



PSC Industries Limited

Main Office: 41B, Olutoye Cres/Adeniyi Jones, Ikeja, Lagos State, Nigeria. Branch Office: KM 39, Lekki - Epe Expressway, Lakowe, Lekki, Lagos State, Nigeria. Tel: +2348120855444, +2348123655444, +2348089552800 Email Address: info@pscsolaruk.com Website: www.pscsolaruk.com











Company Profile

PSC INDUSTRIES LIMITED is a Solar Electricity and Renewable energy total Solutions Manufacturer located in Lagos, Nigeria.

We provide Cost-competitive, Environmental friendly, high quality and innovative Solar/renewable energy products including but not limited to Solar PV Panels, Inverters, Solar Charge Controllers, Solar Streetlights and Deep Cycle Batteries

Vision

With a proven track record for high standards and professionalism PSC Industries vision is to create a world class energy company that provides the customer with a professional, dependable, problem free service which meets the customers expectations and budget.

Fulfilling your energy needs

Mission Statement

Our target markets include residential, industrial, government and large utility companies. We are committed to treating our customers with courtesy and professionalism as we believe in providing complete customer service satisfaction. We do not just sell to them; we also educate our customers to make intelligent buying decisions.

We deliver promptly and on budget.

Our research and development are a step ahead as we strive to manufacture cutting edge Technology Power Products. Our Size and experience enables us to offer our customers the best possible renewable energy / alternative electricity solutions.

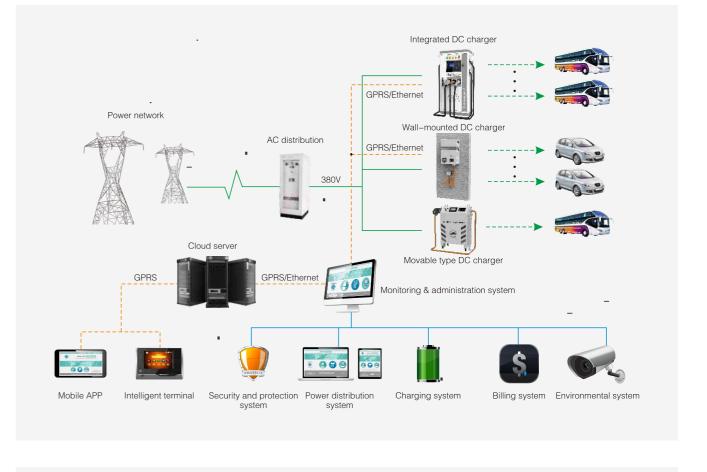
We communicate properly as it is our core interest to maintain our integrity at all times. At PSC Industries ltd, we realize that our work has a direct impact on our customer. We take our commitment to the customer very seriously because we know our continued success depends on their constant satisfaction

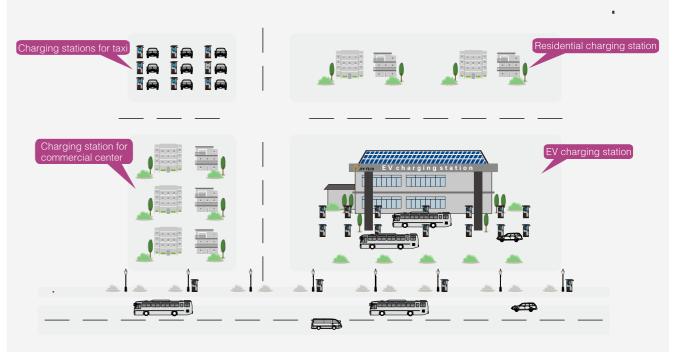




Product Application Diagram

· . . ·





State-level High-tech Enterprise / Contract-Observing and Promise-Keeping Enterprise

CAW 7/11/22KE-DCGS

CAW series wall-mounted AC charger support IEC62196-2 AC Type 2



Product overview

CAW wall-mounted AC charger is composed of main control unit, human-computer interaction interface, charging interface, metering and charging unit. It's resistant to vibration and has complete protection functions, the protection class is IP54, which covers a small area, meets the installation and use of indoor and outdoor environments, and provides AC power for electric vehicles with on-board charger.

Product features:

- > Perfect charging protection such as input over/under voltage, connection abnormality, emergency stop;
- > Protection against lightning protection, leakage, short circuit, over current, over temperature, reverse battery connection, etc;
- > Wall-mounted installation, cover an area of an area small, easy to install;
- > Touch screen operation interface, charging mode can be set up to fill automatically, charge according to electric quantity, charge according to amount and charge according to time, etc;
- > Support swiping card/scan QR code to pay;
- > Support IEC 61851 standard charging;

Applications:

- > EV charging stations for large, medium and small;
- > EV fleet (private and public);
- > EV dealers and service providers;

Product naming rules ① Product series name; Output power; <u>CAW11K E- D C G S</u> 1 2 3 4 5 6 7 E-Europe standard on AC;

④ Support touch screen display function; 5 Support card reader function; 3 Standard type of charging interface: 6 Support GPRS communication function; W-support WIFI; O Support strut assembly installation;

