

# SMALL-SCALE C&I ESS SOLUTION





#### 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.



#### Flexible configuration

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



#### **Eco-friendly**

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



#### Wide temperature

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



Cycles

### Flexible Expansion

35kWh ~ 87kWh

70%

EOI

#### 10 years

Warranty for long-term
peace of mind



#### **Rack-Mounted Battery (HV)**

Model		BOS-G Pro			
Main Parameter					
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-G85 Pro
Battery Module Qty In Series ( Optional )		5 (Min)	8	12	17 (Max)
System Nominal Voltage ( V )		256	409.6	614.4	870.4
System Operating Voltage (V)		220~292	352~467.2	528~700.8	748~992.8
System Energy ( kWh )		25.6	40.96	61.44	87.04
System Usable Ener	gy (kWh)	23.04	36.86	55.3	78.33
		25.6	40.96	55.3	87.04
Charge / Discharge <sup>2</sup> 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		≤3000m			
IP Rating of Enclosure		IP20			
Dimension (W×D×H,mm)		530 × 602 × 1629 530 × 602 × 2219 1060 × 602 × 162			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 <sup>c</sup>		5 years			
rtification		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.





Model Description

BOS-G-PDU-2 High Voltage Battery cluster control box conforming to European or British Standards

Operating Voltage 200 ~ 1000Vdc

 $\begin{array}{lll} \mbox{Nominal Charge/Discharge Current} & 100\mbox{A} \\ \mbox{Max.Charge/Discharge Current} & 120\mbox{A} \\ \mbox{DC Input Rating} & 12\pm2\%\mbox{V}\,/\,4.15\mbox{A} \end{array}$ 

DC Input Rating 12 $\pm$ 2%V / Operating Temperature Range -20  $\sim$  65°C Ingress Protection IP20

 $\begin{array}{ll} \text{Ingress Protection} & \text{IP20} \\ \text{Dimension (W\times D\times H)} & \text{440}\times570\times150\text{mm} \end{array}$ 

Weight Approximate 19kg



High voltage box Standard configuration:

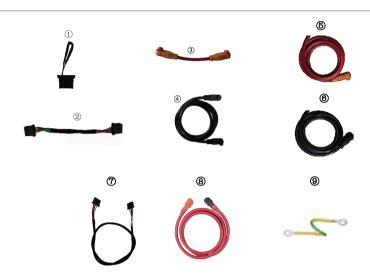
- 1) 120 ohm terminal resistance
- 2 250mm communication cable
- ③ 140mm power cable
- 42.1m power cable
- ⑤EPCable2.0

(Standard 2-meter power cable connected to the positive pole of the external PCS)

©ENCable2.0

(Standard 2-meter power cable connected to the negative pole of the external PCS)

- ①1000mm communication cable between two battery racks
- ®1000mm power cable between the two battery racks
- 9140 mm ground wire

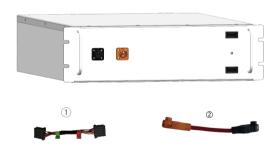


#### BOS-G-Pack5.1 5.12 kwh battery module

LiFePO<sub>4</sub>(LFP) **Battery Type** 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 0°C ~ 35°C Storage Temperature Ingress Protection IP20

Dimension (W $\times$ D $\times$ H) 440 $\times$ 585 $\times$ 133mm

Weight Approximate 46kg



#### **Battery module Standard configuration:**

- 1) 160mm communication cable
- 2 200mm power cable





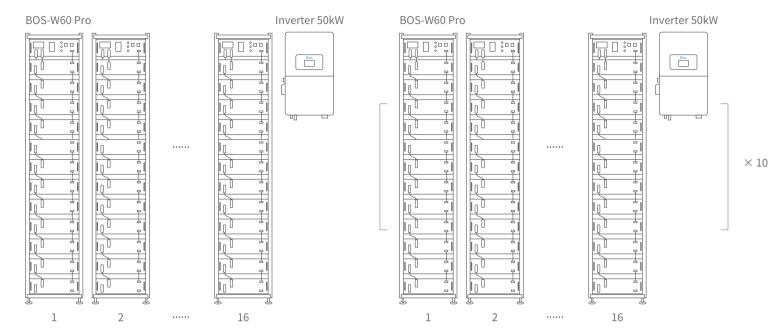
Model	Description				
3U-HRACK(Optional)	Standard 19inch rack, caninstall 12 pcs batteries and 1 pcs High Voltage Battery cluster control box				
Dimension (W×D×H) Weight Approximate	530×602×2219mm 51kg				
3U-LRACK(Optional)	Standard 19inch rack, caninstall 8 pcs batteries and 1 pcs High Voltage Battery cluster control box				
Dimension (W×D×H) Weight Approximate	530×602×1629mm 41kg				





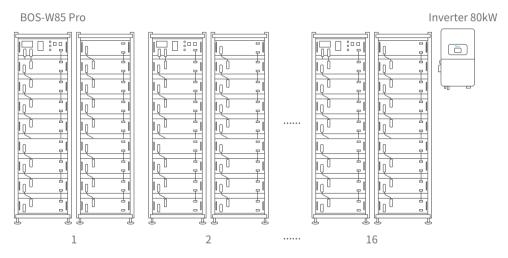
#### **Typical Application Scenarios**

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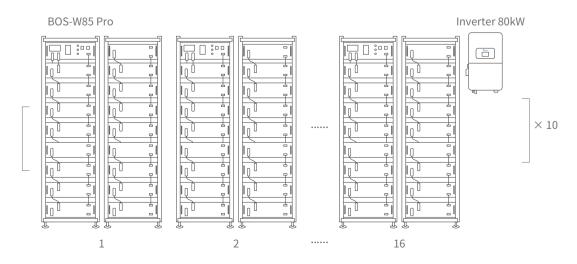


Maximum support for 16 racks of batteries in parallel

Maximum support for 10 inverters in AC parallel operation



Maximum support for 16 clusters of batteries in parallel





# Deye

## To Make ESS Better



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