

# **EV Charging Stations**

SAFE, FAST AND RELIABLE











# SETEC 60kW EV FAST CHARGING STATION

#### SAFE, FAST AND RELIABLE

CCS Combo 1 or Combo 2 + CHAdeMO 60KW
EV charging station is Combined with CHAdeMO
and CCS Combo 1 or 2, Dual connectors, Fast
charging Station. That can be fit for all CHAdeMO
and CCS Electric Cars. CCS Combo 1 is for
American EVs, CCS combo 2 is for European EVs.
CHAdeMO is for Japanese and Korea EVs.
SETEC Power 60kW DC Quick charging station
offers Electric Vehicle owners an opportunity to
charge their car safely and quickly. A typical electric
car with 24kWh battery pack may be charged as quickly
as less than 10 minutes to get up to 80% of its capacity.
SETEC combines industry standardization with advanced



charging technology to support next-generation electric vehicles. Its multi-protocol design allows for easy tailoring to support CHAdeMO and CCS standards for DC fast charging applications. Payment & billing platform solutions enable easy and secure payments via station payment terminals and RFID card.

#### **FEATURES**

- •Built-in safety measures •User friendly interface
- •Flexible multi-protocol design •CHAdeMO and CCS combo1 or 2 compatible

TYPE2 AC Charger 22kw/43kw Optional

- •OCPP •Durable enclosure
- Wide temperature range: -25°C to +65°C Data management and metering options
- •Multi-connector are suitable for all the EV cars.
- •Multi-language to meet for different end users.
- Touch Screen to easy operation and view status.
- •Obvious signal light shows charging status. •Two side doors for checking inside easily.
- •Emergency button to stop immediately. •Two side doors for checking inside easily.
- Tap RIFD card to start charging. Charge modules be inserted easily.

#### **APPLICATIONS**

- Service station operators
- Public corridor charging along the highways
- Busy urban areas
- Commercial fleet operators
- •EV Infrastructure operators and EVSE providers

# TECHNICAL SPECIFICATIONS

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System

DC fast-charging station

**BMS** Communication

CAN2.0 [CHAdeMO]/ PLC [Combo]

**Charging Plugs** 

CHAdeMO and CCS 1 or 2,

/ Type 2 or Socket Optional.

Cooling Forced Ventilation

Display 7 inch LED Touch Screen

Operating temperature -25° C to +65° C

Storage temperature -40° C to +70° C

Relative humidity 20% to 95%

Environment Indoor / outdoor

Input

AC power connection 3P + PE

Input voltage range 305-520 VAC (3 phase)

Frequency 40-65HZ

Power factor 0.99

Current THD ≤5%

Input under-voltage protection Yes

Output

Output voltage (50-500Vdc)

Output current 120-125A

Output power 60KW

Output over-current protection Yes

Output short-circuit protection Yes

General

Protection degree IP54











# SETEC POWER 120kW DC QUICK

SAFE, FAST AND RELIABLE

Charging station offers Electric Vehicle owners an opportunity to charge their car safely and quickly. SETEC combines industry standardization with advance charging technology to support next-generation electric vehicles. Payment & billing platform solutions enable easy and secure payments via station payment terminals and RFID card.

### **Features**

- Built-in safety measures
- User friendly interface
- Flexible multi-protocal design
- CSS protocol compatible
- OCPP
- Durale enclosure
- Wide temperature range: -25°C to +65°C
- Data management and metering options

### **Applications**

- Service station operators
- Bus Station

- Commercial fleet operators
- EV Infrastructure operators and EVSE provider

#### **Technical specifications**

System

Type Single DC fast-charging station

Operating temperature -25° C to +65° C

Storage temperature -40° C to +70° C

Relative humidity 20% to 95%

Environment Indoor / outdoor

Input

AC power connection 3P + PE

Input voltage range 305-520 VAC

Frequency 40-65HZ

Power factor 0.99, Current THD ≤5%

Input under-voltage protection Yes

Output

Output voltage (200-750Vdc)

Output current 120A

Output power 120KW

Output over-current protection Yes

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Output short-circuit protection Yes

General

Dimensions (D x W x H) up to Power capacity

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Weight Charge station up to Power capacity

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Protection degree IP54

Cooling Forced air







# **CHAdeMO & CCS EV**

## **Charging Station**





### **Features**

- Flexible multi-protocol design (Chademo, CCS, TYPE 2)
- Simultaneous charging of DC and AC
- OCPP Communication protocol
- DUrable enclosure
- Full charge in less than 30 minutes

## **Applications**

- Service station operators
- Public corridor charging along the highways
- Busy urban areas
- Commercial fleet operators
- EV Infrastructure operators and EVSE providers



