

# 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)

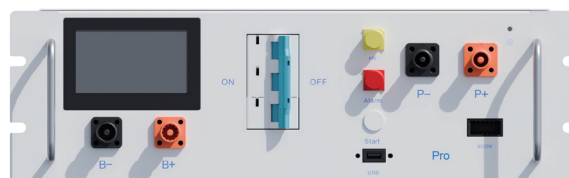
| Model                                     |                                 | BOS-G-Pro                                                           |             |                  |                   |
|-------------------------------------------|---------------------------------|---------------------------------------------------------------------|-------------|------------------|-------------------|
| 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-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 ) <sup>1</sup> |                                 | 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                                                                  |             |                  |                   |
|                                           | 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 <sup>3</sup>                     |                                 | 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

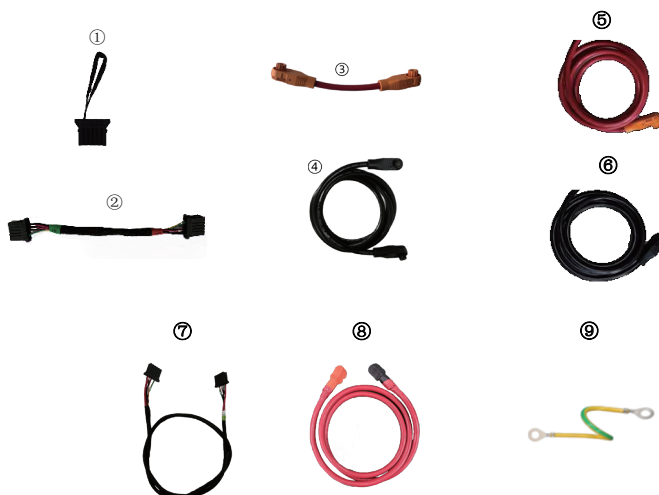
| Model              | Description                                                                          |
|--------------------|--------------------------------------------------------------------------------------|
| <b>BOS-G-PDU-2</b> | High Voltage Battery cluster control box conforming to European 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           |



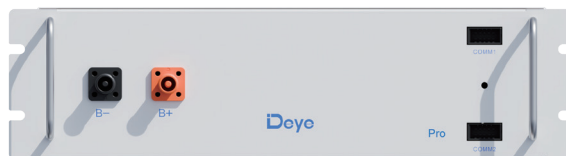
High voltage box Standard configuration:

- 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

| 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



HRACK(SKU:10100401000078)  
Can be installed with an optional door.

|                    |                                                                                                     |
|--------------------|-----------------------------------------------------------------------------------------------------|
| 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

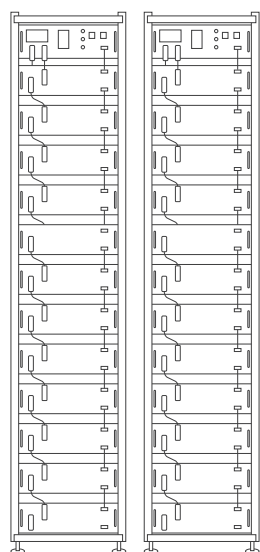
530×602×1629mm  
41kg



LRACK(SKU:10100401000079)  
Can be installed with an optional door.

## Typical Application Scenarios

BOS-G60-Pro



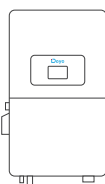
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2

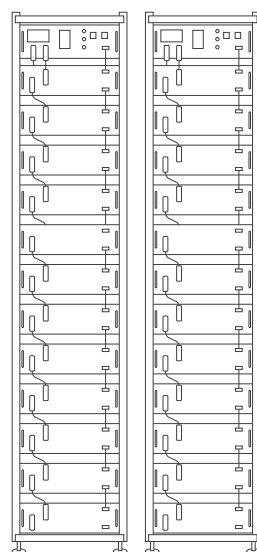
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16

Inverter 50kW



BOS-G60-Pro



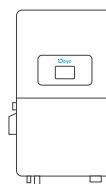
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2

.....

16

Inverter 50kW

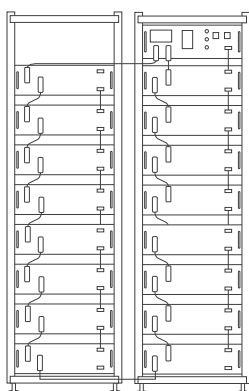


× 10

Maximum support for 16 racks of batteries in parallel

Maximum support for 10 inverters in AC parallel operation

BOS-G80 Pro



1

2

.....

16

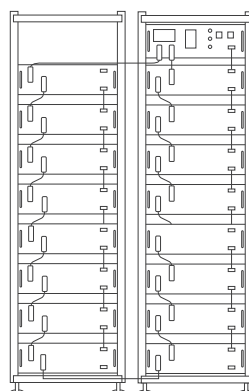
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Inverter 80kW



Maximum support for 16 clusters of batteries in parallel

BOS-G80 Pro



1

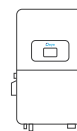
2

.....

16

.....

Inverter 80kW



× 10

Maximum support for 10 inverters in AC parallel operation



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