Technical data	CAW 7KE-DCGS	CAW 11KE-DCGS	CAW 22KE-DCGS
Electrical index			
Power connection	1P+N+PE	3P+N+PE	3P+N+PE
Input/output voltage	230VAC±10%	400VAC±10%	400VAC±10%
Frequency	50Hz±10%	50Hz±10%	50Hz±10%
Rated power	7kW	11kW	22kW
Rated current	32A	16A	32A
General Specifications			
Shell material	Hot-dip galvanized steel sheet	Hot-dip galvanized steel sheet	Hot-dip galvanized steel sheet
Charging mode	IEC 61851-1 Charging model-3	IEC 61851-1 Charging model-3	IEC 61851-1 Charging model-3
AC plugs	IEC 62196-2 AC Type2	IEC 62196-2 AC Type2	IEC 62196-2 AC Type2
Display	4.3"TFT Color touch screen	4.3"TFT Color touch screen	4.3"TFT Color touch screen
RFID system	Mifare (Classic, DesFire EV1)	Mifare (Classic, DesFire EV1)	Mifare (Classic, DesFire EV1)
	or others on request	or others on request	or others on request
Communication	GPRS /Wi-Fi	GPRS /Wi-Fi	GPRS /Wi-Fi
Communication Protocols	OCPP (optional: others)	OCPP (optional: others)	OCPP (optional: others)
Place of installation	Indoor and outdoor	Indoor and outdoor	Indoor and outdoor
Altitude	≤3000m	≤3000m	≤3000m
Protection grade	IP54	IP54	IP54
Operating Temperature	-20-50°C	-20-50°C	-20-50°C
Storage Temperature	-40-70°C	-40-70°C	-40-70°C
Humidity	5%~95% without condensation	5%~95% without condensation	5%~95% without condensation
Cooling mode	Natural cooling	Natural cooling	Natural cooling
Length of charging gun cable	5m(optional)	5m(optional)	5m(optional)
Dimensions(W*D*H)	280mm*120mm*400mm	280mm*120mm*400mm	280mm*120mm*400mm
Weight	7.5kg	11kg	11kg

CAW 7/11/22KE-DCGS

CSI 60K500/750-EUJCabc

CSI series unit-type intelligent AC/DC quick charger support CHAdeMO; CCS Combo 1/2; AC Type 1/2, support for the OCPP 1.6.



Product overview

CSI series unit-type intelligent AC/DC quick charger supplies a convenient human-computer interaction, its modular design facilitates equipment maintenance and expansion; three-interface design ensure power output AC 43kw and DC 60kw at the same time.

Key features:

- > Perfect charging protection against lightning protection, leakage, short circuit, over current, over temperature, reverse battery connection, etc;
- > Protection functions such as input over/under voltage, connection abnormality, emergency stop;
- > Multi-standard (CHAdeMO; CCS Combo-1/2; AC type 1/2), Simultaneous charging of DC and AC;
- > Modular design, flexible configuration and easy maintenance;
- > Built-in RFID and communications(3G/LAN/Wi-Fi);
- > Upgrade the system software remotely and locally;
- > High degree of protection and wide voltage output;
- > Support swiping card/scan QR code to pay;

Applications:

- > Highways and national roads;
- > Fuel-stations (City and strategic locations);
- > EV Infrastructure and operators;
- > EV fleet (private and public);
- > EV dealers and service providers;

Product naming rules	 Product series name:
<u>CSI 60K 750-</u> EUJCabc	2 Output power;
1234	 Maximum output voltage;
	④ Standard type of charging interface:

E-Europe standard on DC; U-United State American standard on DC; J-Japanese standard on DC; C- Chinese standard on DC; a-Europe standard on AC; b-United State American standard on AC; c- Chinese standard on AC;

Model	CSI 60K500-EUJCabc	CSI 60K750-EUJCabc
Nominal Input		
Power connection	3P+N+PE	3P+N+PE
Voltage & Frequency	400VAC±10%;45~65Hz	400VAC±10%;45~65Hz
Efficiency	≥94%	≥94%
Power factor	≥0.99	≥0.99
DC Output		
Voltage (optional)	100-500V	200-750V (up to 500V for CHAdeMO)
Current	160A (CCS Combo1/2)/160A (CHAdeMO)	150A (CCS Combo1/2)/150A (CHAdeMO)
Max. Power	60kW	60kW
AC output		
Voltage	230V or 400V	230V or 400V
Current	from 16A up to 63A	from 16A up to 63A
Nominal Power	from 3.7kw up to 43kw	from 3.7kw up to 43kw
General Specifications		
Shell material	Hot-dip galvanized steel sheet	Hot-dip galvanized steel sheet
Charging mode	Multi-standard DC outputs (model-4),AC (model-3)	Multi-standard DC outputs (model-4),AC (model-3)
DC plugs	JEVS G104(CHAdeMO) /IEC62196-3(CCS Combo 1/2)	JEVS G104(CHAdeMO) /IEC62196-3(CCS Combo 1/2)
AC plugs	IEC62196 AC Type 1/2	IEC62196 AC Type 1/2
Display	7" TFT Color touch screen	7" TFT Color touch screen
RFID system	Mifare (Classic, DesFire EV1) or others on request	Mifare (Classic, DesFire EV1) or others on request
Communication	GPRS/LAN/Wi-Fi	GPRS/LAN/Wi-Fi
Communication Protocols	OCPP (optional: others)	OCPP (optional: others)
Place of installation	Indoor/Outdoor	Indoor/Outdoor
Altitude	6000m (Derating over 3000m)	6000m (Derating over 3000m)
Protection degree	IP54	IP54
Operating Temperature	-20-60°C (Derating over $50^{\circ}C$)	-20-60°C (Derating over 50°C)
Storage Temperature	-40-70°C	-40-70°C
Humidity	5%~95% without condensation	5%~95% without condensation
Sound noise	<55 dB in all directions	<55 dB in all directions
Length of charging gun cable	5m (Other lengths are optional)	5m (Other lengths are optional)
Dimensions (W*D*H)	650*500*1370mm	650*500*1370mm
Weight	230kg	230kg

CSI 60K500/750-EUJCabc

CSP 15/30K-E

CSP series movable type intelligent DC quick charger support CCS Combo2



Product overview

CSP 15/30K-E series movable type intelligent DC quick charger is resistant to vibration and has complete protection functions, suitable for bus charging stations, parking lots, auto repair shops, car manufacturers and other places where customers can quickly respond and test supplementary energy.

