



ALL IN ONE HESS HYBRID ENERGY STORAGE SYSTEM

GE-F128/F240 Series Outdoor Battery Cabinet

SUN-30~125K Series Hybrid Inverter

SUN-100/125K PCS+MPPT+STS Series Module



Ultimate Protection, Continuing "0" safety accidents

- **Six-dimensional** safety design, eliminating the risk of fire and explosion
D1 electrical isolation + D2 physical insulation + D3 active exhaust + D4 directional venting + D5 aerosol suppression + D6 water fire sprinkler
- High-intensity cabinet, **unique patented door latch design**, eliminates structural weak points
- **Hour-level fire resistance**, prevent heat spread



Highly Integrated, All-in-one quick deployment

- Outer cabinet wall preset inverter bracket installation position, **no wall bearing concerns, no need to drill**
- **Hybrid inverter**, covering PV, grid, load, generator, and battery interfaces
- Single cabinet can easily deploy **PV+ESS, PV+ESS+DG**



Stable Efficient, Excellent performance ensures returns

- Long-life lithium iron phosphate battery, **≥ 8000 cycles**
- High-efficiency thermal management, **no derating at 45°C**, cell temperature difference **≤ 5°C**
- **100%** unbalanced output, up to **200%** PV over-matching access



Intelligent Management, Flexible adaptation and expansion

- Leading **rack-level + pack-level + cell-level** energy balancing algorithm, non-inductive pack change and cabinet expansion
- Single cabinet can be configured with a **2/3/4h system of 30~125kW**, up to **10 units** AC-side on/off-grid parallel or **10 units** DC-side battery parallel
- Integrated energy platform, **24/7 AI** smart customization of optimal power usage strategies

Outdoor Battery Cabinet

GE-F128 Series

GE-F240 Series

Model	GE-F112-BC-2-A3	GE-F128-BC-2-A3	GE-F176-BC-2-A3	GE-F208-BC-2-A3	GE-F240-BC-2-A3
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Main Parameters

Cell Type	LiFePO ₄				
Module Capacity (Ah)	314				
Module Nominal Voltage (Vdc)	51.2				
Module Energy (kWh)	16.07				
Module Qty In Series	7	8	11	13	15
System Nominal Energy (kWh)	112	128	176	208	241
System Usable Energy (kWh)*1	112	128	176	208	241
System Nominal Voltage (Vdc)	358.4	409.6	563.2	665.6	768
System Operating Voltage (Vdc)	280-408.8	320-467.2	440-642.4	520-759.2	600-876
Rated DC Power (kW)	56	64	88	104	121
Charge/Discharge Max. Continuous	180				
Current(A)*2	285				
Peak discharge@15s/25±2°C					

Other Parameters

Fire Protection System	Aerosol and Water fire interface CO gas detection, Active exhaust and Explosion venting				
Cooling Method	Smart Air Cooling				
Communication Port	CAN, RS485				
Communication protocol	CAN2.0, Modbus, TCP/IP				
Operating Temperature(°C)*3	-30~55				
Recommend Storage Temperature(°C)	0~35				
Humidity	5% ~ 95%RH (No Condensing)				
Altitude	3000m				
IP Protection	IP55				
Anti Corrosion Level	C4-M				
Dimension(W x D x H,mm)	998 x 1240 x 2400		1300 x 1240 x 2400		
Weight(kg)	1595	1700	2080	2290	2500
Installation Location	Floor mount				
Cycle Life	≥8000 (25±2°C,0.5P,EOL70%)				
Warranty	10 years				
Certification	UN38.3, CE, IEC, VDE, ROHS, REACH				

