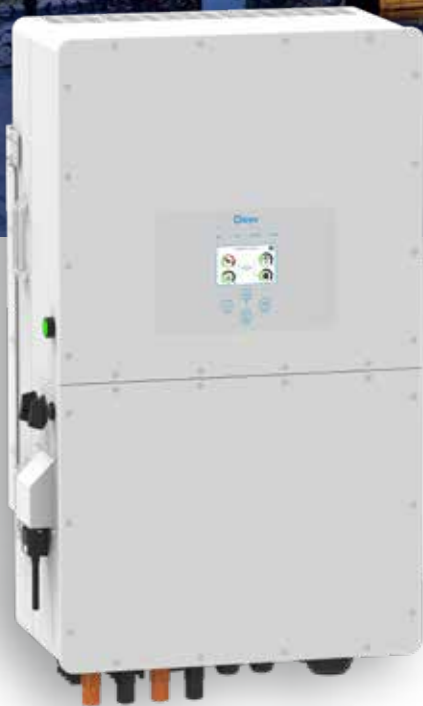




Three Phase Hybrid Inverter

SUN-29.9/30/35K-SG01HP3-EU-BM3

SUN-40/50K-SG01HP3-EU-BM4



- 100** 100% unbalanced output, each phase
-  AC couple to retrofit existing solar system
- 10** *Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100** Max. charging/discharging current of 100A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Model	SUN-29.9K-SG01HP3 -EU-BM3	SUN-30K-SG01HP3 -EU-BM3	SUN-35K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
Battery Input Data					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-800				
Max. Charging Current (A)	50+50				
Max. Discharging Current (A)	50+50				
Number of Battery Input	2				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	38870	39000	45500	52000	65000
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Range (V)	150-850				
Full Load DC Voltage Range (V)	360-850	360-850	420-850	360-850	450-850
Rated DC Input Voltage (V)	600				
PV Input Current (A)	36+36+36	36+36+36	36+36+36	36+36+36+36	
Max. PV I _{SC} (A)	55+55+55	55+55+55	55+55+55	55+55+55+55	
No.of MPP Trackers	3			4	
No.of Strings per MPP Tracker	2+2+2			2+2+2+2	
AC Output Data					
Rated AC Output Active Power (W)	29900	30000	35000	40000	50000
Max. AC Output Active Power (W)	29900	33000	38500	44000	55000
AC Output Rated Current (A)	45.4/43.4	45.5/43.5	53.1/50.8	60.7/58	75.8/72.5
Max. AC Output Current (A)	45.4/43.4	50/47.8	58.4/55.8	66.7/63.8	83.4/79.7
Max. Three-phase Unbalanced Output Current (A)	60	60	60	70	83.3
Max. Continuous AC Passthrough (A)	200				
Peak Power (Off Grid)	1.5 time of rated power, 10 S				
Generator Input/Smart Load /AC Couple Current (A)	45.4 / 200 / 45.4	45.5 / 200 / 45.5	53.1 / 200 / 53.1	60.7 / 200 / 60.7	75.8 / 200 / 75.8
Power Factor Adjustment Range	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)				
DC Current Injection	<0.5% I _n				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection, Arc Fault Circuit Interruption (AFCI optional)				
Over Voltage Category	DC Type II/AC Type III				
Certifications and Standards					
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				
General Data					
Operating Temperature Range ()	-40-60°C, >45°C Derating				
Cooling	Smart Cooling				
Noise (dB)	≤65 dB				
Communication with BMS	CAN				
Weight (kg)	80				
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				

*Note: Parallel operation for 5 inverters is usable. Parallel operation is currently being tested for up to ten inverters. The prerequisite for parallel operation is that only Deye high-voltage inverters with the same power and Deye high-voltage storage battery can be used.

BOS-G



◆ Convenient

Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance.

◆ Safe and reliable

Cathode material is made from LiFePO₄ with safety performance and long cycle life, The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge.

◆ Intelligent BMS

It has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.

◆ Eco-friendly

The whole module is non-toxic, non-polluting and environmentally friendly.

◆ Flexible configuration

Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, wifi upgrade(optional), remote up grade(Compatible with Deye inverter).

◆ Wide temperature

Working temperature range is from -20°C to 55°C, with excellent discharge performance and cycle life.

Model		BOS-G		
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)	3 (Min)	8 (Standard US Cluster)	12 (Standard EU Cluster)	
System Nominal Voltage (V)	153.6	409.6	614.4	
System Operating Voltage (V)	124.8~175.2	332.8~467.2	499.2~700	
System Energy (kWh)	15.36	40.96	61.44	
System Usable Energy (kWh) ¹	13.8	36.86	55.29	
Charge/Discharge ² Current (A)	Recommend	50		
	Nominal	100		
	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	IP20			
Dimension (W/D/H,mm)	589*590*1640		589*590*2240	
Weight Approximate (kg)	258	434	628	
Installation Location	Rack Mounting			
Storage Temperature(°C)	0~35			
Recommend Depth of Discharge	90%			
Cycle Life	25±2°C, 0.5C/0.5C, EOL70%≥6000			
Warranty ³	10 years			
Certification	CE/IEC62619/UL1973/UL9540A/UN38.3			

1 DC Usable Energy, test conditions: 90% DOD, 0.2C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

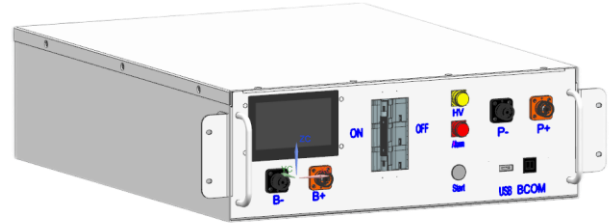
2 The current is affected by temperature and SOC.

