2、Ac Type2、CHAdeMO、NACS	
Input voltage	8 VDC-30 VDC (rated voltage: 12 VDC and 24 VDC)	
Size (W*L*H, mm)	300*150*55	
	UART, RS232, CAN 2 (GB/T27930)	
	Ethernet:10/100M(RJ45)	
Interface	USB:Mini-BType	
	LVDS	
	Analog sampling	
	GPIO	
Communication Protocols	OCPP1.6J (OCPP 2.0 upgradable)	
Operating temperature	-40°C ~ +85°C	
Compliance and safety	IEC61851, ISO15118, GB/T18487, GB/T27930, UL2202	

### **EVSE-PLC**

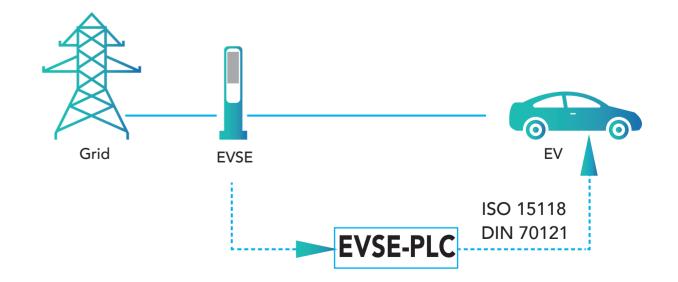
EVSE-PLC is a PLC(Power Line Communication) based modem for communication between EV and EVSE. It is suitable for DC charging, and supports conversion of CAN, RS232/485 communication protocol to ISO/IEC 15118 and DIN 70121 standards. It can be installed inside CCS2 DC chargers to realize intelligent interconnection between EV and EVSE.





- Robust, portable and easy to be embedded inside EVSE and EV;
- ISO/IEC 15118, DIN 70121 compliant communication;
- RS232, RS485, CAN and Ethernet interface to power elcetronics;
- It can be used with EVSE, or to be installed in EV to realize the interconnection and communication between EVSE and EVs of different communication protocols;
- Short development cycle, quick docking between different EVSE and EV;
- Parralle support for multiple vehicles;
- Instantly handling of abnormal charging process;
- OTA upgrade compatible;
- TUV SUD certified.

#### Diagram



# Renewable Energy Charging Station

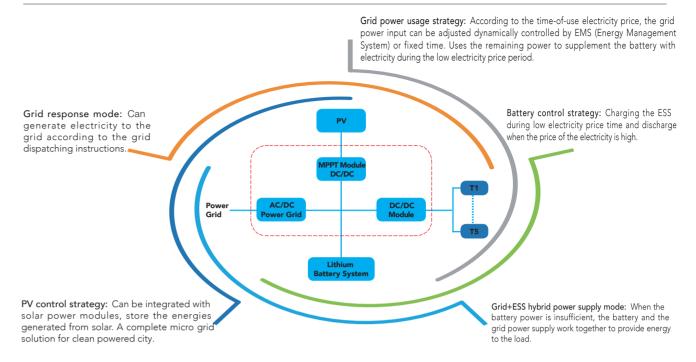
New Energy lintegrated Charging Station is combined with PV, energy storage battery, bidirectional converter and charging facilities, uses modular and standardized design concept, standard integrated charging overall solution achieves rapid and flexible deployment.

The interior of container is divided into equipment area and user resting area, the exterior of container is charging parking space, user can charge with charging terminal inserted.



- Convenient operation, high reliability, high security, high integration, low cost, low energy consumption.
- The system supports grid-connected and off-grid operation, can be used as backup power supply.
- The system can access the cloud platform to achieve unified monitoring management.





Model	EVMS-30	EVMS-30	
AC parameters(grid-connected)			
Rated output power(kW)	50 ~ 250kW	100 ~ 500kW	
Rated grid voltage(V)	3W+N,380		
Grid voltage range	-15	5%~+10%	
Rated grid frequency(hz)		50	
Grid frequency range(hz)		±2	
Total current waveform distortion rate	<3%(at	t rated power)	
Power factor adjustable range	-(	0.9~+0.9	
Overload capacity	≤105%: long-term operation;[105%, 11	0%] :running time≥10min;>110%:stop running	
Fast charger parameters	9 ,		
System capacity	240KW	480KW	
Output voltage	50VD	C-1000VDC	
Constant power range	300V-500V&600V-1000V (500V-600VDerat	ing output, the maximum output current is 50A)	
Voltage regulation accuracy		<1%	
Output ripple		<0.5%	
BMS auxiliary power		12V	
Standard DC charging terminal	250A*3	250A*5	
Liquid-cooled DC charging terminal	500A*1	500A*1	
Battery interface parameters		3007	
Rated voltage	<del>-</del>	768VDC	
Voltage range		ng battery cell voltage 2.7V-3.6V)	
Rated charging current	145A	290A	
Maximum charging current	170A	340A	
Rated discharge current	290A	506A	
Maximum discharge current	343A	600A	
PV access parameters	J+J/A	000A	
PV access voltage range	20	00V-700V	
MPPT voltage range		00V-700V	
Suggested string format		eneer 14 strings 8 parallels	
Maximum input current	30000 8 14 30000 00	135A	
Basic parameters		133A	
Maximum efficiency	F	lli +il i- 0/9/	
Dimension(W*D*H)		he charging terminal is 96%	
Protection class	800*1000*2000	1600*1000*2000	
Range of working temperature	Outdoor IP54		
Operating humidity(non-condensing)		C(>45°Cderating)	
		0~95%	
Temperature control method		(optional intelligent heating)	
Maximum working altitude(m)		2000 derating)	
Communication Interface	RS485、0	CAN、4G、LAN	

