

# UTILITY-SCALE ESS SOLUTION

DEYE WINTER WS SERIES



## Ultimate Safety

- ⦿ 3+3 Fire Protection System
- ⦿ 3+3 Electrical Safety Safeguards
- ⦿ AC Leakage & DC Insulation detection
- ⦿ High-Voltage Interlock



## Versatile Applications

- ⦿ Peak Shaving & Energy Arbitrage
- ⦿ Virtual Power Plant (VPP) Ready
- ⦿ Off-Grid & Microgrid Capable
- ⦿ PV and BESS DC Coupling
- ⦿ Hybrid Solar-BESS-Diesel Systems



## High Energy Density

- ⦿ 4300kWh in 20' BESS container
- ⦿ 2250kW PCS, 2880kW PV in 10' container



## Seamless Scalability

- ⦿ Modular Architecture
- ⦿ Flexible 2/4/6h Energy Storage Solutions
- ⦿ Compact Design



## Smart Cloud Management

- ⦿ AI-Powered Load Optimization
- ⦿ 24/7 Remote Monitoring & O&M
- ⦿ Real-Time Battery Health & Safety Alerts
- ⦿ Cloud-Connected Ecosystem



## Cluster Management

- ⦿ One cluster management, high availability, more friendly to the cell

IP55

Protection Rating

2880kW

PV DC Coupling

6 Levels

Fire Protection



|              |                        |
|--------------|------------------------|
| <b>Model</b> | <b>WS-L4300-BC-3-A</b> |
|--------------|------------------------|

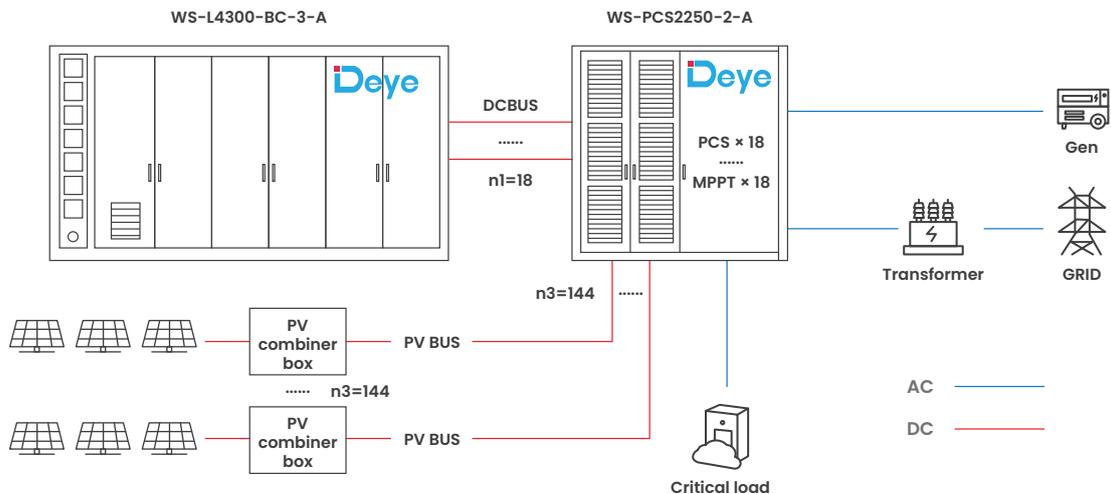
|                   |  |
|-------------------|--|
| <b>DC Battery</b> |  |
|-------------------|--|

|                                     |                     |
|-------------------------------------|---------------------|
| Battery Type                        | LiFePO <sub>4</sub> |
| Nominal Capacity ( Cell )           | 314Ah               |
| Nominal Energy                      | 4340kWh             |
| PACK Configuration                  | 1P48S               |
| RACK Configuration                  | 18 × 1P240S         |
| Nominal DC Voltage                  | 768Vdc              |
| DC Voltage Range                    | 648Vdc ~ 876Vdc     |
| Charge and discharge rate           | ≤0.5P               |
| Max. Charging / Discharging Current | 3150A ( 18 × 175A ) |
| No. of DC Output                    | 18                  |

