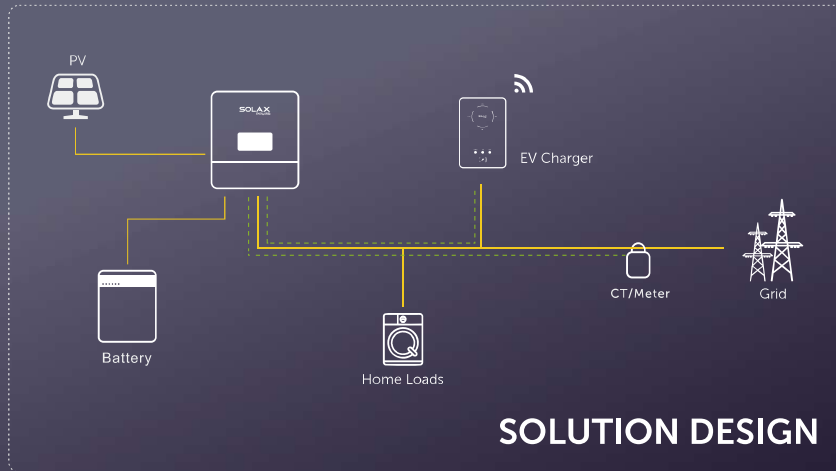# SMART EV CHARGER

X1-EVC-7.2K
X3-EVC-11K / X3-EVC-22K

Features

- Plug or socket outlet selectable
- Built-in 30mA type A RCD and 6mA DC protection
- Integrated with PEN protection and no earth rod
- Encrypted communication based on TLS
- Indoor and outdoor easy installation
- Form an intelligent photovoltaic, storage and EV charging energy system through the communication between the smart EV charger and solaxpower inverter.

- Capable with 100% green energy generated from your solar or wind generation.
- Integrated RFID function
- Remote setting and monitoring with APP and website
- Smart dynamic load balance control
- Set timers to reduce your cost during peak and valley price

SOLUTION DESIGN

SMART EV CHARGER

		X1-EVC-7.2K	X3-EVC-11K	X3-EVC-22K
AC NOMINAL INPUT	Phases/Lines	Single phase	Three phase	Three phase
	Voltage [V]	230; 1/N/PE	230/400; 3/N/PE	230/400; 3/N/PE
	Frequency [Hz]	50/60; ±5	50/60; ±5	50/60; ±5
AC NOMINAL OUTPUT	Voltage [V]	230; 1/N/PE	230/400; 3/N/PE	230/400; 3/N/PE
	Current [A]	32	16	32
	Power [kW]	7.2	11	22
INTERFACE	Wireless Module	Wi-Fi 2.4GHz		
	RS485	YES		
	RFID	YES		
	OCPP 1.6 (JSON)	Optional		
	LCD Screen	Optional		
	CT Clamps	X1	x3	X3
GENERAL DATA	Housing Material	Plastic/Metal		
	Installation Method	Wall-mount		
	Wall-mount Bracket	Yes		
	Charging Outlet	Type P(Charging cable with plug)/Type S(Socket-outlet)		
	Cable Length [m]	6.5		
	Operating Temperature [OC]	-30 ~ 50		
	Working Humidity [%]	5%~95% without condensation		
	Working Altitude [m]	<2000		
	Degree of Protection	IP65		
	Application Site	Indoor/Outdoor		
	Cooling Concept	Natural cooling		
	Dimension(WxHxD) [mm]	249*370*155(for type S)/265*370*155(for type P)		
	Net Weigth [kg]	7(for type S)/10.5(for type P)		
SECURITY PROTECTION	Multiple Protection	Over/Under voltage protection,Overload protection,Shortcircuit protection, Current leakage protection,Grounding protection,Surge protection, Overtemperature protection		
	Integral Earth Leakage Protection Integral	30mA Type A RCD (EN 61008) + 6mA DC protection (EN 62955)		
	Encrypted Communication	TLS		
	Safety Standard	IEC 61851-1:2017, IEC 62196-2:2016		
	Built-in PEN fault technology	YES		
	Warranty [years]	3 (5 optional)		
ADVANCED FUNCTIONS	Charging mode	**Green Mode:** The main purpose of Green mode is to charge the EV with PV energy as much as possible. The default level is 6A, in which the Smart EV Charger will never take electricity from the grid, while there is another 3A level, capable to purchase a little electricity from the grid but no more than 3A. In the Green mode, the minimum charging current is 6A. This work mode will spend all its effort to help clients reduce the cost of buying electricity from the grid. ECO Mode:ECO mode help users to charge their EV with a fixed power while the energy will also from the PV as much as possible. The gap will be supplied by the grid. The charging current can be set thus control the output power. For example, the users set the charging current 16A. If the current from the inverter is only 10A then the rest would be taken from the grid as 6A. If the current from the inverter is 18A, then the Smart EV Charger will output 18A. **Fast Mode:** Will charge the EV at the fastest rate and will import grid electricity if there is insufficient surplus generated power.The max charging power will be the minimum value of the rated power and the current grid limit power.		
	Smart boost	With Smart Boost function, the Smart EV Charger will spend all its effort to use the PV energy as much as possible. Users could set an "End Time" and "Charge Energy", the Smart EV Charger will automatically output the power according to the rest time and rest energy and this part of energy will be taken from PV, if any, in the first place.		
	Timer Boost	Users, when enable the "Timer Boost" function, are able to set a period of time, during which the Smart EV charger will charge the EV as fast as it can no matter in which work mode.		
	Dynamic load balancing	Full dynamic load balancing allows you to charge as fast as possible at your charging mode, protects the main fuse and ensures that you can use your electricity wherever it's needed.		