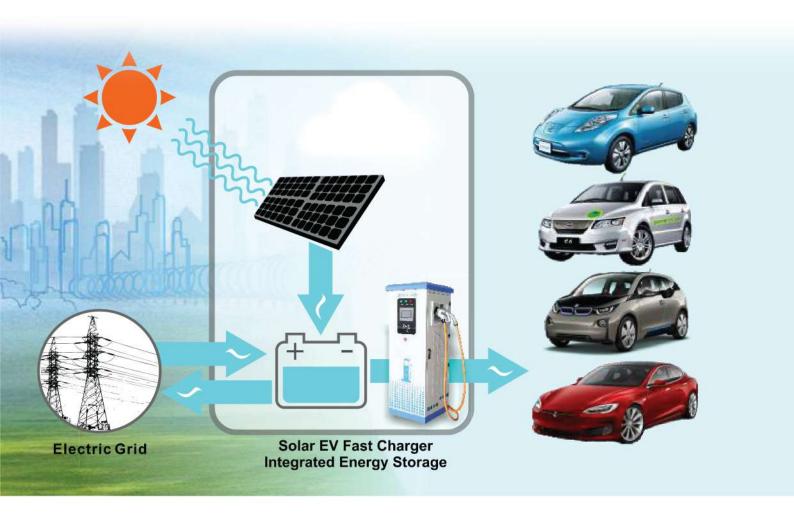
# SETEC 20kW EV FAST CHARGING STATION

	Input Rating	380 Vac, 50 Hz	
Power Input	Number of Phase / Wire	3-phase / L1, L2, L3, N,PE	
	Power Factor	> 0.98	
	Efficiency	94%	
Power output	Output Rating 50-500 Vdc, 40 A maximum, 20 kW maximum		
	Display	7" LCD touch screen	
User Interface	Support Language	English (Other languages optional)	
Oser interface	Charging Interface	CHAdeMO/ CCS compliant cable and plug	
	User Authentication	RFID for user authentication OCPP ( optional)	
	Operating Temperature	-25 °C to +50 °C	
Environmental	Storage Temperature	-40 °C to +70 °C	
	Humidity	< 95% relative humidity, non-condensing	
	Ingress Protection	IP55	
Mechanical	Enclosure Protection	IK10	
	Cooling	Forced air	
	Charging Cable Length	5m	
	Packing Dimension (W x H x D)	94*64*48cm excluding plug	
	Gross Weight	100KG	



# SETEC 50kW EV FAST CHARGING STATION

	Input Rating	380 Vac, 50 Hz	
Power Input	Number of Phase / Wire	3-phase / L1, L2, L3,N, PE	
	Power Factor	> 0.98	
	Efficiency	94%	
Power output	Output Rating	50-500 Vdc, 100 A maximum, 50 kW maximum	
	Display	7" LCD touch screen	
l la au lataufa a	Support Language	English (Other languages optional)	
User Interface	Charging Interface	CHAdeMO/ CCS/TYPE 2 compliant cable and plug	
	User Authentication	RFID for user authentication OCPP ( optional)	
	Operating Temperature	-25 °C to +50 °C	
Environmental	Storage Temperature	-40 °C to +70 °C	
	Humidity	< 95% relative humidity, non-condensing	
	Ingress Protection	IP55	
Mechanical	Enclosure Protection	IK10	
	Cooling	Forced air	
	Charging Cable Length	5m	
	Packing Dimension (W x H x D)	200*90*85cm excluding plug	
	Gross Weight	300KG	



# **Solar DC EV FAST CHARGING STATION**

- 100% Green Source
- Solar Panel & Batteries Input
- MPPT Function
- User friendly interface
- CHAdeMO & CCS, AC Optional
- Public corridor charging along the highways
- Busy urban areas
- Service station operators
- Commercial fleet operators
- EV Infrastructure operators & EVSE providers

# **SETEC 50kW**

### **EV FAST CHARGING STATION**

Product Model	SET450-100Y-LSC		
	DC source Solar PV / Battery Pack		
Power Input	Voltage Range (Solar PV)	About 500Vdc	
	Voltage Range (Batteries)	About 300-400Vdc	
	MPPT Conversion Effic.	99.8%	
	Output Current (A)	100A	
	Regulation accuracy	<0.5%	
	steady current accuracy	<1%	
DC Output	Ripple Peak factor	<0.5%	
	The output voltage range (V)	50-500Vdc, Or Other Option	
	Short circuit current (A)	<30A	
	Output Power	50kW	
Mechanical	packaging	Wooden packing	
indicators	System Weight	<200Kg	
	protection grade	IP54	
Operating Temperature	-25°C: to +50°C		
Protective Function	Short circuit protection/ Over temperature protection / Over-voltage / Under-voltage protection/ Communication failure		
BMS	CAN2.0 [CHAdeMO]/		
Communication	PLC [Combo]		
Cooling	Forced Ventilation		
Display	LED: 7 inch Touch Screen		
, ,	LCD: 3 Color LED lights - status indicator		
User Recognition	RFID card		
DC Plugs	CHAdeMO and CCS 2/ AC Type 2 Option		

# PORTABLE CHARGER

Portable Charger converts a 220Vac/380Vac voltage into DC voltage to directly charge an electric vehicle's lithium ion battery. It is the ideal final solution for EV long trip, road travel emergency. In addition, the charger utilizes a CHAdeMO/CCS compliant communications protocol and power connector.