1. Test conditions : 100% DOD, 0.5P 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. Derated operation at > 45°C.

Hybrid Inverter

Model	SUN-30K-SG02HP3-EU-BM3	SUN-50K-SG02HP3-EU-BM4-P	SUN-80K-SG02HP3-EU-EM6	SUN-100K-SG02HP3-EU--GM10* (Coming soon)	SUN-125K-SG02HP3-EU-GM10* (Coming soon)
Battery Input					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160~800		160~1000		
Max.Charge/Discharge Current (A)	100	160	80+80	100+100	100+100
Number of Battery Input					
PV Input					
Max. PV Access Power (W)	6000	100000	160000	200000	250000
Max. PV Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Voltage Range (V)	150~850				
Rated PV Input Voltage (V)	600		650		
Max. Operating PV Input Current Per MPPT (A)	36	36	36	42	42
Max. Input Short-Circuit Current Per MPPT (A)	55	55	54	63	63
No. of MPP Trackers/Strings Per MPP Tracker	3/2	4/2	6/2	10/2	10/2
AC Input/Output					
Rated AC Input/Output Active Power (W)	30000	50000	80000	100000	125000
Max. AC Input/Output Apparent Power (VA)	33000	55000	88000	110000	137500
Rated AC Input/Output Current (A)	45.5/43.5	75.8/72.5	121.3/116	151.6/145.0	189.4/181.2
Max. AC Input/Output Current (A)	50/47.9	83.4/79.8	133.4/127.6	166.7/159.5	208.4/199.3
Max. Continuous AC Passthrough (grid to load) (A)	200	200	200	250	250
Peak Power (off-grid) (W)	1.5 Times Of Rated Power,10s				
Power Factor Adjustment Range	0.8 Leading-0.8 Lagging				
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un				
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65				
Grid Connection Form	3L+N+PE				
Total Current Harmonic Distortion THDi	<3% (Of Rated Power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.60%		98.7%		
Euro Efficiency	97%		98.1%		
MPPT Efficiency	> 99%				
Equipment Protection					
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (Optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection				
Surge Protection Level	TYPE II(DC),TYPE II(AC)		TYPE II(DC), TYPE II(AC)		
Interface					
Communication Interface	RS485, RS232, CAN				
LCD/LED Display	GPRS/WIFI/Bluetooth/4G/LAN (Optional)				
General					
Operating Temperature Range (°C)	-40 to +60, >45 Derating				
Permissible Ambient Humidity	0~100%				
Permissible Altitude	3000m				
Noise (dB)	≤ 65				
Ingress Protection(IP) Rating	IP65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Dimension (WxHxD mm, excluding connectors and brackets)	528*793*278	528*793*278	606*927*314	TBD	TBD
Weight (kg)	65	65	105	TBD	TBD
Type of Cooling	Smart Air Cooling				
Warranty	5 Years/10 Years				
Grid Regulation	IEC 61727,IEC 62116,CEI 0-21,EN 50549 , NRS 097,RD 140,UNE 217002,OVE-Richtlinie R25,G99,VDE-AR-N 4105				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				

HESS Solution



GE-F128



GE-F240

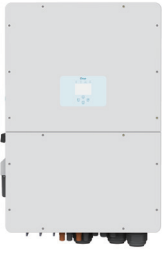
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SUN-30K/50K-SG02HP3-EU-BM4-P



SUN-60K/80K-SG02HP3-EU-EM6



SUN-100K/125K-SG02HP3-EU-GM10



SUN-100K/125K-PCS01HP3+
SUN MPPT-L01-EU-AM8+
SUN-ST5500L

Power Unit	Battery Cabinet Model	Specification
2h HESS Solution		
SUN-50K-SG02HP3-EU-BM4-P	GE-F112-BC-2-A3	50kW/112kWh
SUN-60K-SG02HP3-EU-EM6	GE-F128-BC-2-A3	60kW/128kWh
SUN-80K-SG02HP3-EU-EM6	GE-F176-BC-2-A3	80kW/176kWh
SUN-100K-SG02HP3-EU-GM10	GE-F208-BC-2-A3	100kW/208kWh
SUN-125K-SG02HP3-EU-GM10	GE-F240-BC-2-A3	125kW/241kWh
SUN-100K-PCS01HP3+SUN MPPT-L01-EU-AM8+SUN-ST5500L	GE-F208-BC-2-A3	100kW/208kWh
SUN-125K-PCS01HP3+SUN MPPT-L01-EU-AM8+SUN-ST5500L	GE-F240-BC-2-A3	125kW/241kWh
3h HESS Solution		
SUN-60K-SG02HP3-EU-EM6	GE-F176-BC-2-A3	60kW/176kWh
SUN-80K-SG02HP3-EU-EM6	GE-F240-BC-2-A3	80kW/241kWh
4h HESS Solution		
SUN-30K-SG02HP3-EU-BM3	GE-F128-BC-2-A3	30kW/128kWh
SUN-50K-SG02HP3-EU-BM4-P	GE-F208-BC-2-A3	50kW/208kWh
SUN-60K-SG02HP3-EU-EM6	GE-F240-BC-2-A3	60kW/241kWh

Deye Cloud

All-in-one Energy & Device Management Platform

- Unlock significant savings
- Individual Add-on for dynamic tariff
- Intelligent charging/discharging strategies
- Tailored solution to deye devices
- Real-time equipment monitoring
- Best energy scheduling solutions by Deye Copilot
- 24/7 AI Assistant support

Switch flexibly between autonomous and manual control

Display energy savings and costs

Support dynamic tariff and flat-rate

AI Assistant

Offer response suggestions and personalized support experience

Support over 30 languages

Analyze dynamic pricing, predict power load and PV generation to optimize energy dispatch and minimize electricity costs

Smarten Up Your Hybrid Energy Storage System

Download Deye Cloud APP to join us!

Embrace a seamless, effortless energy experience that's both eco-friendly and budget-friendly with our intelligent assistant



APP & Web Manage your energy effortlessly	Cloud-edge Collaboration Faster and more efficient	Accelerated Connection Optimized for speed and performance	Localized Data Centers Ensure data sovereignty and compliance in EU & US	Deye Copilot AI-powered energy analysis and control	AI Assistant 24/7 support, fast, efficient, in your language
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