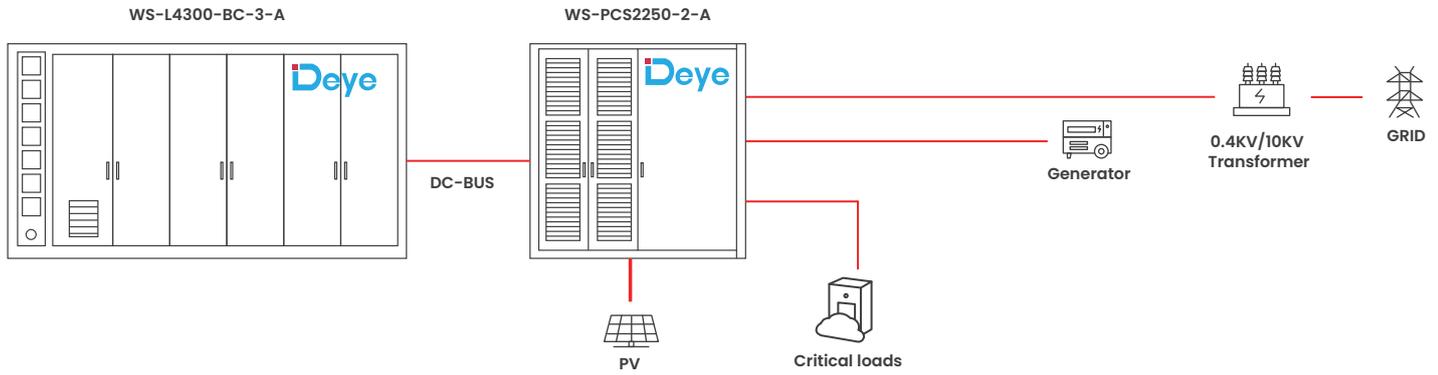
|               |  |
|---------------|--|
| <b>System</b> |  |
|---------------|--|

|                          |                      |
|--------------------------|----------------------|
| Operating Temperature    | -30°C ~ +50°C        |
| Storage Temperature      | -30°C ~ +60°C        |
| Humidity                 | 0 ~ 95%              |
| Type of cooling          | Liquid cooling       |
| Fire Suppression         | Aerosol、Water        |
| Ingress Protection       | IP55                 |
| Anticorrosion grade      | C4-M (Optional C5)   |
| Altitude                 | ≤2000m               |
| Communication            | CAN、RS485、TCP、DIDO   |
| Weight                   | 38500kg              |
| Dimensions ( W × D × H ) | 6058 × 2438 × 2896mm |

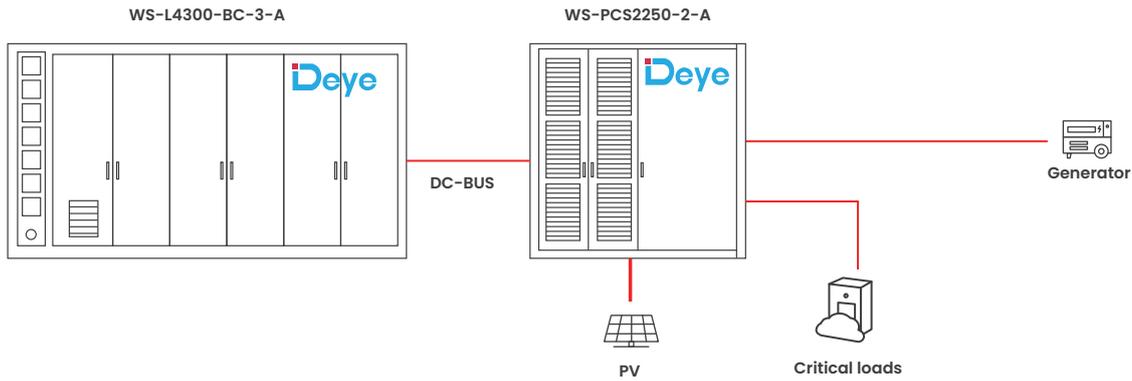
| Model                                  |  | WS-PCS2250-2-A                     |
|--|--|------------------------------------|
| <b>PCS Data</b>                        |  |                                    |
| AC Rated Power                         |  | 2250kW ( 18 × 125kW )              |
| AC Rated Voltage / Frequency           |  | 400Vac / 50Hz ( 3L+N+PE )          |
| AC Rated Current                       |  | 3248A ( 18 × 180.4A )              |
| Max Power                              |  | 2475kW ( 18 × 137.5kW )            |
| Power Factor                           |  | -1 ~ +1                            |
| Battery Input Voltage Range            |  | 630Vdc ~ 1000Vdc                   |
| Max. DC Charging / Discharging Current |  | ( 18 × 190A )                      |
| <b>MPPT Data</b>                       |  |                                    |
| Max. PV Input Power                    |  | 2880kW ( 18 × 160kW )              |
| Max. PV Input Voltage                  |  | 800Vdc                             |
| Start-up Voltage                       |  | 200Vdc                             |
| Max Operating PV Input Current         |  | 18 × ( 40+40+40+40+40+40+40+40 ) A |
| No. of MPP Trackers                    |  | 144 ( 18 × 8 )                     |
| <b>System Data</b>                     |  |                                    |
| <b>Grid Side Data</b>                  |  |                                    |
| AC Rated Voltage / Frequency           |  | 400Vac / 50Hz ( 3P4W )             |
| AC Max Current                         |  | 5400A                              |
| <b>Gen Side Data</b>                   |  |                                    |
| AC Rated Voltage / Frequency           |  | 400Vac / 50Hz ( 3P4W )             |
| AC Max Current                         |  | 3600A                              |
| <b>Load Side Data</b>                  |  |                                    |
| AC Rated Voltage / Frequency           |  | 400Vac / 50Hz ( 3P4W )             |
| AC Max Current                         |  | 3247A                              |
| <b>General Data</b>                    |  |                                    |
| Operating Temperature                  |  | -30°C ~ +50°C                      |
| Humidity                               |  | 0 ~ 95% ( No condensation )        |
| Ingress Protection                     |  | IP55                               |
| Anticorrosion grade                    |  | C4-M (Optional C5)                 |
| Altitude                               |  | ≤2000m                             |
| Weight                                 |  | 12000kg                            |
| Dimensions ( W × D × H )               |  | 2991 × 2438 × 2896mm               |