Product features:

- > Perfect charging protection such as input over/under voltage, connection abnormality, emergency stop;
- > Protection against lightning protection, leakage, short circuit, over current, over temperature, reverse battery connection, etc;
- > Independently installed, plug and play occupies a small area, mobile and flexible;
- > Modular design, flexible configuration and easy maintenance;
- > Anti vibration, complete protection function;
- > High degree of protection and wide voltage output;
- > Support swiping card/scan QR code to pay;
- > Support CCS standard quick charging;

Applications:

- > EV Infrastructure and operators;
- > EV fleet (private and public);
- > EV dealers and service providers;

 Product naming rules
 ① Product series name;

 <u>CSP</u>
 <u>30K</u>
 <u>750-</u>
 E
 ② Output power;
 ④ Standard type of charging interface:

 ①
 ②
 ③
 ④ Maximum output voltage;
 E-Europe standard on DC

Technical data		CSP 15K750-E	
Nominal Input			
Power connection	3P+N+PE	3P+N+PE	
Voltage & Frequency	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	
Efficiency	≥94%	≥94%	
Power factor	≥0.99	≥0.99	
DC Output			
Voltage	100-500V	200-750V	
Max.Current	40A	37.5A	
Max. Power	15kW	15kW	
General Specifications			
Shell material	Hot-dip galvani	zed steel sheet	
Charging mode	IEC 61851-1 Charging model-4		
DC plugs	IEC62196-3(CCS Combo 2)		
Display	4.3"TFT Color	touch screen	
RFID system	Mifare (Classic, DesFire EV1) or others on request		
Communication	GPRS /L	GPRS /LAN/Wi-Fi	
Communication Protocols	OCPP (optional: others)		
Place of installation	Indoor		
Altitude	6000m (Deratir	ng over 3000m)	
Protection grade	IP	32	
Operating Temperature	-20-60°C (Dera	ting over 50°C)	
Storage Temperature	-40-70°C		
Humidity	5%~95% withou	ut condensation	
Sound noise	<55 dB in a	Il directions	
Length of charging gun cab	le 5m(op	tional)	
Dimensions(W*D*H)	500*300	*765mm	
Weight	49	kg	

CSP 15/30K-E

CSP 30K750-E

3P+N+PE 3P+N+PE 400VAC±10%; 45~65Hz 400VAC±10%;45~65Hz ~65Hz ≥94% ≥94% ≥0.99 ≥0.99 200-750V 100-500V 80A 75A 30kW 30kW Hot-dip galvanized steel sheet IEC 61851-1 Charging model-4 IEC62196-3(CCS Combo 2) 4.3"TFT Color touch screen uest Mifare (Classic, DesFire EV1) or others on request GPRS /LAN/Wi-Fi OCPP (optional: others) Indoor 6000mm (Derating over 3000m) IP32 -20-60°C (Derating over 50°C) -40-70°C 5%~95% without condensation <55 dB in all directions 5m(optional) 500*300*765mm 63.5kg

CSP 30K500-E

CSP 15/30K500-J

CSP series movable type intelligent DC quick charger support CHAdeMO



Product overview

CSP 15/30K500-J movable type intelligent DC quick charger is resistant to vibration and has complete protection functions, suitable for bus charging stations, parking lots, auto repair shops, car manufacturers and other places where customers can quickly respond and test supplementary energy.

Product features:

- > Perfect charging protection such as input over/under voltage, connection abnormality, emergency stop;
- > Protection against lightning protection, leakage, short circuit, over current, over temperature, reverse battery connection, etc;
- > Independent distributed installation, plug and play occupies a small area, mobile and flexible;
- > Modular design, flexible configuration and easy maintenance;
- > Anti vibration, complete protection function;
- > High degree of protection and wide voltage output;
- > Support swiping card/scan QR code to pay;
- > Support CHAdeMO systerm interface quick charging;

Applications:

- > EV Infrastructure and operators;
- > EV fleet (private and public);
- > EV dealers and service providers;

 Product naming rules
 ① Product series name;

 <u>CSP</u>
 <u>30K</u>
 <u>500-</u>
 <u>J</u>
 ② Output power;
 ④ Standard type of charging interface:

