

PV storage and charging integrated equipment

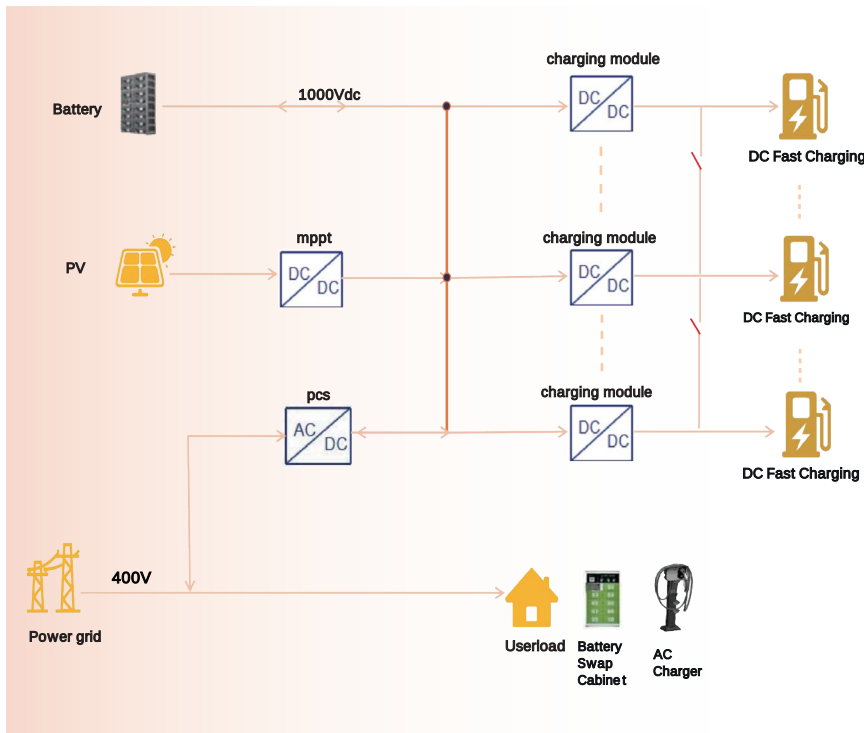
High-efficiency DC Bus Architecture for Smart PV-ESS Charging Systems

1000Vdc

DC busbar

240kW

charging power



Product Overview

PV power generation, energy storage backup, smart fast charging, green energy saving a safe and efficient integrated energy solution.

Application Scenarios

Suitable for shopping malls, service areas, gas stations, scenic spots, and remote off-grid areas, delivering green power supply, emergency backup, and peak-valley savings.

Customer Value



Simplified delivery, ready to operate

High integration, floor-mounted, space-saving, reduced construction, accelerated timelines.



Ultimate efficiency, low-loss energy flow

DC bus system reduces energy conversion losses.



Off-grid operation, power reliability maxed out

Off-grid operation with PV + storage backup ensures reliable power.



Lower costs, higher efficiency, more flexible business models

100% PV self-consumption + energy storage peak-valley arbitrage, dynamic capacity expansion, reducing transformer upgrade costs.

Battery Specs	Product Model	GCC-1000V130H261L240H-EN
	Cell Type	LFP314Ah
	pack Configuration	52.25kWh/1P52S
	Capacity and Pack Quantity	261.25kWh/5
	Battery Voltage Range	650~949Vdc
	C-Rate	≤0.5P
	Cycle Life	8000 cycles (25±2°C, 0.5P charge/discharge, 70% EOL)
		6000 cycles (25±2°C, 0.5P charge/discharge, 80% EOL)
PV System	Input Voltage Range	200~900Vdc
	Output Voltage Range	600~950Vdc
	MPPT Channels	4 MPPT channels × 3
	Output Power	120kW
Charging System	Charging Power	130~240kW
	Charging Distribution	Dynamic Switching
	Charging Gun Qty	Fast Charging, 400A × 6 guns; Slow Charging, 7kW × 6
	Two-wheeler Charging/ Battery Swapping	12+12kW; 400Vac; 3L+N
	Reserved Distribution	20+20kW; 400Vac; 3L+N
	DC Output	Constant Power Output Voltage Range: 300-1000 Vdc
		Output Current Range: 0-799.8 A
AC Side Parameters	Input Power	137 ~ 243kW
	Input Voltage	400Vac; 3L+N
Off-grid	Output Power	130kVA
	Output Voltage	400Vac; 3L+N; 50Hz
System Parameters	Connectivity	4G / Wi-Fi / Ethernet
	Off-grid Capability	Yes
	Noise	≤ 75dB
	Cooling System	Battery liquid cooling; charging power module; pcs air cooling
	Protection Rating	Overall IP55,
	Operating Temperature	-25~55°C, derating above 45°C
	Relative Humidity	5%-95%, non-condensing
	Dimensions (W × D × H)	1707mm × 1495mm × 2290mm
	Weight	3300kg
	Corrosion Protection Level	C3 (standard) / C5 (coastal)
	Altitude	≤ 2000m; Derating required for altitudes exceeding 2000m