Installation Way		Portable		
Power(KW)		10	20	50
Picture			SETE PLANE	EX COMMISSON STATISTICS
	e Voltage Vac ′oltage Type	380/220		
v		3 phase/single phase		3 phase
AC Input	Frequency (HZ)  Power Factor	45-55 0.99		
AC IIIput	Input Current(A)	20A/60A	40A/120A	100A
	Input undervoltage protection value (V)	222.5\//475\/.5\/		100A
	Output Current (A)	0~20A	0~40A	0~100A
	Regulation accuracy	<0.5%		
DC Output	steady current accuracy	<1%		
	Ripple Peak factor	<0.5%		
	The output voltage range (V)	50-500V/200-750V		
	Short circuit current (A)	<30A		
	packaging	Wooden packing		
Mechanical	Dimensions (WXHXD)(cm)	40*30*15	90*60*30	100*50*50
indicators	Net Weight	18Kg	50Kg	100Kg
	protection grade	IP31		
Operating Temperature	-25°C: to +50°C			
Protective Function	Short circuit protection/ Over temperature protection / Over-voltage / Under-voltage protection/ Communication failure			
BMS Communicat on	CAN2.0 [CHAdeMO]/[GB/T] PLC [SAE Combo]			
Cooling	Forced Ventilation			
Display	LED: 7 inch Touch Screen LCD: 3 Color LED lights - status indicator			
DC Plugs	CHAdeMO/CCS/GB/T			

# **SET - QM**Charging Module



### **EV charging module Introduction**

SETEC Power is providing state-of-the-art electronic modules to be integrated in DC fast charging station. Each module is CHAdeMO, CCS and GB/T compliant and can be stacked in pile.

Specialist in power conversion, SETEC Power is looking for to supply you with all the electronics to be integrated

in your project for public charging stations. SETDC modules operate in master or BMS mode. Your public charging stations now communicate via CHAdeMO/CCS. Each stackable 10kW power module can be deployed in a variety of use cases depending on the power output requirement (e.g. 20kw for the home or garage, or 50kw for a public charging station).

### **Features**

- Module with full resonance, double soft-switching principles of design, efficiency ≥ 96%;
- Module with full isolation design. Module control part is fully isolated with the input and output of the main circuit. When some external factors will produce high voltage of module input or output part, internal module control circuit will not damage;
- PCB with epoxy coating should be dampproof and dustproof;
- Multiple anti-reverse-current protection design to prevent the intrusion of various fault current phenomenon;
- Input uses three-phase four-wire , three-phase equilibrium;
- SCM module built by CAN \ RS485 port communication. Monitoring system can monitor the module and operating condition;
- With LCD display, real-time display module output voltage, current, easy operation and monitoring;

- Regulators, current limiting function. It can be charged
  the battery groups and carried the load with the set
  voltage and current. When the output current is greater
  than the current limit ,module automatically works on
  steady flow operation;when the output current is less
  than the current limit ,it works on voltage regulator
  condition;
- Output voltage and current regulation. It can adjust the output voltage and the maximum current limit via background monitoring;
- Work in parallel. The same model module can work in parallel and share current. If one module failed, it will not affect the whole system operation;
- Hot-swap. You can either plug in any one module to make access to or remove it from the system without affecting the normal operation;
- LCD shows module parameters, and Status Indicator;
- Protection and alarm: input, short-circuit, over temperature, over voltage, and alarm indication.

# **EV** module technical datasheet

Model	SDC450-10KW	SDC750-10KW	
Input voltage	AC305-520		
Frequency	40∼65Hz		
Output voltage	DC100-450V	DC200-750V	
Max Output current	23A	12.5A	
Rated Output power	10Kw		
Max output voltage	470 <u>+</u> 15V	770 <u>+</u> 15V	
Regulation accuracy	≤±0.	.5%	
precision of steady current	≤±1%		
Ripple factor	≤±0.	5%	
Efficiency	≥95% (Load	:50~100%)	
Power factor	≥0.99		
unequal current ratio	≤± <b></b> 5	5%	
Soft start time	3~8s		
Dielectric strength	IVP input&output、input&chassis AC2000V,  1min, No breakdown, no flashover;  IVS input,output &chassis AC1000V,  1min, No breakdown, no flashover		
Insulation Resistance	DC1000V, >10MΩ		
Working temperature	-25℃~50℃		
Storage temperature	-40℃	-40℃~70℃	
Relative humidity	Working≤90%,	Working≤90%, Storage≤95%	
Noise	≤55db/Fan cooled		
Parallel modules No.	N≤64		
Power surge	NO		
IP degree	ee IP21		
Safety Certification	Compliance with 3C certification		
MBTF	>100000h		
Size (mm)	374 (D) x482 (W) x88 (H)		
Weight	13Kg		
Cool	Fan cooled		
	Control: ON/OFF、One line/Off line、Float/boost charge		
Functions	Set: Output voltage, output limit current		
i unotions	Test: Output voltage, output current, working temperature		
	Communication: ON/OFF status, Fails		

## **Contact Us**



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