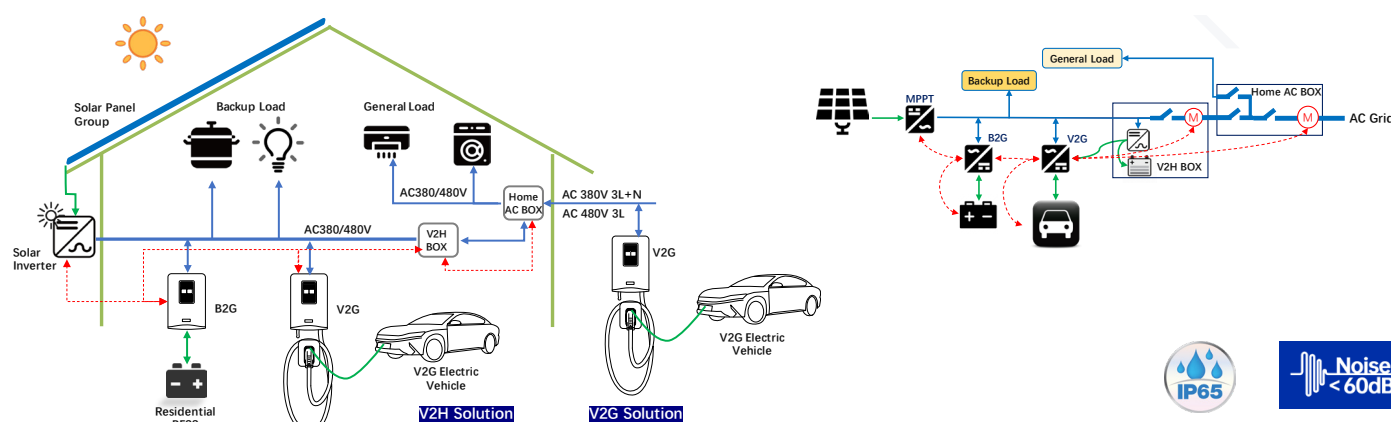


EXP11K1E-FSW

11kW1000V Three Phase V2G/V2H DC Wallbox Charger

Product Introduction

EXP11K1E is the bidirectional 11kW 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. This 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.



Unique function

- 11kW DC charger with AC three phase for CCS, NACS, CHAdeMO or GBT standard
- V2G, V2H, B2G, B2H configuration
- Optional V2H Box to realize the off grid power backup
- Wide DC voltage range from 300V to 1000V
- One key to realize the manual charging and discharging

Main feature

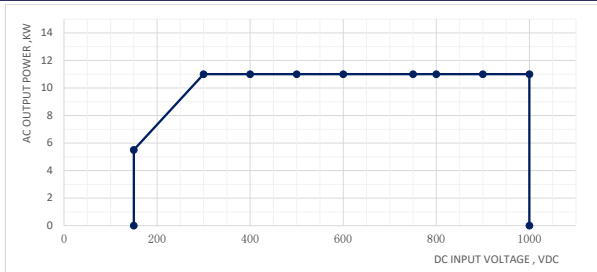
- Inside high frequency transformer isolation to enhance safety
- Max efficiency is higher than 97.0%
- Low standby power consumption, less than 7W
- Residential using with low noise, <60dB, EMC class B
- IP65

Application

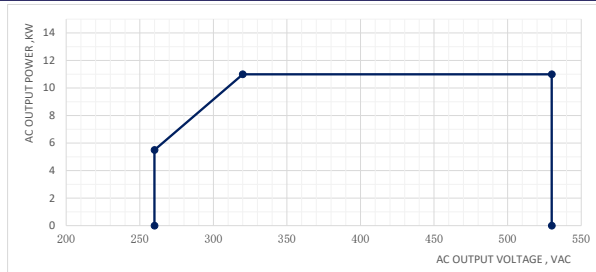
- V2G EV charger
- B2G Energy storage battery inverter
- V2H/B2H application with optional off grid V2H box
- Residential off grid backup power supply



