

# C&I ESS SOLUTION

## BOS-B



### Intelligent Control

- Peak-valley mgmt, anti-backflow,
- overload protection
- Load tracking, demand control, backup power, phase separation



### Scalable

- Support up to 20 units in parallel, maximum 2MW/4.3MWh



### Multi-Fusion

- Integrated EMS, PCS, and BMS
- Support expansion of MPPT module
- Support off-grid backup



### Reliable

- Operating temp : -20°C to 55°C
- Operate up to 3000m altitude
- 1.1x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply



### Easy Maintenance

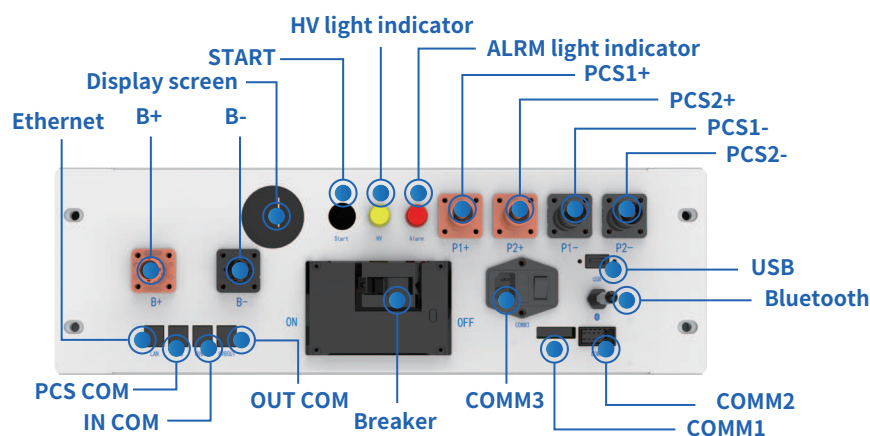
- 5U Standard Chassis
- User Interface & Bluetooth App
- USB & Cloud Upgrades
- TCP Protocol for EMS
- Fault Signal Input Support



### Safer

- LFP batteries
- Support aerosol fire extinguishing

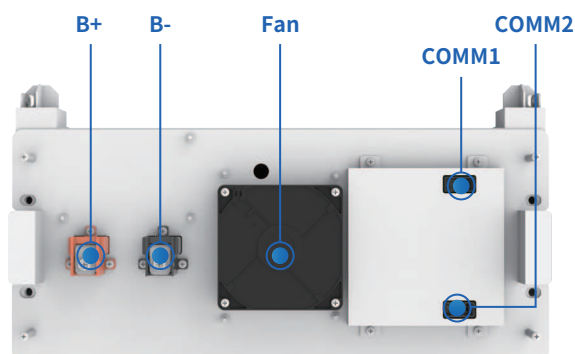
| Model                            | BOS-B-PDU-2                 |
|----------------------------------|-----------------------------|
| Operating Voltage                | 200~1000Vdc                 |
| Nominal Charge/Discharge Current | 168A                        |
| Operating Temperature            | -20~60°C                    |
| Ingress Protection               | IP20                        |
| AC Input Rating                  | 220±10%VAC/2A               |
| Details                          | 788.6×526×167.2(W×H×D),32kg |



- ◎ Ethernet: Features not yet developed.
- ◎ PCS COM: PCS COM battery communication terminal: used to output battery information to the inverter.
- ◎ IN COM: Connection position with previous BOS-B-PDU-2 communication OUT COM .
- ◎ OUT COM: Connection position with next BOS-B-PDU-2 communication IN COM.
- ◎ Breaker: It is used to manually control the connection between the battery rack and external devices.

- ◎ COMM3: The product must be connected to the auxiliary power input AC200~240V-3A-50~60Hz when used.
- ◎ COMM1: Emergency power-off triggered the interface.
- ◎ COMM2: Communicative connection with the first battery module; and providing 12VDC power for the first battery module.
- ◎ Bluetooth: The mobile APP connects to the data acquisition rod of the energy storage system.
- ◎ B+: Battery common positive connection position (orange).
- ◎ B-: Battery common negative connection position (black).
- Display screen: Display SOC and fault codes.
- START: A start switch of 12VDC power inside the high-voltage control box.
- ◎ HV light indicator: High-voltage hazard indicator (yellow).
- ALRM light indicator: Battery system fault alarm indicator (red).
- ◎ PCS1+: First PCS positive connection position (orange).
- ◎ PCS2+: Second PCS positive terminal connection position (orange).
- ◎ PCS1-: First PCS negative connection position (black).
- ◎ PCS2-: Second PCS negative connection position (black).
- ◎ USB: BMS upgrade port and storage expansion port.

