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 -20ºC to 55ºC, 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)

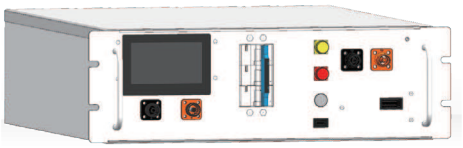
Model		BOS-G-Pro											
Main Parameter													
Cell Chemistry		$LiFePO_4$											
Module Energy (kWh)		5.12											
Module Nominal Voltage (V)		51.2											
Module Capacity (Ah)		100											
Battery Module Number		BOS-G25-Pro	BOS-G30-Pro	BOS-G35-Pro	BOS-G40-Pro	BOS-G45-Pro	BOS-G50-Pro	BOS-G55-Pro	BOS-G60-Pro	BOS-G65-Pro	BOS-G70-Pro	BOS-G75-Pro	BOS-G80-Pro
Battery Module Qty In Series (Optional)		5 (Min)	6	7	8	9	10	11	12	13	14	15	16 (Max)
System Nominal Voltage (V)		256	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	768	819.2
System Operating Voltage (V)		220~292	264~350.4	308~408.8	352~467.2	396~525.6	440~584	484~642.4	528~700.8	572~759.2	616~817.6	660~876	704~934.4
System Energy (kWh)		25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44	66.56	71.68	76.8	81.92
System Usable Energy (kWh)[1]		25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44	66.56	71.68	76.8	81.92
Rated DC Power (kW)		25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44	66.56	71.68	76.8	81.92
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		⩽3000m											
IP Rating of Enclosure		IP20											
Dimension (W×D×H,mm)		530 × 602× 1629				530 × 602 × 2219				1060 × 602 × 1629			
Weight Approximate (kg)		290	336	382	428	484	530	576	622	699	745	791	837	883
Installation Location		Rack Mounting											
Storage Temperature (°C)		0 ~ 35											
Recommend Depth of Discharge		100%											
Cycle Life		25±2°C, 0.5C / 0.5C, EOL70%⩾6000											
Warranty[3]		10 years											
Certification		UN38.3 / CE / CE-EMC / IEC62040 / CEC / VDE											

1. DC Usable Energy, test conditions : 100% 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.

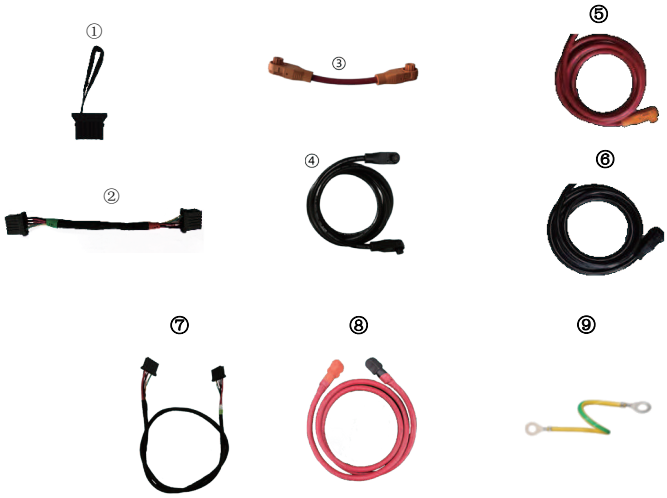
System Components

Model	Description
BOS-G-PDU-2	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

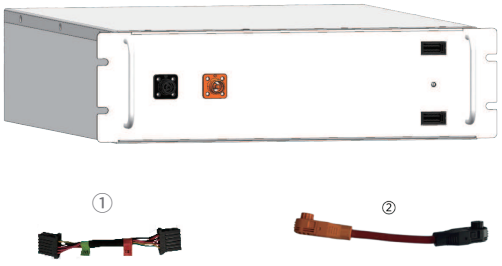


High voltage box Standard configuration:
① 120 ohm terminal resistance
② 250mm communication cable
③ 140mm power cable
④2.1m power cable
⑤EPCable2.0
(Standard 2-meter power cable connected to the positive pole of the external PCS)
⑥ENCable2.0
(Standard 2-meter power cable connected to the negative pole of the external PCS)
⑦1000mm communication cable between two battery racks
⑧1000mm power cable between the two battery racks
⑨140 mm ground wire