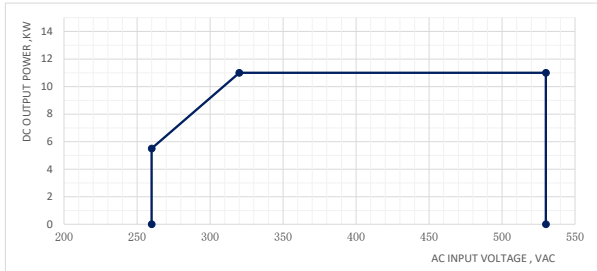
DC2AC MODE DC input voltage VS AC output power



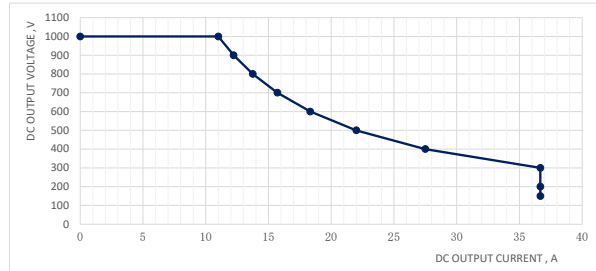
DC2AC MODE AC output voltage VS AC output power



AC2DC MODE AC input voltage VS DC output power



AC2DC MODE DC output voltage VS DC output current



Technical Specification

Environmental		Ambient Temperature	~ -40℃ ~ + 75℃, derating from 45℃
		Cooling	Fan cooling
		Altitude	2000m
Charging Mode	AC Input	Input voltage & current	380/400/480Vac, 3L+(N)+PE; 22A
		Input voltage/frequency range	260 Vac ~ 530 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	11kW
		Voltage and current range	200Vdc ~ 1000Vdc, 0 ~ 37A
		Efficiency (max)	≥97.0%
AC Box	if no V2H box, need this Box	AC energy meter, SPD, AC distribution	
Charging and V2G Mode convert time (Battery test)			10mS
V2G Mode	DC Input	DC input voltage and Output power	300Vdc ~ 1000Vdc, 11kW
		Max Input current	37A
	AC Output	Output AC Voltage and Output power	From 320 to 530Vac, ouput power is 11kW
		Rated power and current	11kW / 16.6A
		Output AC Frequency	50 Hz/60 Hz
		THDi / Output Power Factor	< 5% / User Setting, 0.8 Leading~0.8 Lagging
		Efficiency (max)	≥97.0%
	Off Grid	Voltage accuracy and distortion	1% and <3% // Off Grid only support 230Vac
		Power factor	>0.7
		Dynamic volt stability & recovery time	5% and 20mS
	V2H Box (Optional)	V2H Box	Bidirectional Mid AC energy meter, SPD, AC distribution
		Grid Connection	PV inverter connection, Grid switch connector, backup 12V/10Ah battery 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, optional EEBUS		
B2G WallBox converter	Battery side: Charge/Discharge Voltage 300~1000V, max power 11kW, max current 37A		
	AC side: 320 Vac ~ 530 Vac, 45 Hz ~ 65 Hz, max current 16.6A, 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/Safety	TUV CE, RED, EN61000-6-3/EN61000-6-1 Class B ; EN 61851-1/EN 61851-23/EN 61851-24; TUV US+CA, UL2202	
Grid connection	Certification	VDE-AR-N 4105, EN50549, AS4777.2, UL1741SB: 2021, CSA C22.3 No. 9 and CSA C22.2 No. 107.1	
Mechanical		Dimension / Weight	705mm(H)×405mm(W)×230mm(D) / ≤45 kg (include the charging connector)
Charging cable configuration		40A/1000V for CCS1/2, 37A/1000V for CHAdeMO, 40A/1000V for GBT, 50A/1000V for NACS	
Optional Pedestal		Pedestal with cable retractors	