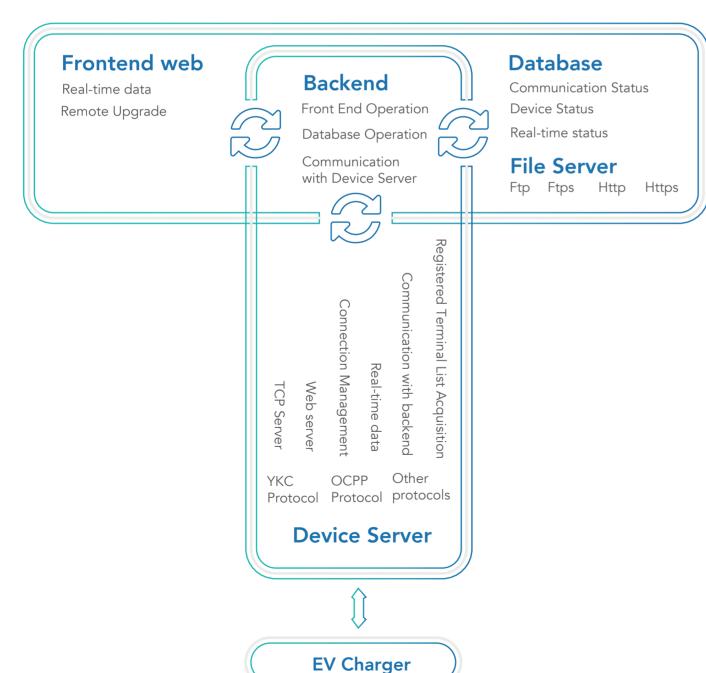
### Remote Maintenance System



Client can take great advantage of using our Remote Maintenance System to access the charger remotely from anywhere in the world & save cost of deploying people to the sites.

Real time monitoring of the charging status, power module status, change settings, downloading logs, Fw management etc.

Remote Debugging functionality gives you remote access to the monitoring of real time communication data between the charger & EV.



The system identifies and protects data and system assets through three foundational dimensions of information security:

Confidentiality

Ensure that confidential information can only be accessed by authorized individuals:

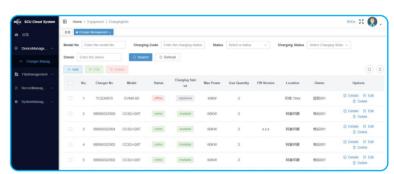
Integrity

Ensure accuracy and credibility of information;

Availability

Ensure that information and systems are accessible and available when needed;







### **Real Time Monitoring**

Clients are able to monitor the connector status, charging data, power module status, alarms etc. in real time. No need to download special software, any browser works

### **Change Configuration**

Clients are able to change settings/ configuration of the charger according to their needs. This function comes very handy when any settings need to tweak and it has to be done remotely

### Remote Debugging

This is a great feature we have implemented. Client can monitor all the communication between the charger and EV, communication between the charger & backend system. If any error occurs during operation, engineers can have real time monitor and solve it accordingly

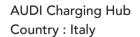
**37** | SCU SCU | 38

### **CLASSIC CASE**









Product : EVMS Satelitte & EVMS Classic Series



Public Transportation Project Country: Israel

Product : EVMS Satelitte & EVMS Classic Series



SHELL Gas Station Project Country: Bulgaria

Product : EVMS Satelitte Series



Commercial Charging Project Country: Turkey

Product : EVMS Classic & Base Series



BMW Charging Hub Country: Hong Kong (China)

Product : EVMS Classic & EVMS

Wallbox Series

PTT OR Gas Station Project Country: Thailand

Product : EVMS PRO & EVMS Classic Series