BOS-G-Pack5.1	5.12 kwh battery module

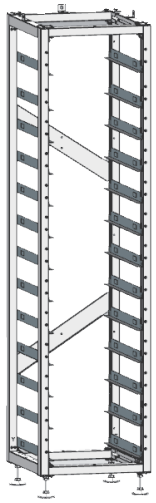
Battery Type	$LiFePO_4$(LFP)
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Rated Energy	5.12kWh
Nominal Charge/Discharge Current	100A
Peak.Discharge Current	120A
Charge Temperature	0 ~ 55°C
Discharge Temperature	-20°C ~ 55°C
Storage Temperature	0°C ~ 35°C
Ingress Protection	IP20
Dimension (W×D×H)	440×585×133mm
Weight Approximate	46kg



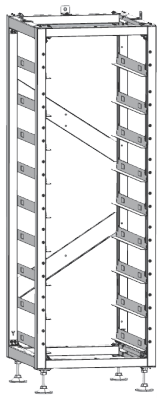
Battery module Standard configuration:
① 160mm communication cable
② 200mm power cable

System Components

Model	Description
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

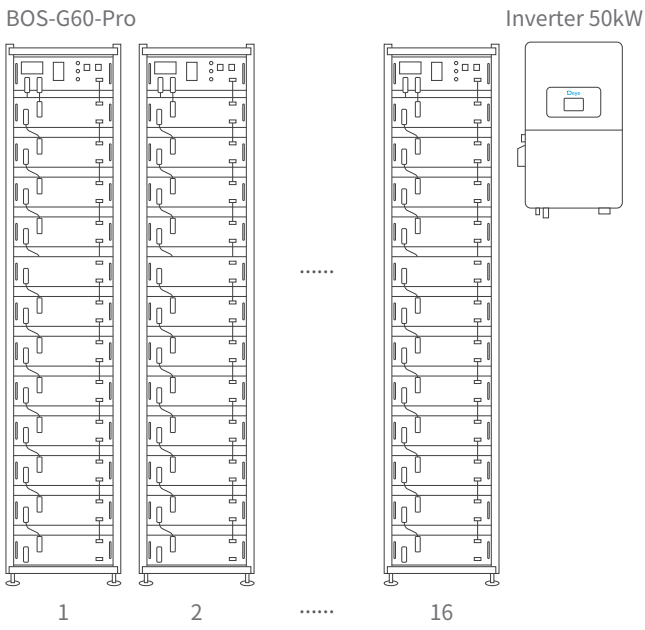


3U-LRACK(Optional)	Standard 19inch rack, caninstall 8 pcs batteries and 1 pcs High Voltage Battery cluster control box
Dimension (W×D×H) Weight Approximate	530×602×1629mm 41kg

