OPTONICA SOLAR

GE-F60







Rated power operation the maximum temperature of the battery is less than 40°C

BMS integrated technology, power supply redundancy design, support black start function,Off grid operation,etc

Suitable for high rate cyclic charging and discharging scenarios

Lithium Iron Phosphate (LFP) Battery, The battery pack and system adopt an aerosol fire extinguishing solution

Combustible gas, smoke and temperature detection, system active exhaust, and fire alarm

Supports battery expansion, with a maximum capacity of 360KWh



Model		GE-F60
Main Parameter		
Cell Chemistry		LiFePO4
Module Energy (kWh)		5.12
Module Nominal Voltage (V)		51.2
Module Capacity (Ah)		100
Battery Module Qty In Series (Optional)		12
System Nominal Voltage (V)		614.4
System Operating Voltage (V)		480~700
System Energy (kWh)		61.44
System Usable Energy (kWh) ¹		55.29
Rated DC Power		61.44
	Recommend	50
Charge/Discharge ²	Nominal	100
Current (A)	Peak Discharge (2 mins, 25°C)	125
Working Temperature (°C)		Charge: 0~55/Discharge: -20~55
Status Indicator		Yellow: Battery High Voltage Power On Red: Battery System Alarm
Communication Port		CAN2.0/ RS485
Humidity		5%~85%RH
Altitude		≤2000m
IP Rating of Enclosure		IP55
Dimension (W/D/H,mm)		735*1045*2235
Weight Approximate (kg)		1010
Installation Method		Floor-Mounted
Storage Temperature (°C)		0~35
Operating Temperature (°C)		-30~45(>45 derating)
Recommend Depth of Discharge		90%
Cycle Life		25±2°C,0.5C/0.5C, EOL70%≥6000
Warranty ³		10 years
Certification		UN38.3/CB/CE/CEC/IEC62040

- 1. DC Usable Energy, test conditions: 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
- 2. The current is affected by temperature and SOC.
- 3. The warranty is due whichever reached first of warranty period or life cycle power.
- 4. Made in China.



