



# Indoor C&I ESS Solutions

GB-W

SUN-30~125K Series Hybrid Inverter

SUN-125K PCS+MPPT+STS Series Module



## User-friendly Structural Design

- Cable-free stackable design enables fast, tool-free installation.
- Millimeter-grade filtered airflow ensures efficient dust removal.
- Detachable maintenance cover allows direct on-cluster service.



## High Power Output

- 1C continuous charge/discharge for high-load and fast-charge scenarios.



## Intelligent Thermal Management

- Independent fan control at pack level.
- Optimized airflow design keeps cell temperature difference within 5 °C.



## Flexible Expansion

- Modular design, scalable from 5-16 packs (58-188 kWh) per cluster.
- Up to 16 clusters in parallel, reaching 3MWh.



## Wide Compatibility

- Advanced cluster-level, pack-level, and cell-level balancing algorithms ensure seamless battery replacement and parallel operation.
- Compatible with 30-125 kW power units.



## Robust Protection

- C4 anti-corrosion coating ensures superior environmental resistance.

Model	GB-W											
<b>Battery System Data</b>												
Cell Chemistry	LiFePO <sub>4</sub>											
Module Energy (kWh)	11.7											
Module Capacity (Ah)	230											
Nominal Voltage (V)	51.2											
Battery Module Qty in series (Optional)	5	6	7	8	9	10	11	12	13	14	15	16
System Nominal Voltage (Vdc)	256	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	768	819.2
System Operating Voltage (Vdc)	208-292	249.6-350.4	291.2-408.8	332.8-467.2	374.4-525.6	416-584	457.6-642.4	499.2-700.8	540.8-759.2	582.4-817.6	624-876	665.6-934.4
System Energy (kWh)	58.8	70.6	82.4	94	105.9	117.7	129.5	141.3	153	164.8	176.6	188.4
System Usable Energy (kWh)	53	63.5	74.1	84.6	95.3	105.9	116.5	127.1	137.7	148.3	158.9	169.5
System Nominal Charge/Discharge Power (kW)	58.8	70.6	82.4	94.2	105.9	117.7	129.5	141.3	153	164.8	176.6	188.4
Charge / Discharge	Max.Continuous											230
Current	Peak											322 (1s)
Working Temperature (°C)	Charge:0~55 / Discharge:-20~55											
Communication Port	CAN / RS485											
Thermal Management	Natural air cooling											
Recommend Depth of Discharge	90%											
Cycle Life	25±2°C,0.5C/0.5C,70%EOL≥6000											
Warranty	10 years											
<b>Other Data</b>												
Humidity	0-85%											
Altitude (m)	≤3000											
IP Rating of Enclosure	IP20											
Noise (dB)	≤50											
Storage Temperature (°C)	-30~60											
Dimension (W × D × H, mm)	690 x 436 x 1610.7	690 x 436 x 1881.2	690 x 436 x 1340.2 +690 x 436 x 1008.5	690 x 436 x 1340.2 +690 x 436 x 1279	690 x 436 x 1610.7 +690 x 436 x 1279	690 x 436 x 1610.7 +690 x 436 x 1549.5	690 x 436 x 1881.2 +690 x 436 x 1549.5	690 x 436 x 1881.2 +690 x 436 x 1820	690 x 436 x 1610.7 +690 x 436 x 1279*2	690 x 436 x 1881.2 +690 x 436 x 1279*2	690 x 436 x 1610.7 +690 x 436 x 1549.5*2	690 x 436 x 1881.2 +690 x 436 x 1549.5*2
Weight Approximate (kg)	500	593	706	799	892	985	1078	1171	1284	1377	1470	1563
Installation Location	Floor Mount											



# Recommended Collection



Model	SUN-30K-SG02HP3-EU-BM-P	SUN-50K-SG01HP3-EU-BM4	SUN-80K-SG02HP3-EU-EM6	SUN-125K-PCS01HP3
<b>Battery Input</b>	Lithium-ion			
Battery Type	Lithium-ion			
Battery Voltage Range (V)	160~800	160~800	160~1000	630~1000
Max. Charging Current (A)	160	50+50	80+80	200
Max. Discharging Current (A)	160	50+50	80+80	200
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1	2		1
<b>AC Input/Output Data</b>				
Rated AC Input/Output Active Power (kW)	30	50	80	125
Max. AC Input/Output Apparent Power (kVA)	33	55	88	125
Rated AC Input/Output Current (A)	45.5/43.5	75.8/72.5	121.3/127.6	189.4/181.2
Max. AC Input/Output Current (A)	50/47.9	83.4/79.8	133.4/127.6	189.4/181.2
Rated Input/Output Voltage/Range(V)	220/380V, 230/400V 0.85Un-1.1Un			
Grid Connection Form	3L+N+PE			
Power Factor Adjustment Range	0.8 leading-0.8 lagging			-1~1
Total Current Harmonic Distortion THDi	<3% (of nominal power)			
DC Injection Current	<0.5%In			
<b>Efficiency</b>				
Max. Efficiency	97.60%	97.60%	98.70%	98.50%
Euro Efficiency	97.00%	97.00%	98.10%	97.80%
MPPT Efficiency	>99%	>99%	>99%	
<b>Equipment Protection</b>				
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			AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, Anti-islanding Protection, Insulation Impedance Detection, Residual Current Detection
Surge Protection Level	TYPE II(DC),TYPE II(AC)			
<b>Interface</b>				
Communication Interface	WIFI, RS485, CAN	RS485, RS232, CAN		WIFI, RS485, CAN, Meter
<b>General Data</b>				
Operating Temperature Range (°C)	-40°C to +60°C, > 45°C Derating			
Permissible Ambient Humidity	0~100%			0~95%
Altitude(m)	≤3000	≤2000	≤3000	≤4000
Noise(dB)	≤65			≤75
IP Rating of Enclosure	IP65			
Over Voltage Category	OVC II(DC),OVC III(AC)			
Type of Cooling	Intelligent air cooling			
Warranty	5 Years/10 Years (the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy)			
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002,OVE-Richtlinie R25, G98, G99,VDE-AR-N 4105			
Safety/EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			IEC/EN 62477-1

# 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

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

Display energy savings and costs

Deye Copilot ToU

## 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



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