| Model                            | BOS-B-Pack14.3               |
|----------------------------------|------------------------------|
| Nominal Capacity                 | 280Ah                        |
| Nominal Energy                   | 14.3kWh                      |
| Nominal Voltage                  | 51.2Vdc                      |
| Max Charge/Discharge Current     | 168A                         |
| Ingress Protection               | IP20                         |
| Operating Temperature(Charge)    | 0~55°C                       |
| Operating Temperature(Discharge) | -20~55°C                     |
| Storage Temperature              | 0~35°C                       |
| Details                          | 795.9×526×274.2(W×H×D),123kg |



- ◎ B+: Battery module positive pole (orange)
- ◎ B-: Battery module negative pole (black)
- ◎ Fan: Ventilation and heat dissipation.
- ◎ COMM1: Connection position of battery module communication and power supply input
- ◎ COMM2: Connection position of battery module communication and power supply output



## Model BOS-B

### Main Parameter

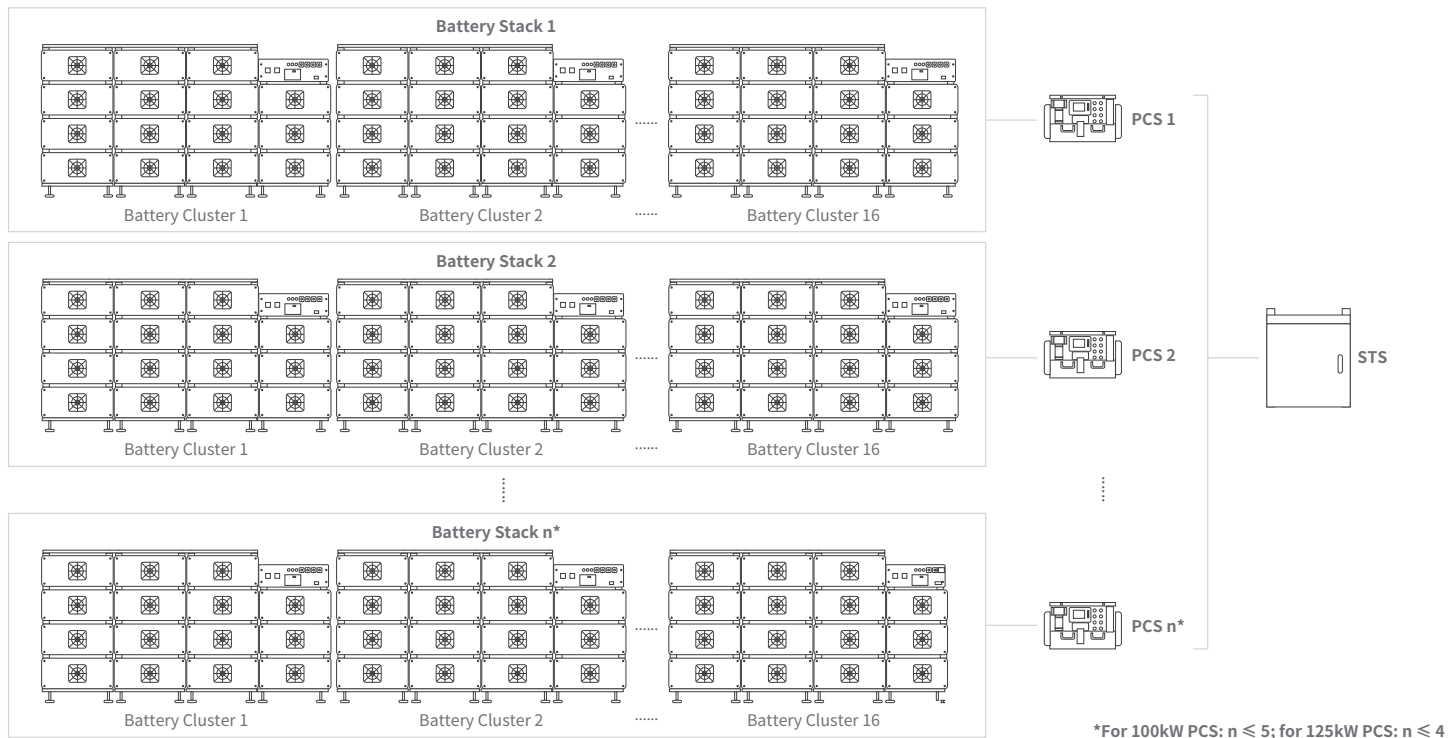
|                                                                                                                          |                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Battery Module Energy ( kWh )                                                                                            | 14.3                                                                                                                    |
| Battery Module Nominal Voltage ( V )                                                                                     | 51.2                                                                                                                    |
| Battery Module Capacity ( Ah )                                                                                           | 280                                                                                                                     |
| Module Weight Approximate ( kg )                                                                                         | 123                                                                                                                     |
| Battery Module Qty In Series ( Optional )                                                                                | 15                                                                                                                      |
| Scalability                                                                                                              | PCS or Inverter                                                                                                         |