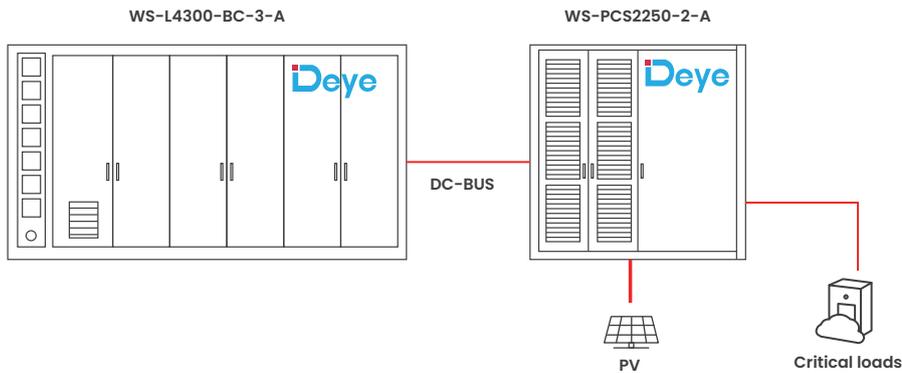
PV + Energy Storage + Diesel Generator Microgrid Solution



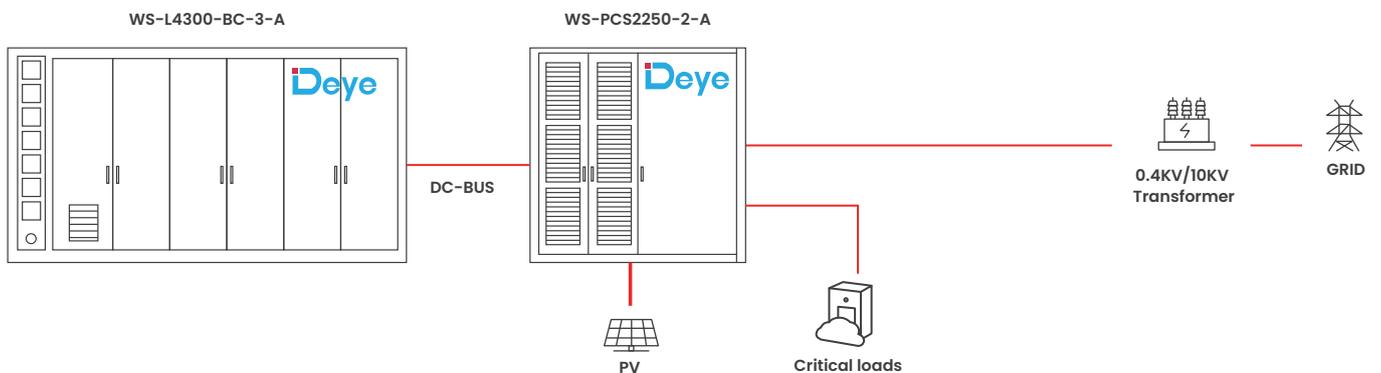
PV+ Energy Storage + Diesel Generator off-grid Solution