 ①
 ②
 ③
 ④ Maximum output voltage;
 J-Japanese standards on DC

Technical data	CSP 15K500-J
Nominal Input	
Power connection	3P+N+PE
Voltage & Frequency	400VAC±10%; 45~65Hz
Efficiency	≥94%
Power factor	≥0.99
DC Output	
Voltage	100-500V
Max.Current	40A
Max. Power	15kW
General Specifications	
Shell material	Hot-dip galvanized steel sheet
DC plugs	JEVS G104 (CHAdeMO)
Display	4.3"TFT Color touch screen
RFID system	Mifare (Classic, DesFire EV1) or othe
Communication	GPRS /LAN/Wi-Fi
Communication Protocols	OCPP (optional: others)
Place of installation	Indoor
Altitude	6000m (Derating over 3000m)
Protection degree	IP32
Operating Temperature	-20-60°C (Derating over 50°C)
Storage Temperature	-40-70°C
Humidity	5%~95% without condensation
Sound noise	<55 dB in all directions
Length of charging gun cable	5m (Other lengths are optional)
Dimensions (W*D*H)	500*300*765mm
Weight	47kg

CSP 15/30K500-J

CSP 30K500-J

	3P+N+PE
	400VAC±10%; 45~65Hz
	≥94%
	≥0.99
	100-500V
	80A
	30kW
	Hot-dip galvanized steel sheet
	JEVS G104 (CHAdeMO)
	4.3"TFT Color touch screen
rs on request	Mifare (Classic, DesFire EV1) or others on request
	GPRS /LAN/Wi-Fi
	OCPP (optional: others)
	Indoor
	6000m (Derating over 3000m)
	IP32
	-20-60°C (Derating over 50°C)
	-40-70°C
	5%~95% without condensation
	<55 dB in all directions
	5m (Other lengths are optional)
	500*300*765mm
	61.5kg

CSW 15/30K-E

CSW series wall-mounted type intelligent DC quick charger support CCS Combo2



Product overview

CSW 15/30K-E series wall-mounted type intelligent DC quick charger has complete protection functions, It is suitable for small installation environment indoors, and convenient for users to fast charge.

Product features:

- > Perfect charging protection such as input over/under voltage, connection abnormality, emergency stop;
- > Protection against lightning protection, leakage, short circuit, over current, over temperature, reverse battery connection, etc;
- > Wall-mounted installation, cover an area of an area small;
- > Modular design, flexible configuration and easy maintenance;
- > High degree of protection and wide voltage output;
- > Support swiping card/scan QR code to pay;
- > Support CCS standard quick charging;

Applications:

- > EV Infrastructure and operators;
- > EV fleet (private and public);
- > EV dealers and service providers;

Product naming rules ① Product series name; <u>CSW 30K</u> <u>750-</u> <u>E</u> ① ② ③ ④ 2 Output power; Maximum output voltage; ④ Standard type of charging interface: E-Europe standard on DC

Nominal Input					
Power connection	3P+N+PE	3P+N+PE	3P+N+PE	3P+N+PE	
Voltage & Frequency	400VAC±10%; 45~65Hz	400VAC±10%;45~65Hz	400VAC±10%;45~65Hz	400VAC±10%;45~65Hz	
Efficiency	≥94%	≥94%	≥94%	≥94%	
Power factor	≥0.99	≥0.99	≥0.99	≥0.99	
DC Output					
Voltage	100-500V	200-750V	100-500V	200-750V	
Max.Current	40A	37.5A	80A	75A	
Max. Power	15kW	15kW	30kW	30kW	
General Specifications					
Shell material	Hot-dip galvani	Hot-dip galvanized steel sheet		Hot-dip galvanized steel sheet	
Charging mode	IEC 61851-1 Ch	IEC 61851-1 Charging model-4		IEC 61851-1 Charging model-4	
DC plugs	IEC62196-3(C	IEC62196-3(CCS Combo 2)		IEC62196-3(CCS Combo 2)	
Display	4.3"TFT Color	4.3"TFT Color touch screen		touch screen	
RFID system	Mifare (Classic, DesFire EV1) or others on request		Mifare (Classic, DesFire I	EV1) or others on request	
Communication	GPRS /LAN/Wi-Fi		GPRS /L/	AN/Wi-Fi	
Communication Protocols	OCPP (optional: others)		OCPP (optic	onal: others)	
Place of installation	Indoor		Indoor		
Altitude	6000m (Deratin	6000m (Derating over 3000m)		6000m (Derating over 3000m)	
Protection grade	IPS	IP30		IP30	
Operating Temperature	-20-60°C (Derat	-20-60°C (Derating over 50°C)		-20-60°C (Derating over 50°C)	
Storage Temperature	-40-7	-40-70°C		-40-70°C	
Humidity	5%~95% withou	5%~95% without condensation		5%~95% without condensation	
Sound noise	<55 dB in al	Idirections	<55 dB in all directions		
Length of charging gun cable	e 5m(op	5m(optional)		5m(optional)	
Dimensions(W*D*H)	530*170	530*170*752mm		*752mm	
Weight	54kg		68	kg	