|                                                                                                                          | PCS + MPPT                                                                                                              |
| 14-15 units for PCS on-grid applications, 15 units for PCS off-grid applications, 5-15 units for hybrid inverter systems |                                                                                                                         |
| 15 units (on/off-grid) for MPPT Open-Circuit Voltage around 750V                                                         |                                                                                                                         |
| 14 units (on-grid) for MPPT Open-Circuit Voltage around 700V                                                             |                                                                                                                         |
| Battery Model Number                                                                                                     | BOS-B70 BOS-B85 BOS-B100 BOS-B110 BOS-B125 BOS-B140 BOS-B155 BOS-B170 BOS-B185 BOS-B200 BOS-B215                        |
| Battery Module Qty In Series (Optional)                                                                                  | 5 6 7 8 9 10 11 12 13 14 15                                                                                             |
| System Nominal Voltage (V)                                                                                               | 256 307.2 358.4 409.6 460.8 512 563.2 614.4 665.6 716.8 768                                                             |
| System Operating Voltage (V)                                                                                             | 208~292 249.6~350.4 291.2~408.8 332.8~467.2 374.4~525.6 416~584 457.6~642.4 499.2~700.8 540.8~759.2 582.4~817.6 624~876 |
| System Energy (kWh)                                                                                                      | 71.5 85.8 100.1 114.4 128.7 143 157.3 171.6 185.9 200.2 215                                                             |
| System Usable Energy (kWh)                                                                                               | 64.35 77.22 90.09 102.96 115.83 128.7 141.57 154.44 167.31 180.18 193.05                                                |
| Rated DC Power(kWh)                                                                                                      | 43.008 51.6096 60.2112 68.8128 77.4144 86.016 94.6176 103.2192 111.8208 120.4224 129.024                                |
| Max.Charge/Discharge Current ( A )                                                                                       | 168                                                                                                                     |