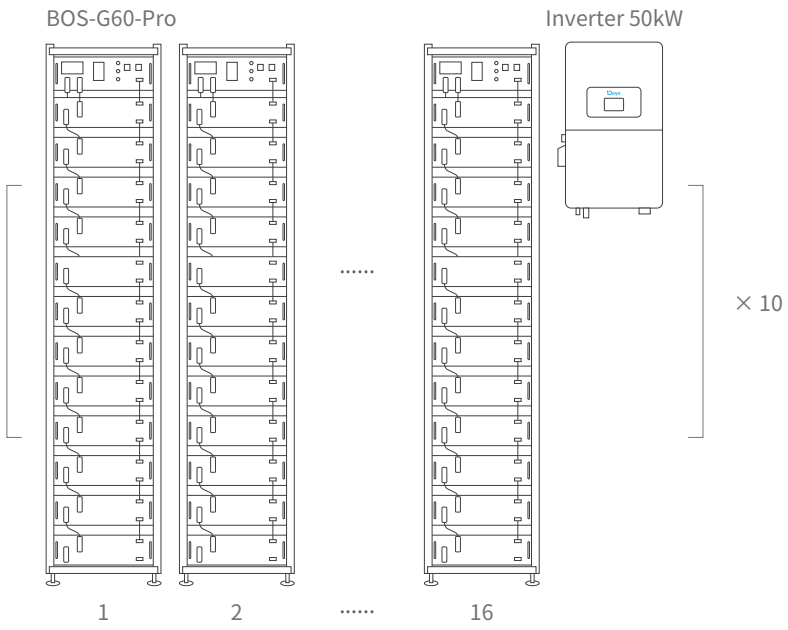


Typical Application Scenarios

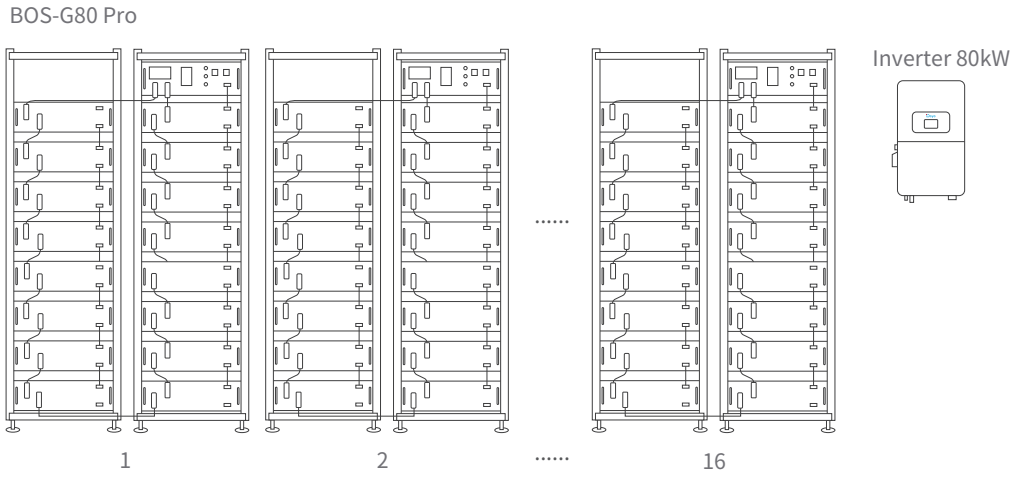
Typical Application Scenarios



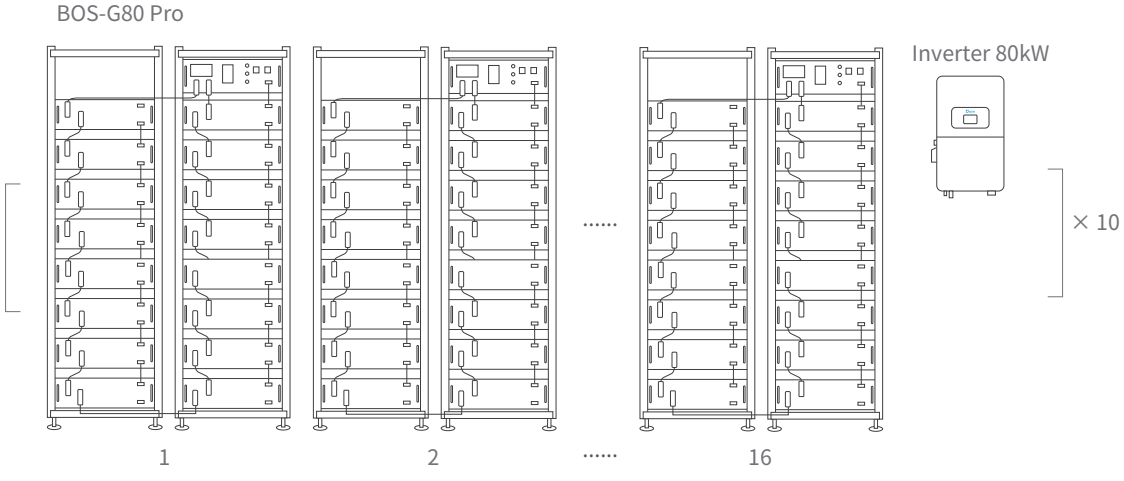
Maximum support for 16 racks of batteries in parallel



Maximum support for 10 inverters in AC parallel operation



Maximum support for 16 clusters of batteries in parallel



Maximum support for 10 inverters in AC parallel operation

To Make ESS Better

Deye ESS Facebook

Deye ESS www.deyeess.com