ominal Input					
wer connection	3P+N+PE	3P+N+PE	3P+N+PE	3P+N+PE	
Itage & Frequency	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	
iciency	≥94%	≥94%	≥94%	≥94%	
wer factor	≥0.99	≥0.99	≥0.99	≥0.99	
C Output					
Itage	100-500V	200-750V	100-500V	200-750V	
ax.Current	40A	37.5A	80A	75A	
ax. Power	15kW	15kW	30kW	30kW	
eneral Specifications					
ell material	Hot-dip galvani	Hot-dip galvanized steel sheet		Hot-dip galvanized steel sheet	
arging mode	IEC 61851-1 Ch	IEC 61851-1 Charging model-4		IEC 61851-1 Charging model-4	
plugs	IEC62196-3(C	IEC62196-3(CCS Combo 2)		IEC62196-3(CCS Combo 2)	
splay	4.3"TFT Color	4.3"TFT Color touch screen		4.3"TFT Color touch screen	
ID system	Mifare (Classic, DesFire EV1) or others on request		Mifare (Classic, DesFire I	EV1) or others on request	
ommunication	GPRS /LAN/Wi-Fi		GPRS /L/	AN/Wi-Fi	
mmunication Protocols	OCPP (optional: others)		OCPP (optional: others)		
ace of installation	Ind	Indoor		Indoor	
litude	6000m (Deratin	6000m (Derating over 3000m)		6000m (Derating over 3000m)	
otection grade	IP	IP30		IP30	
perating Temperature	-20-60°C (Dera	-20-60°C (Derating over 50°C)		ting over 50°C)	
orage Temperature	-40-	-40-70°C		70°C	
midity	5%~95% withou	5%~95% without condensation		5%~95% without condensation	
und noise	<55 dB in a	Idirections	<55 dB in all directions		
ngth of charging gun cable	e 5m(op	tional)	5m(optional)		
mensions(W*D*H)	530*170	530*170*752mm		*752mm	
eight	54kg		68	kg	

Technical data

CSW 15K500-E

Nominal Input					
Power connection	3P+N+PE	3P+N+PE	3P+N+PE	3P+N+PE	
Voltage & Frequency	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	400VAC±10%; 45~65Hz	
Efficiency	≥94%	≥94%	≥94%	≥94%	
Power factor	≥0.99	≥0.99	≥0.99	≥0.99	
DC Output					
Voltage	100-500V	200-750V	100-500V	200-750V	
Max.Current	40A	37.5A	80A	75A	
Max. Power	15kW	15kW	30kW	30kW	
General Specifications					
Shell material	Hot-dip galvani	Hot-dip galvanized steel sheet		Hot-dip galvanized steel sheet	
Charging mode	IEC 61851-1 Ch	IEC 61851-1 Charging model-4		IEC 61851-1 Charging model-4	
DC plugs	IEC62196-3(0	IEC62196-3(CCS Combo 2)		IEC62196-3(CCS Combo 2)	
Display	4.3"TFT Color touch screen		4.3"TFT Colo	4.3"TFT Color touch screen	
RFID system	Mifare (Classic, DesFire	Mifare (Classic, DesFire EV1) or others on request		EV1) or others on request	
Communication	GPRS /LAN/Wi-Fi		GPRS /L	AN/Wi-Fi	
Communication Protocols	OCPP (optio	OCPP (optional: others)		onal: others)	
Place of installation	Ind	Indoor		Indoor	
Altitude	6000m (Deratir	6000m (Derating over 3000m)		6000m (Derating over 3000m)	
Protection grade	IP	IP30		IP30	
Operating Temperature	-20-60°C (Dera	-20-60°C (Derating over 50°C)		-20-60°C (Derating over 50°C)	
Storage Temperature	-40-	-40-70°C		-40-70°C	
Humidity	5%~95% withou	5%~95% without condensation		5%~95% without condensation	
Sound noise	<55 dB in a	Il directions	<55 dB in all directions		
ength of charging gun cabl	e 5m(op	5m(optional)		5m(optional)	
Dimensions(W*D*H)	530*170	530*170*752mm)*752mm	
Weight	54kg		68	3kg	

CSW 15/30K-E

CSW 15K750-E CSW 30K500-E CSW 30K750-E

CSW 15/30K500-J

CSW series wall-mounted type intelligent DC quick charger support CHAdeMO



Product overview

CSW series wall-mounted type intelligent DC quick charger has complete protection functions, It is suitable for small installation environment indoors, and convenient for users to fast charge.

Product features:

- > Perfect charging protection such as input over/under voltage, connection abnormality, emergency stop;
- > Protection against lightning protection, leakage, short circuit, over current, over temperature, reverse battery connection, etc;
- > Wall-mounted installation, cover an area of an area small;
- > Modular design, flexible configuration and easy maintenance;
- > High degree of protection and wide voltage output;
- > Support swiping card/scan QR code to pay;
- > Support CHAdeMO systerm interface quick charging;

Applications:

- > EV Infrastructure and operators;
- > EV fleet (private and public);
- > EV dealers and service providers;

Product naming rules <u>CSW</u> <u>30K</u> <u>500-</u> J (1) <u>2</u> (3) (4) (2) Output power; (3) Maximum output voltage; (4) Standard type of charging interface: J-Japanese standard on DC

Technical data	CSW 15K500-J
Nominal Input	
Power connection	3P+N+PE
Voltage & Frequency	400VAC±10%; 45~65Hz
Efficiency	≥94%
Power factor	≥0.99
DC Output	
Voltage	100-500V
Max.Current	40A
Max. Power	15kW
General Specifications	
Shell material	Hot-dip galvanized steel sheet
DC plugs	JEVS G104 (CHAdeMO)
Display	4.3"TFT Color touch screen
RFID system	Mifare (Classic, DesFire EV1) or othe
Communication	GPRS /LAN/Wi-Fi
Communication Protocols	OCPP (optional: others)
Place of installation	Indoor
Altitude	6000m (Derating over 3000m)
Protection grade	IP30
Operating Temperature	-20-60°C (Derating over 50°C)
Storage Temperature	-40-70°C
Humidity	5%~95% without condensation
Sound noise	<55 dB in all directions
Length of charging gun cable	5m (Other lengths are optional)
Dimensions (W*D*H)	530*170*752mm
Weight	52kg