### Other Parameter

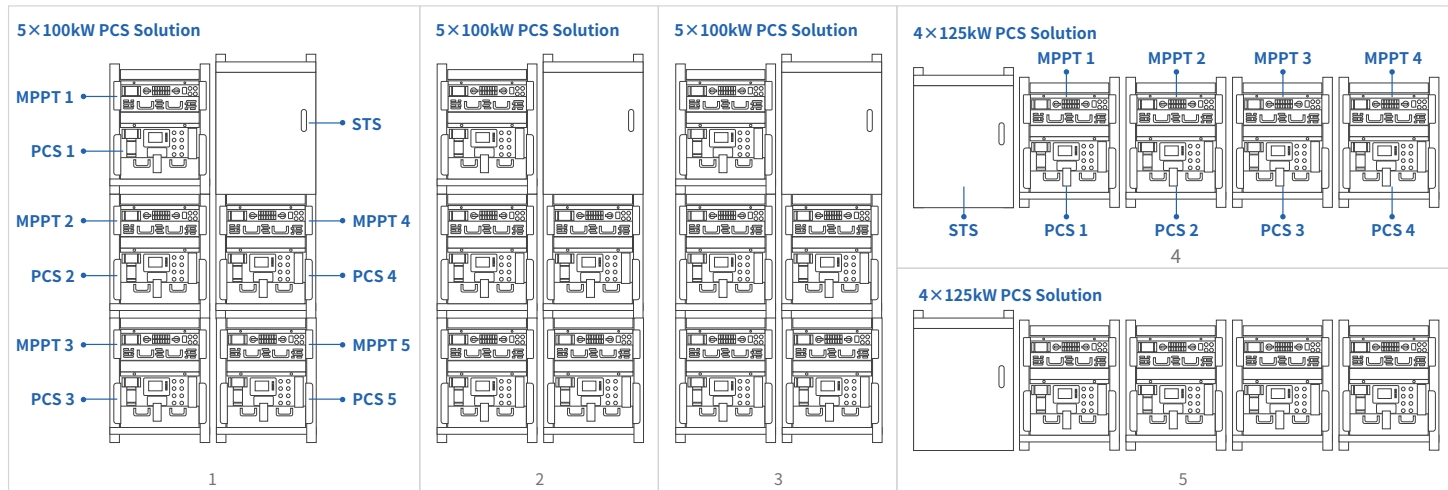
|                                    |                                                                         |
|------------------------------------|-------------------------------------------------------------------------|
| Operating Temperature ( °C )       | discharge : -20 ~ 55      charge : 0 ~ 55                               |
| Storage Temperature ( °C )         | 0 ~ 35                                                                  |
| Thermal Management                 | Smart fan cooling                                                       |
| LCD Display                        | SOC / Fault Code                                                        |
| Status Indicator                   | Yellow : Battery High Voltage Power On   Red : Battery System Alarm     |
| Communication Port                 | TCP / RS485 / CAN                                                       |
| Communication With BMS             | CAN                                                                     |
| Humidity                           | 5% ~ 85%                                                                |
| Altitude                           | ≤3000m                                                                  |
| IP Rating of Enclosure             | IP20                                                                    |
| Noise ( dB )                       | TBD                                                                     |
| System Dimension ( W × H × D, mm ) | 1067 × 1136 × 800      1608 × 1136 × 800      2150 × 1136 × 800         |
| System Weight Approximate ( kg )   | 680   803   926   1066   1189   1312   1435   1575   1698   1821   1944 |
| Installation Location              | Rack Mounted                                                            |
| Recommend Depth of Discharge       | 90%                                                                     |
| Cycle Life                         | 25±2°C, 0.5C / 0.5C, EOL70%≥6000                                        |
| Warranty Period                    | 10 years                                                                |
| Certification                      | CE / IEC62619 / IEC62040 / UN38.3                                       |

## Typical Application Scenarios

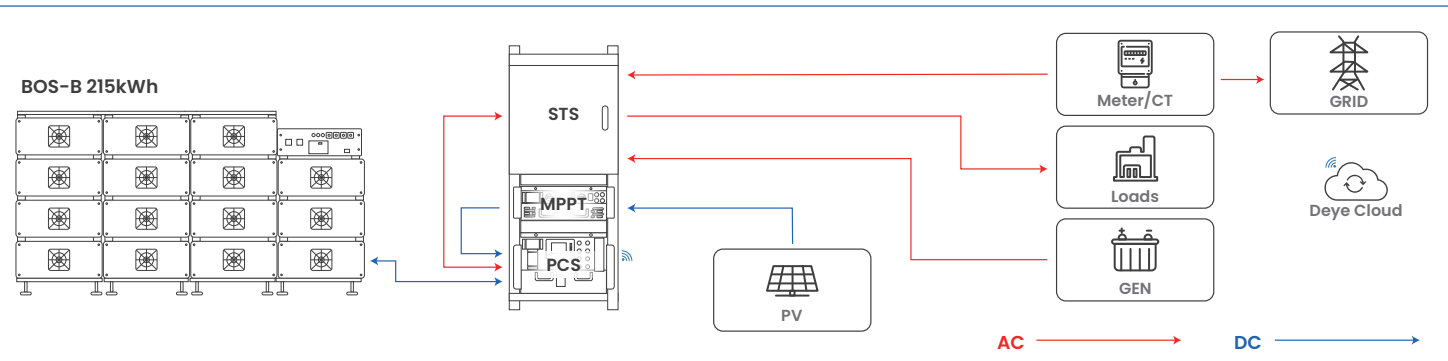
### One PCS can support up to 16 racks of batteries in parallel



