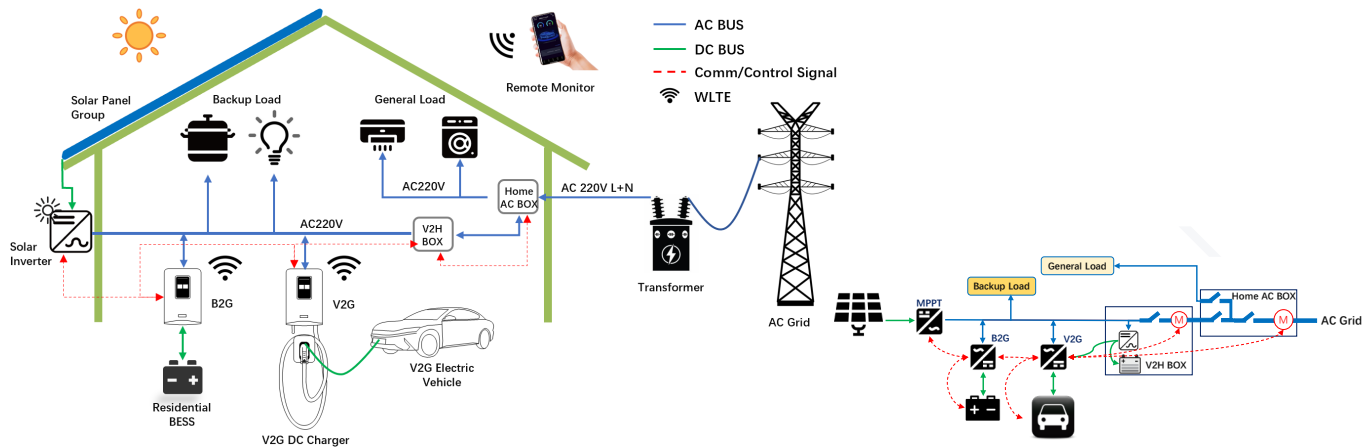


# EXP07K1E-FSW



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



## Introduction

EXP07K1E 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 dis/charging 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



V2H Solution



V2G Solution

# 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%
	DC output	Rated power		6.2kW
		Voltage and current range		300Vdc~750Vdc, 0~20.7A
		Efficiency (max)		≥95.0%
	V2G AC box	If there is no V2H box, need to select this box		AC energy meter, SPD, AC distribution
Charging and V2G mode conversion time (battery test)				100ms
V2G mode	DC input	DC input voltage and output power		300~750V/6.2kW
		Max input current		22A
	AC output	Output AC voltage and output power		230V/6.2kW
		Rated power and current		6.2kW/27A
		Output AC frequency		50Hz/60Hz
		THDi/output power factor		<5%/user setting, 0.8 leading~0.8 lagging
		Efficiency (max)		≥95.0%
	Off grid	Voltage accuracy and distortion		1% and <3%/off grid only support 230Vac
		Power factor		0.8~1
		Dynamic volt stability & recovery time		5% and 20ms
V2H (optional)	V2H box		Bidirectional mid AC energy meter, SPD, AC distribution PV inverter connection, grid switch connector, backup 12V/5Ah battery	
	Grid connection		Power switch in the main grid, backup grid and V2G charger by AC contactor	
Protocol standard		OCPP 1.6J/OCPP 2.0, ISO15118/ISO15118-20, CHAdeMO V1.2, EVPOSSA		
B2G wallbox converter		Battery side: charge/discharge voltage 300~750V, max power 7kW, max current 23A		
		AC side: 100 Vac~264 Vac, 45 Hz~65 Hz, max current 32A, grid connection standard: same to V2G		
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		