CSW 15/30K500-J

CSW 30K500-J

	3P+N+PE
	400VAC±10%; 45~65Hz
	≥94%
	≥0.99
	100-500V
	80A
	30kW
	Hot-dip galvanized steel sheet
	JEVS G104 (CHAdeMO)
	4.3"TFT Color touch screen
ers on request	Mifare (Classic, DesFire EV1) or others on reques
	GPRS /LAN/Wi-Fi
	OCPP (optional: others)
	Indoor
	6000m (Derating over 3000m)
	IP30
	-20-60°C (Derating over 50°C)
	-40-70°C
	5%~95% without condensation
	<55 dB in all directions
	5m (Other lengths are optional)
	530*200*752mm
	66kg

PSC Solar ECM/ECH (square) **15KW High-efficiency Intelligent**



Features

Feasibility:

- > Wide range of voltage input;
- > Wide range of DC voltage output, applicable for small-size vehicles, minibuses and coaches;
- > Able to support up to more than 20 parallel modules;
- > Applicable for integrated charging piles, split charging piles, specialtype charging piles, portable charging piles and moveablechargers etc;

High efficiency:

- > Wide range of voltage at full power;
- > Adopting digital automatic current-sharing technique with high accuracy of current sharing;
- > Peak efficiency up to 95%;
- > Adopting the technology of three-phase active power factor correction with the power factor being 0.995 and the total harmonic current lower than 5%;

Reliability:

- > Input overvoltage/undervoltage, output overvoltage, overcurrent, short circuit, overtemperature, undervoltage warning and other protective functions;
- > Ultra wide applicable range of temperature $(-40 \sim +65 \circ C) +50 \circ C$, applicable for kinds of extreme conditions;

ECM15KW charging module with constant power

JFY ECM 15KW constant power charging module is controlley by digital DSP. Its input stage adopts the industry-leading Vienna structure, which achieves wide input voltage range. The whole voltage range is AC 260~456V voltage. The input power capacitor is 0.995, the total harmonic current is less than 5%.

The output stage of ECM charging module adopts the soft switching technology of three level full bridge resonant, high efficiency up to 96%; The output voltage can be ultra wide range adjustment, when the working voltage is more than 80% of the rated output voltage, it can achieve the output of full power. ECM500V charging module has average output power 12.5KW, 19% enhance the overall output capacity. ECM750V charging module has average output power 11.94KW, also 19% enhance theoverall output capacity.

ECM charging module can support up to 20 pcs charging modules in parallel; The use of advanced digital current sharing technology, allows a plurality of modules in parallel can work withut monitoring module. The battery charger module can automatically divide current into equal part with high precision. The charging module has the advantages of small size, light weight, high efficiency and reliability, can be well used in the charging system for electrical vehicles.

Model

ECM 15K 500 H

2 3 4

ECM 15K500H / ECM 15K750H

Input voltage	AC 260~456V (50% reduction 2010)
Input frequency	45Hz~65Hz
Input power factor	≥0.995
Input current harmonics	≤5%
Peak efficiency	≥96%
Output power	15KW
Output voltage range	DC 100~500V (100V~200V
	375V~500V can achieve full
	DC 250~750V (250V~600V
Stable voltage accuracy	≤±0.5%
Output voltage error	≤±0.5%
Ripple factor	≤±0.2%
Stable current accuracy	≤±1%
Output current error	≥30A: No more than±1%; <
Voice-frequency noise	≤55dB
Operating humidity	-20~+60 °C (derated power
Storage temperature	-40~+70°C
Relative humidity	5%~95%, without condensa
Communication interface	CAN
Protection grade	IP20
Cooling mode	Forced air cooling
Protective function	Input overvoltage/undervolt
	lightning protection, emerge
Standby power	≤20W
Weight	15kg
Dimensions (W*D*H)	462.6*379.4*86 mm
Naming rules of products	

2 Output power; 4 Shape structure;



tion of output power below 310V)

30A max. current charge, 200V~375V 40A max. current charge, (tuatuo rewoa Ilu 25A max. current charge, 600V~750V can achieve full power output)

<30A: No more than±0.3A

erabove 50 °C)

ation

Itage, output overvoltage, overcurrent, short circuit, electric leakage, gency shutdown and other protective functions

Series name: 3 The maximum output voltage:

ECH 15KW new generation of charging module with constant power

The new generation of ECH charging module with wide range constant power, with DC 200~750V ultra-wide voltage output range.It generates constant power 15KW in the section of DC 400-460V and 600~750V, constant current 37.5A in the DC 200~400V section ,constant current 25A in the DC 600~750V. It is completely compatible with the advantages of 500V and 750V voltage class charging module, the average output power is 13.2KW. The overall output capacity enhanced 39%, the low voltage section charging capacity increased by nearly 90%, while the cost increased just a little bit.