### One STS module can connect to five 100kW PCS modules or four 100kW PCS modules for parallel operation



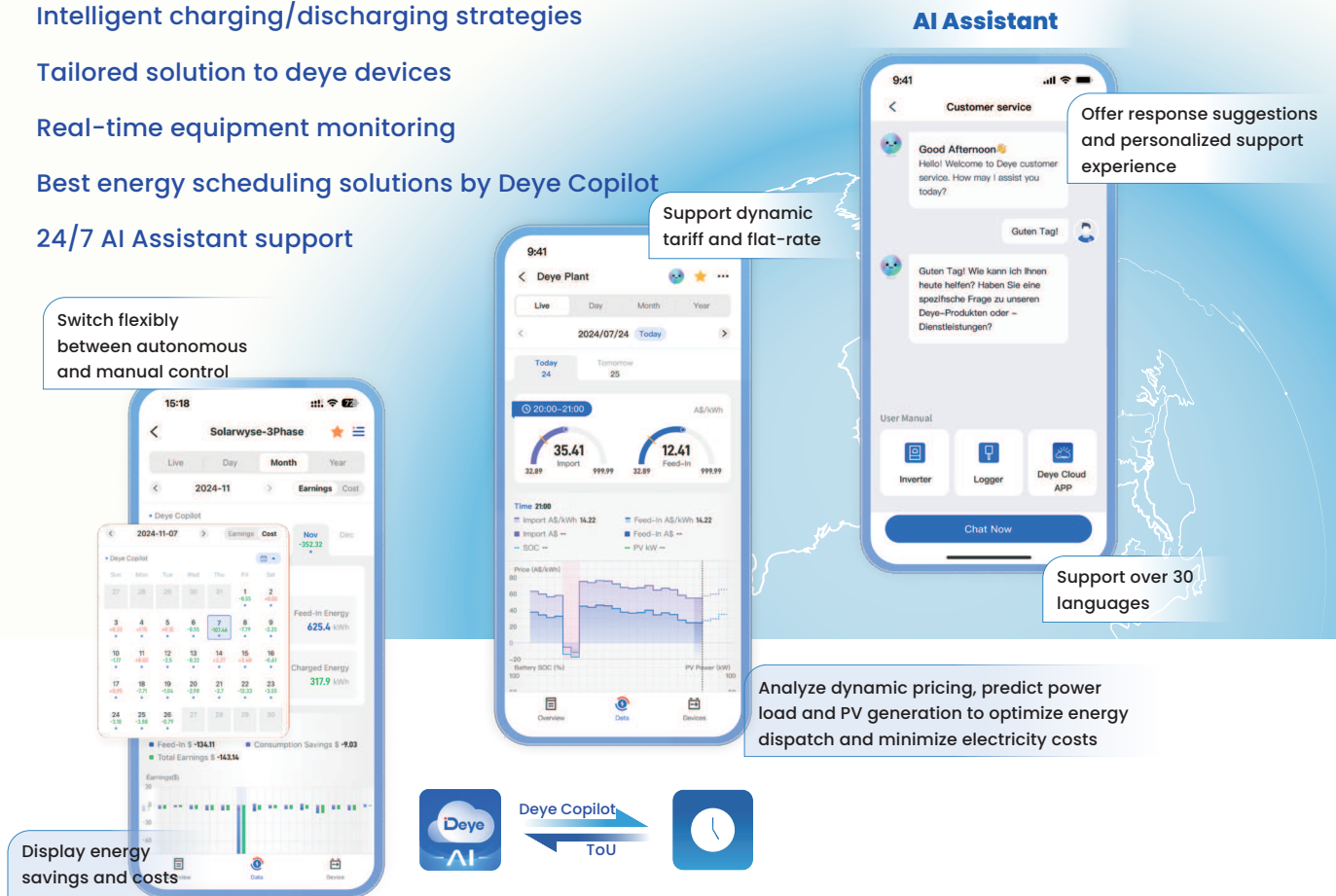
### Five STS modules can provide parallel support for twenty-five 100kW PCS modules or twenty 125kW PCS modules, forming a 2.5MW system.



# Deye Cloud

## All-in-one Energy & Device Management Platform

- Unlock significant savings
- Individual Add-on for dynamic tariff
- Intelligent charging/discharging strategies
- Tailored solution to deye devices
- Real-time equipment monitoring
- Best energy scheduling solutions by Deye Copilot
- 24/7 AI Assistant support



## Smarten Up Your Energy Storage System

Download Deye Cloud APP to join us!

Embrace a seamless, effortless energy experience that's both eco-friendly and budget-friendly with our intelligent assistant



|                                                                                                                                                |                                                                                                                                                     |                                                                                                                                                             |                                                                                                                                                                           |                                                                                                                                                        |                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>APP &amp; Web</b><br>Manage your energy effortlessly | <br><b>Cloud-edge Collaboration</b><br>Faster and more efficient | <br><b>Accelerated Connection</b><br>Optimized for speed and performance | <br><b>Localized Data Centers</b><br>Ensure data sovereignty and compliance in EU & US | <br><b>Deye Copilot</b><br>AI-powered energy analysis and control | <br><b>AI Assistant</b><br>24/7 support, fast, efficient, in your language |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|