

# SMALL-SCALE C&I ESS SOLUTION

**DEYE SUMMER BOS SERIES**



## Convenient

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



## 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.



## 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.



## Flexible configuration

Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, 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.

≥6000

Cycles

**Flexible Expansion**

35kWh ~ 87kWh

70%

EOL

**10 years**

Warranty for long-term peace of mind



# Rack-Mounted Battery (HV)

Model	BOS-G-Pro						
<b>Main Parameter</b>							
Cell Chemistry	LiFePO <sub>4</sub>						
Module Energy ( kWh )	5.12						
Module Nominal Voltage ( V )	51.2						
Module Capacity ( Ah )	100						
Battery Module Number	BOS-G25-Pro	BOS-G40-Pro	BOS-G60-Pro	BOS-G80-Pro			
Battery Module Qty In Series ( Optional )	5 (Min)	8	12	16 (Max)			
System Nominal Voltage ( V )	256	409.6	614.4	819.2			
System Operating Voltage ( V )	220~292	352~467.2	528~700.8	704~934.4			
System Energy ( kWh )	25.6	40.96	61.44	81.92			
System Usable Energy ( kWh )	23.04	36.86	55.3	73.72			
Rated DC Power ( kW )	25.6	40.96	55.3	81.92			
Charge / Discharge <sup>2</sup>	Recommend	50					
Current ( A )	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	≤3000m						
IP Rating of Enclosure	IP20						
Dimension ( W×D×H,mm )	530 × 602 × 1629		530 × 602 × 2219	1060 × 602 × 1629			
Weight Approximate ( kg )	290	428	622	883			
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	10 years						
Certification	UN38.3 / CE / CE-EMC / IEC62040 / CEC / VDE						

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.



# System Components

Model	Description
<b>BOS-G-PDU-2</b>	High Voltage Battery cluster control box conforming to European or British Standards
Operating Voltage	200 ~ 1000Vdc
Nominal Charge/Discharge Current	100A
Max.Charge/Discharge Current	120A
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	19kg
High voltage box Standard configuration:	
① 120 ohm terminal resistance	
② 250mm communication cable	
③ 140mm power cable	
④ 2.1m power cable	
⑤ EPCable2.0 (Standard 2-meter power cable connected to the positive pole of the external PCS)	
⑥ ENCable2.0 (Standard 2-meter power cable connected to the negative pole of the external PCS)	
⑦ 1000mm communication cable between two battery racks	
⑧ 1000mm power cable between the two battery racks	
⑨ 140 mm ground wire	
<b>BOS-G-Pack5.1</b>	5.12 kwh battery module
Battery Type	LiFePO <sub>4</sub> (LFP)
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Rated Energy	5.12kWh
Nominal Charge/Discharge Current	100A
Peak Discharge Current	120A
Charge Temperature	0 ~ 55°C
Discharge Temperature	-20°C ~ 55°C
Storage Temperature	0°C ~ 35°C
Ingress Protection	IP20
Dimension ( W×D×H )	440×585×133mm
Weight Approximate	46kg
Battery module Standard configuration:	
① 160mm communication cable	
② 200mm power cable	



## System Components

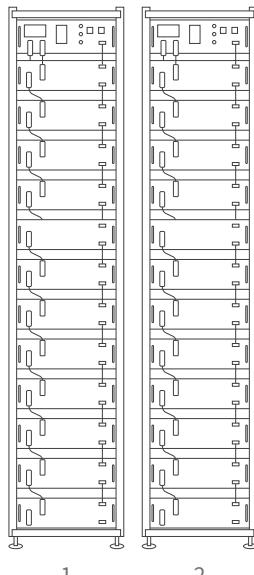
Model	Description
<b>3U-HRACK(Optional)</b>	Standard 19inch rack, caninstall 12 pcs batteries and 1 pcs High Voltage Battery cluster control box
Dimension (W×D×H) Weight Approximate	530×602×2219mm 51kg
	 HRACK(SKU:10100401000078) Can be installed with an optional door.
<b>3U-LRACK(Optional)</b>	Standard 19inch rack, caninstall 8 pcs batteries and 1 pcs High Voltage Battery cluster control box
Dimension (W×D×H) Weight Approximate	530×602×1629mm 41kg
	 LRACK(SKU:10100401000079) Can be installed with an optional door.



# Typical Application Scenarios

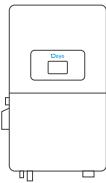
## Typical Application Scenarios

BOS-G60-Pro

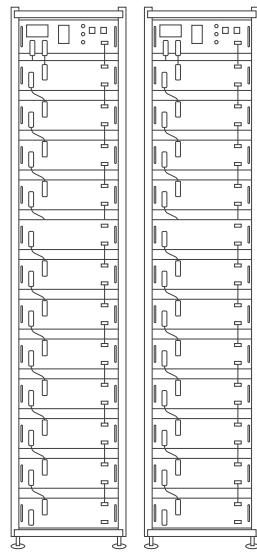


1 2 ..... 16

Inverter 50kW

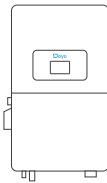


BOS-G60-Pro



1 2 ..... 16

Inverter 50kW

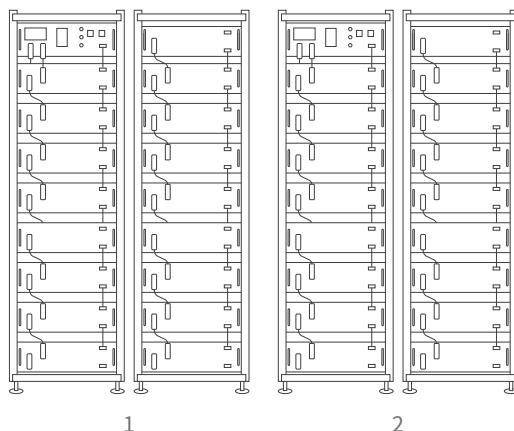


× 10

Maximum support for 16 racks of batteries in parallel

Maximum support for 10 inverters in AC parallel operation

BOS-G85 Pro



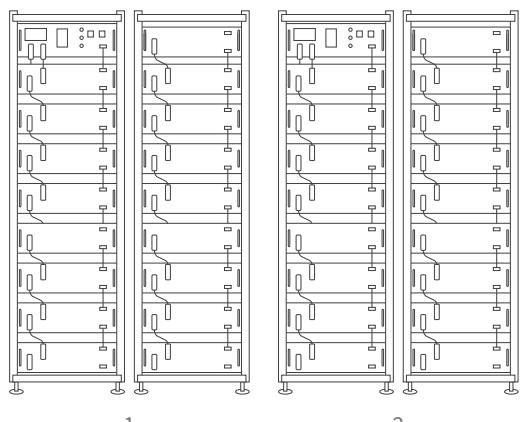
1 2 ..... 16

Maximum support for 16 clusters of batteries in parallel

Inverter 80kW

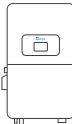


BOS-G85-Pro



1 2 ..... 16

Inverter 80kW



× 10

Maximum support for 10 inverters in AC parallel operation



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