Model

ECH 15K750B

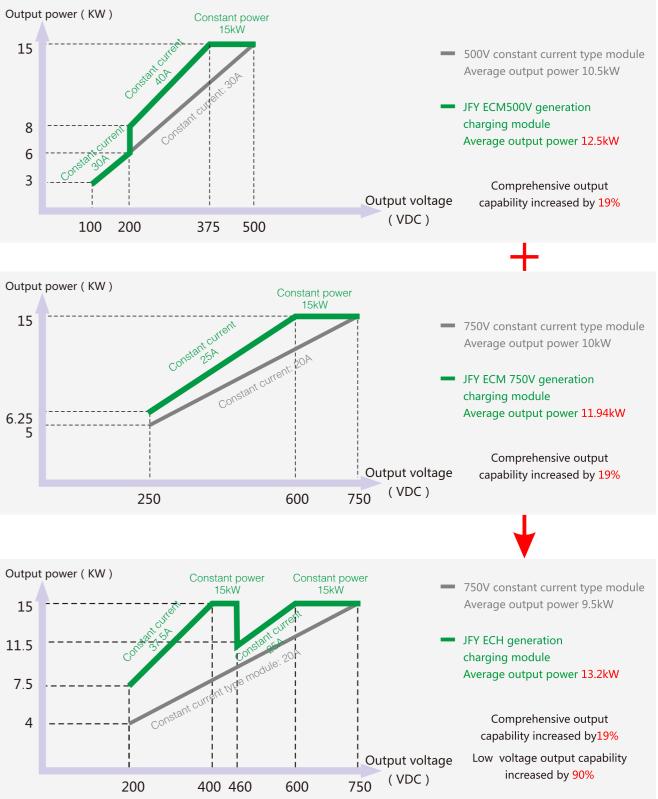
Input voltage	AC 260~456V (50% reduction of output power below 310V)	
Input frequency	45Hz~65Hz	
Input power factor	≥0.995	
Input current harmonics	≤5%	
Peakefficiency	≥96%	
Output power	15KW	
Output voltage range	DC 200~750V	
	Full power output: Able to achieve the full power output in the range of 400V~460V and 600V~750V	
	Constant current output: Charging with max current of 37.5A in the range of 200V~400V, and the	
	max current of 25A in the range of 460V~600V	
Stable voltage accuracy	≤±0.5%	
Output voltage error	≤±0.5%	
Ripple factor	≤±0.2%	
Stable current accuracy	≤±1%	
Output current error	≥30A: No more than±1%; <30A: No more than±0.3A	
Voice-frequency noise	≤55dB	
Operating humidity	-20~+60 $^{\circ}\text{C}$ (derated power above 50 $^{\circ}\text{C}$)	
Storage temperature	-40~+70°C	
Relative humidity	5%~+95%, without condensation	
Communication interface	CAN	
Protection grade	IP20	
Cooling mode	Forced air cooling	
Protective function	Input overvoltage/undervoltage, output overvoltage, overcurrent, short circuit, electric leakage,	
	lightning protection, emergency shutdown and other protective functions	
Standby power	≤20W	
Weight	15kg	
Dimensions (W*D*H)	462.6*379.4*86 mm	

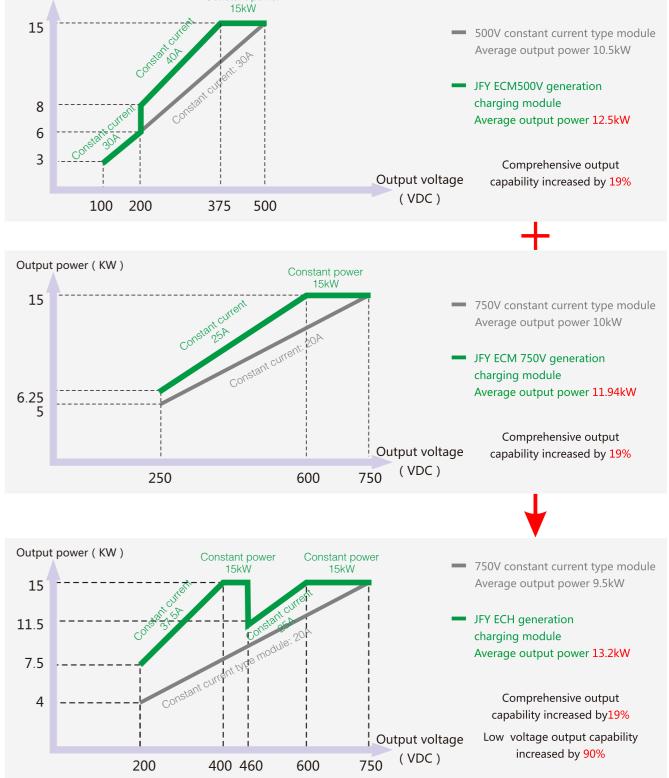
Naming rules of products <u>ECH 15K750B</u>