3 The warranty is due whichever reached first of warranty period or life cycle power.

Model	Description
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HVB750V/100A-EU High Voltage Battery cluster control box conforming to European or British Standards

Operating Voltage 120 ~ 750Vdc
 Nominal Charge/Discharge Current 100A
 Max.Charge/Discharge Current 125A
 DC Input Rating 12±2%V/4.15A
 Operating Temperature Range -20~65°C
 Ingress Protection IP20
 Dimension (W/D/H) 440*570*150mm
 Weight Approximate 15.5kg



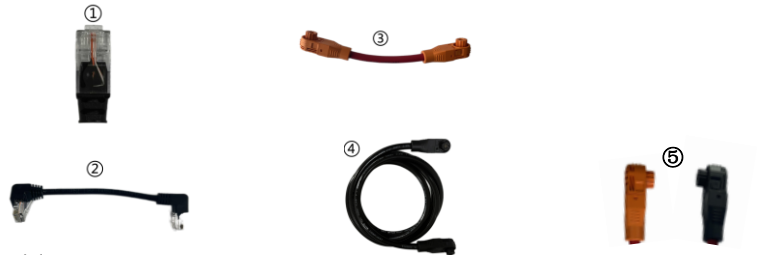
HVB750V/100A-US High Voltage Battery cluster control box conforming to North American Standard

Operating Voltage 120 ~ 750Vdc
 Nominal Charge/Discharge Current 100A
 Max.Charge/Discharge Current 125A
 DC Input Rating 12±2%V/4.15A
 Operating Temperature Range -20~65°C
 Ingress Protection IP20
 Dimension (W/D/H) 440*570*150mm
 Weight Approximate 17kg



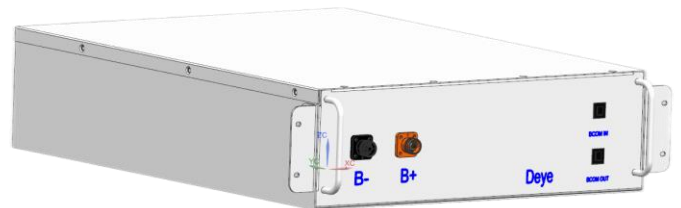
High voltage box Standard configuration:

- ① 120 ohm terminal resistance
- ② 140mm communication cable
- ③ 220mm power cable
- ④ 1.5m power cable (US Version)
2.1m power cable (EU Version)
- ⑤ Power plug



BOS-GM5.1 5.12 kwh battery module

Battery Type LiFePO4(LFP)
 Nominal Voltage 51.2Vdc
 Rated Capacity 100Ah
 Rated Energy 5.12kWh
 Nominal Charge/Discharge Current 100A
 Peak.Discharge Current 125A
 Charge Temperature 0~55°C
 Discharge Temperature -20°C ~ 55°C
 Storage Temperature 0°C ~ 35°C
 Ingress Protection IP20
 Dimension (W/D/H) 440*570*133mm
 Weight Approximate 44kg



Battery module Standard configuration:

- ① 110mm communication cable
- ② 200mm power cable



EPCable5.0(Optional) Standard 5-meter power cable connected to the positive pole of the external PCS

1000V/4AWG cable



ENCable5.0(Optional) Standard 5-meter power cable connected to the negative pole of the external PCS

1000V/4AWG cable



Model	Description
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EPWR Cable5.0(Optional)

Standard 5-meter cable connected to external 12VDC power supply



ECOM Cable5.0(Optional)

Standard 5-meter communication cable connected to the external device

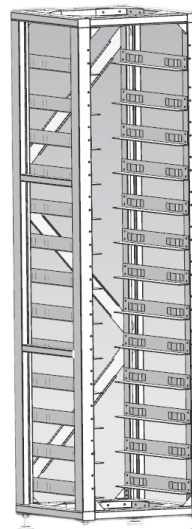


3U-HRACK(Optional)

Standard 19inch rack, caninstall 12 pcs batteries and 1 pcs High Voltage Battery cluster control box

Dimension (W/D/H)
Weight Approximate

589*590*2240mm
85kg



3U-LRACK(Optional)

Standard 19inch rack, caninstall 8 pcs batteries and 1 pcs High Voltage Battery cluster control box

Dimension (W/D/H)
Weight Approximate

589*590*1640mm
65kg

