

# V2G Charging Solution



22kW /44kW /132kW V2G DC Fast Charger

The V2G charger ensures the power supply and demand in good balance between the grid and EV battery by taking the EV battery as an energy storage device and through the help of local or remote Energy Management System. It also supports flexible PV energy access to optimize grid peak-valley electricity usage, supplement the grid capacity and provide backup power supply. It can be a core node to smart grid or micro grid access and also an important supplement to the user-side energy storage system.

## Solution Value

- Grid peak valley electricity using
- Grid capacity supplement
- Grid quality and safety improvement
- Supplement to the user-side energy storage

#### Solution Feature

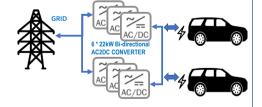
- Total electric insolation between the grid, battery and EV
- Fully compatible with different system configurations
- Flexible change of the system configuration, capacity and the direction of power flow, customization support
- Unify EMS strategy
- Global V2G standard support

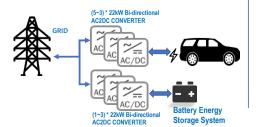
■ EXP132K4E-FD 132kW V2G charger

■ EXP44K4E-FDW 44kW V2G charger

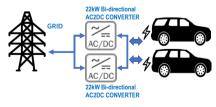
■ EXP22K4E-FSW 22kW V2G charger





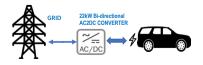






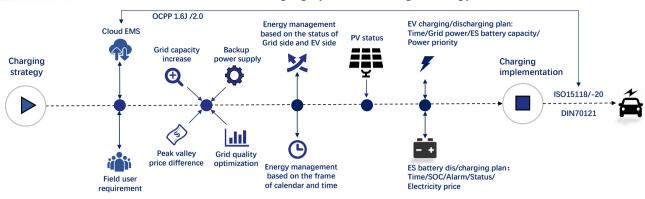






2024.12 VER:2.4

## V2G Charging System Running Strategy



		EXP22K4E	EXP44K4E	EXP132K4E
AC Grid access	AC mode	45-65Hz/ 3-phases+(N)+PE / 260Vac-530Vac		
	Max AC feedback power	22 kW	44 kW	132 kW
	Power factor	>0.99		
	Total harmonic curren	<3% (Rated input )		
EV charging	Max Charging power	22 kW	44 kW	132 kW
	Charging power switch	Single charging connectorc	Charging in parallel with half power or in series with full power between 2 charging connectors	
	Charging voltage	150V~1000V		
EV discharging	Max V2G feedback power	22kW	44 kW	132 kW
	V2G protocol standard	CCS: DIN70121, IEC15118/-2/-20, CHAdeMO V1.2 EVPOSSA		
Optional Battery	Battery Voltage	1	300~1000V	
Energy Storage	Max Dis/Charging power	1	22kW	C66kW configuration
Access	BES BMS access	CAN communication		
Metering	AC Grid side (Optional)	One bidirectional AC energy meter		
	Charging side	Bidirectional DC energy meter	Two bidirectional DC energy meter	
Dimension	W * H * D mm	610 * 610 * 270 mm	705 * 1000 * 240 mm	700 * 1750 * 750 mm
Weight	Kg	65 kg	120 kg	250 kg
Pro	tection Class	IP54/IK10	IP55/IK10	IP55/IK10
Thermal Management		Air cooled		
Ambient Temp	-30 ∼ +70°C , full power output below 45°C, Power derating 5%/ °C above 45°C			
EMC/Safety	TUV US+CA, UL2202, TUV CE/RED EN62909, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24			
Grid connection	VDE-AR-N 4105, EN50549, UL1741SB			

Configuration					
Power module configuration	1 * 22kW power module	2 * 22kW power modules	6 * 22kW power modules		
Charging connector configuration	1 CCS +1 CHAdeMO or 2 CCS or 1 CCS or 1 CHAdeMO		CHAdeMO		

Function and Interface				
HMI	Tempered glass protective 7" TFT Touch Screen LCD, RFID, RGB panel LED, POS (opt)			
Back-end platform	OCPP 1.6J, support firmware update to 2.0x, OTA support, P&C/ Smart charge/ Power management support			
MBE function support	WEB side Maintenance Backend System enhance the operation and maintenance effectiveness			
Cable management	Pedestal with two cable retractors and the light bar			

# BEG1K075G 22kW1000V Bi-directional AC2DC power converter

