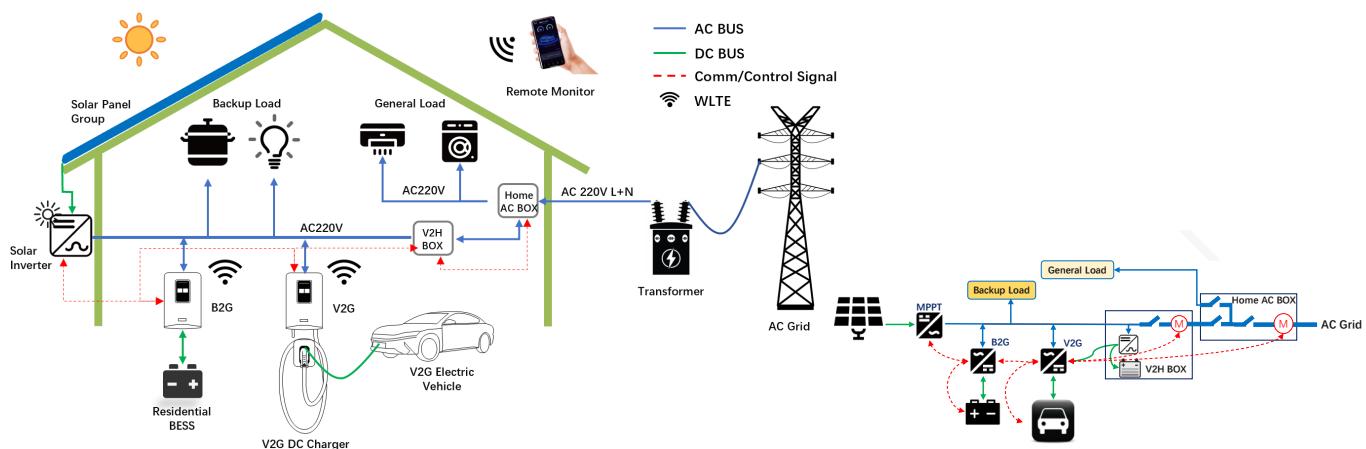


EXPO7K1E-FSW



7kW 750V Single Phase V2G/V2H DC Wallbox Charger



Introduction

EXPO7K1E is the bidirectional 7kW DC wall box for V2G/V2H and B2G/B2H applications, to connect the EV battery or the Residential energy storage battery to the single phase AC grid to realize the EV discharging V2G function and Home power backup V2H function. These V2G/V2H and B2G/B2H functions enable EV battery and residential battery to be used for grid energy storage, backup power supply and smart grid node.

Main Features

- Inside high frequency transformer isolation to enhance safety
- Residential using with low noise, <60dB, EMC class B
- Max efficiency is higher than 95.0%

- WEB/APP Maintenance Backend System enhances the operation and maintenance effectiveness
- Low standby power consumption, less than 30W
- IP65

Unique Function

- 7kW DC charger with AC single phase for CCS, CHAdeMO or GBT standard
- V2G, V2H, B2G, B2H configuration
- V2H Box to realize the off grid power backup
- Wide DC voltage range from 300V to 750V
- One key manual charging and discharging



Application

- V2G EV charger
- B2G Energy storage battery inverter
- V2H/B2H application with optional off grid V2H box
- Residential off grid backup power supply

Technical Parameters

Environmental	Ambient temperature	-40°C~75°C, derating from 45°C	
	Cooling	Fan cooling	
	Altitude	2000m	
Charging mode	AC input	Input voltage & current	230Vac, L+N+PE; 32A
		Input voltage/frequency range	100 Vac~264 Vac, 45 Hz~65 Hz
		Power factor	>0.98 full-load output power of @50%~100%
		THD	<5% full-load output power of @50%~100%
Charging and V2G mode conversion time (battery test)	DC output	Rated power	6.2kW
		Voltage and current range	300Vdc~750Vdc, 0~20.7A
		Efficiency (max)	≥95.0%
V2G mode	V2G AC box	If there is no V2H box, need to select this box	AC energy meter, SPD, AC distribution
	DC input	100ms	
V2G mode	AC output	DC input voltage and output power	300~750V/6.2kW
		Max input current	22A
		Output AC voltage and output power	230V/6.2kW
		Rated power and current	6.2kW/27A
		Output AC frequency	50Hz/60Hz
Off grid	V2H (optional)	THDi/output power factor	<5%/user setting, 0.8 leading~0.8 lagging
		Efficiency (max)	≥95.0%
		Voltage accuracy and distortion	1% and <3%/off grid only support 230Vac
Protocol standard	Power factor	Power factor	0.8~1
		Dynamic volt stability & recovery time	5% and 20ms
B2G wallbox converter	V2H (optional)	V2H box	Bidirectional mid AC energy meter, SPD, AC distribution
		Grid connection	PV inverter connection, grid switch connector, backup 12V/5Ah battery
Control		Monitor interface	LAN 10M/100M and LTE wireless modem support
		Charging indication RGB light bar	Green-normal, yellow-charging, blue-discharging, red-failure
		HMI	Tempered glass protective 5" TFT touch screen LCD, RFID support
		Metering	Bidirectional mid AC energy meter in optional V2H box
		Hot key	One EPO key, one V2G action key
Reliability and safety	Protection	IP65, IK10 for cabinet and IK08 for LCD	
	EMC	RED, EN61000-6-3/EN61000-6-1 Class B, IEC61851-21-2	
	Safety	TUV CE, EN 61851-1/EN 61851-23/EN 61851-24, IEC62477-1, IEC62909-1, IEC62909-2	
Grid connection	AS4777.2		
Mechanical	Dimensions/weight	568mm(H)×340mm(W)×190mm(D)/≤40kg (including the charging connector)	
Charging cable configuration	40A/750V for CCS2, 37A/500V for CHAdeMO, 32A/750V for GBT		
Optional pedestal	Pedestal with cable retractors		