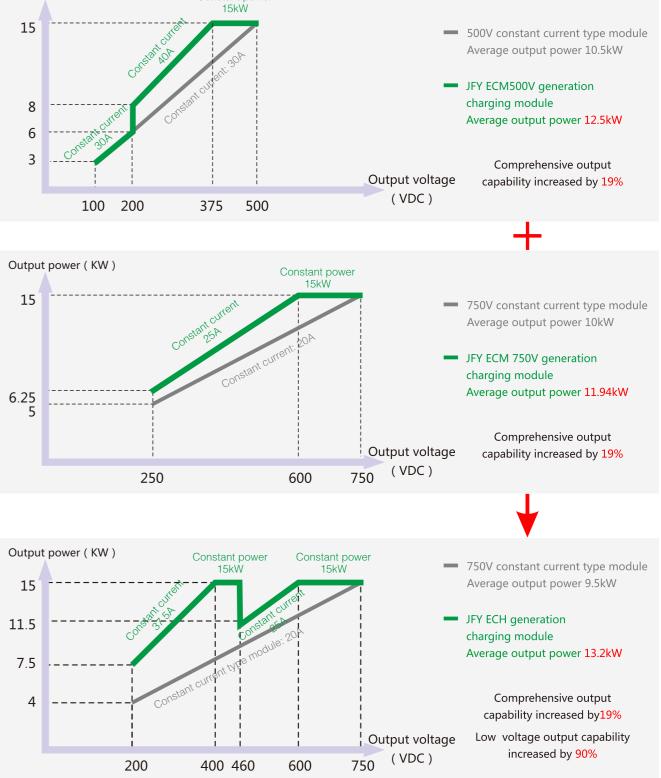
2 3 4

① Series name; ③ The maximum output voltage; 2 Output power; 4 Shape structure;

Charger module Curve graph of output power

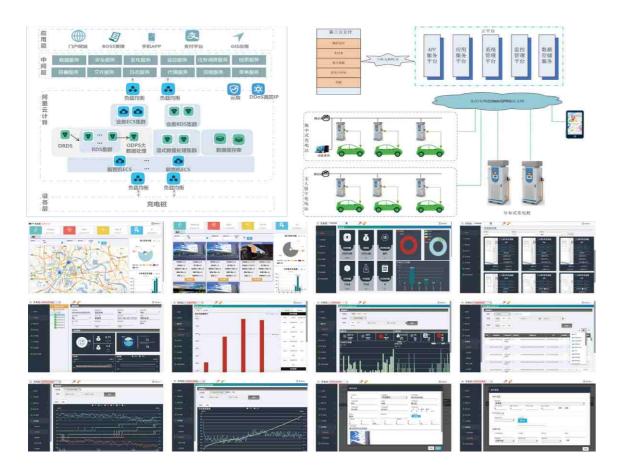






Charging operation management system

The charging operation management platform of JFY is based on SAAS cloud service, it provides a safe, open, easy to use and shared operating platform for commercial customers, charging operators and individual users of EV. The platform supports the international Open Charge Point Protocol (OCPP). We are committed to promoting the development of "car + pile + network" and building a global charging operation network for new energy vehicles. In the meantime, we provide personalized solutions for different customer types and business features.



Mobile APP

The "Intelligent Cloud Charging" APP of JFY is a professional charging business operation platform, providing charging users with convenient and efficient charging services, support the use of bank cards, PayPal and operator charge cards and other payment methods. Users can find nearby charging stations by location and view information of charging stations, charging piles and charging parking spaces. It also offers optimized addressing, reservation charging and navigation functions, It can start charging by scanning the code through the login account, inquire real-time charging status information, and participate in various charging preferential activities of operators; provide user evaluation services for charging experience. In the meantime, it can push various online and offline activity information and provide value-added services for users.



System interface configuration

e jotom monaco comiguration	
Communication	GPRS/Ethernet
Communication Protocols	OCPP 1.6
Software environment	Operating system: Winodws Server 2012, Da
Data acquisition modes	Take turns patrolling, initiative reported(The
Data collecting interface	I/O, RS-485, serial port, Ethernet, GPRS and
Interface to other systems	Create read-only database user direct acces
	interface file transfer
System functional	
Monitoring and statistics	Map display and list display of charging stati
	charging data statistics, gunpoint status stat
Station information statistics	Total charging amount, total revenue, total ch
	times, daily charging amount statistics, pile of
Real-time monitor	Version and configuration information of char
	condition monitoring information
Data analysis	Charging volume analysis, order analysis and
	in a certain period of time, you can select mu
	results and provide the query data export fun
Financial analysis	Order information, recharge record and repo
	station) filter and query, and provide export of
Usermanagement	Open an account, open a card, report the los
	online business hall, filter all the user informa
	be directly related to the query), and filter and
	customer information filter query and key cus
Historical data	Current site charging records, AC/DC side da
	screening query
Equipment management	Add, modify and delete Charging pile, station
	provide remote maintenance station setup ar
System management	System member inquiry, addition and modifie

Comment: the above is the standard series, the specific specifications are subject to the actual specifications

Database: Mysqql

he real-time status data period is 30S and the charging data is 10S) nd so on

cess, TCP/UDP communication, WebService call, interface database,

ations, station information,monitoring of pile status and real-time data,

tatistics, monthly charge statistics

l charging times, daily charging amount, daily revenue, daily charging le operation status

harging pile equipment in charging station, and real-time operation

and screening query; For query of charging amount and order quantity nultiple forms of broken line diagram and histogram to display the query function

port information (generate weekly and monthly statistics report of pile

loss, release the loss, unlock and cancel the business functions of the mation of the current station (the card information of the user name can and inquire the charging card information of the current station. Key customer account recharge, provide query data export function e data, event alarm records, charging data and other historical data

tion file configuration information , Channel and rate management, and upgrade function

ification; Assign station management scope and role authority

Partner

Application Cases































PSC Industries Limited

Main Office: 41B, Olutoye Cres/Adeniyi Jones, Ikeja, Lagos State, Nigeria. Branch Office: KM 39, Lekki -Epe Expressway, Lakowe, Lekki, Lagos State , Nigeria. Tel: +2348120855444, +2348123655444, +2348089552800 Email Address: info@pscsolaruk.com Website: www.pscsolaruk.com