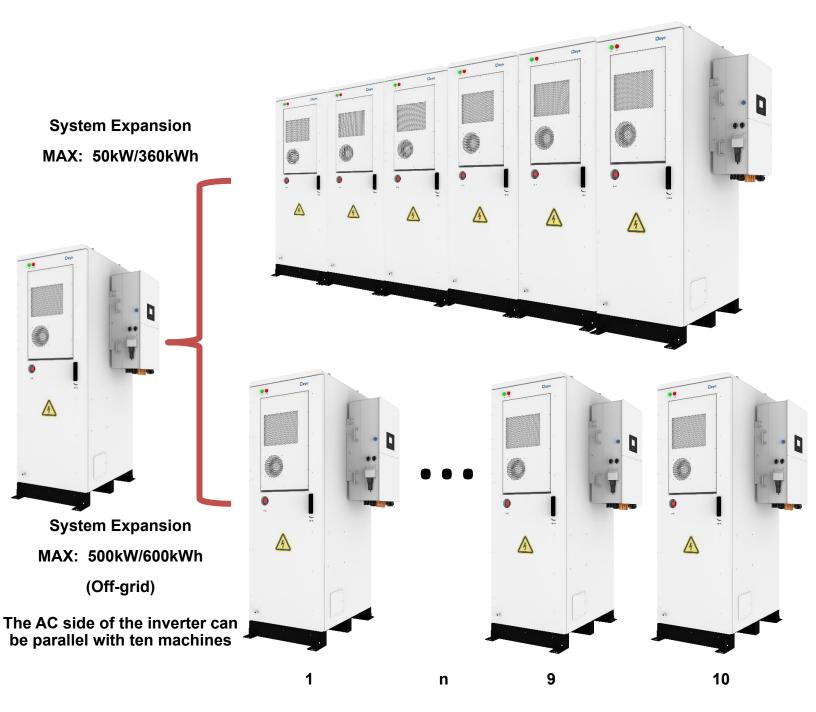




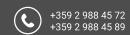


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Typical application cases

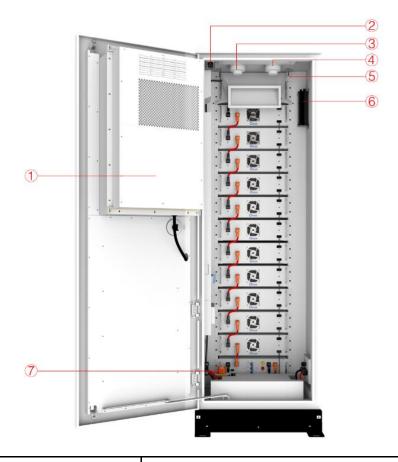










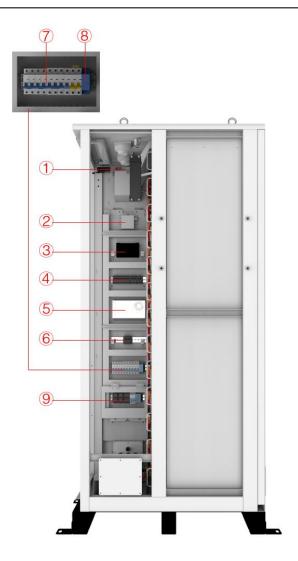


①Air conditioner	Cooling the BESS.
②Travel switch	When the BESS is detected to be on fire, aerosol is emitted to extinguish the fire. Check whether the BESS's door is closed.
③Smoke detector	A device used to detect smoke in a fire and sound an alarm when smoke is detected.
4 Heat detector	A device used to measure temperature and sound an alarm if it detects excessive temperature.
5 Fire suppression water pipe	Fire suppression and cooling.
6 Aerosol Fire Suppression Device	When the BESS is detected to be on fire, aerosol is emitted to extinguish the fire.
7 Manual service disconnect	In order to protect the safety of technicians servicing in high voltage environments or respond to sudden events, the connection of the high voltage circuit can be quickly separated.



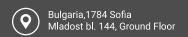




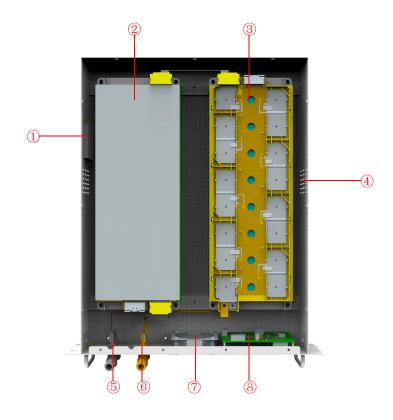


①Fan	Emission of combustible gas
②Combustible gas sensor	Detect combustible gases
③Serial relay	Control system
④Terminal line	For connecting cables
⑤Switching Mode Power Supply	Power source
⑥Combustible gas sensor	Detect combustible gases
7 Miniature circuit breaker	Controlled power-on and power-off
®Water immersion sensor	Check the ESS for water leakage
9Terminal line	Connect external cables

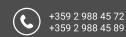






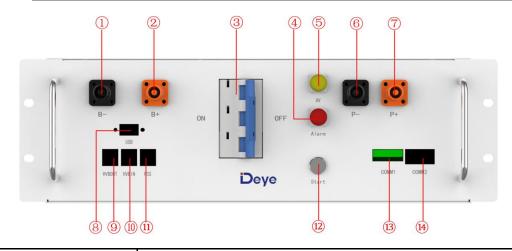


①Aerosol fire extinguishing device	When the pack is detected to be on fire, aerosol is emitted to extinguish the fire.
②Battery module	Provides electrical energy storage and output
③CCS	Cells Contact System
4Air inlet	Cold air inlet
⑤Battery negative-	/
6 Battery positive+	/
7 Fan	Promote internal and external air flow
®BMU	Battery monitoring









①B-	Connection position of the common negative pole of the battery
②B+	Connection position of the common positive pole of the battery
③Air switch	Used to manually control the connection between the battery rack and external devices
4 ALRM light indicator	Battery system fault alarm indicator
⑤HV light indicator	High-voltage hazard indicator
⑥PCS-	Connection position of PCS negative pole
⑦PCS+	Connection position of PCS positive pole
®USB	BMS upgrade interface and storage expansion interface
9оит сом	Connection position with next GE-F-PDU communication output
10 IN COM	Connection position with previous GE-F-PDU communication input
①PCS COM	Communication interface with charging and discharging equipment
12)START	A start switch of 12VDC power inside the high-voltage control box
③СОММ1	Communicative connection with the cabinet
1 4 СОММ2	Communicative connection with the first battery module; and providing 12VDC power for the first battery module.