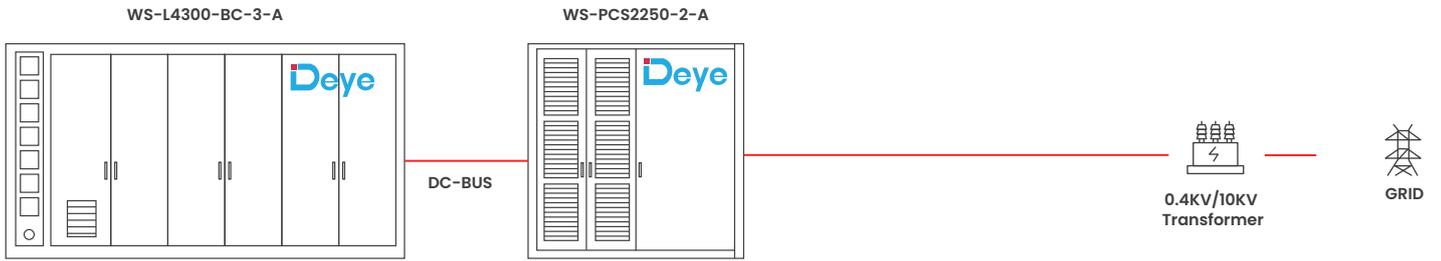
PV + Energy Storage Off-grid Solution



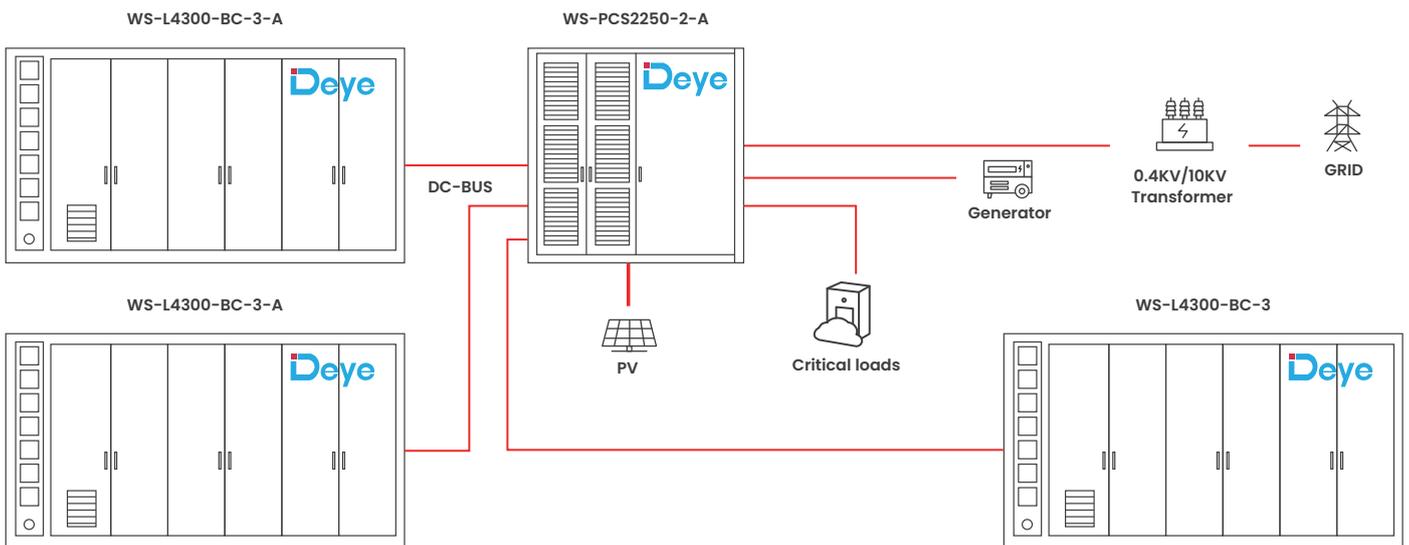
On-grid Energy Storage Solution with Backup Power



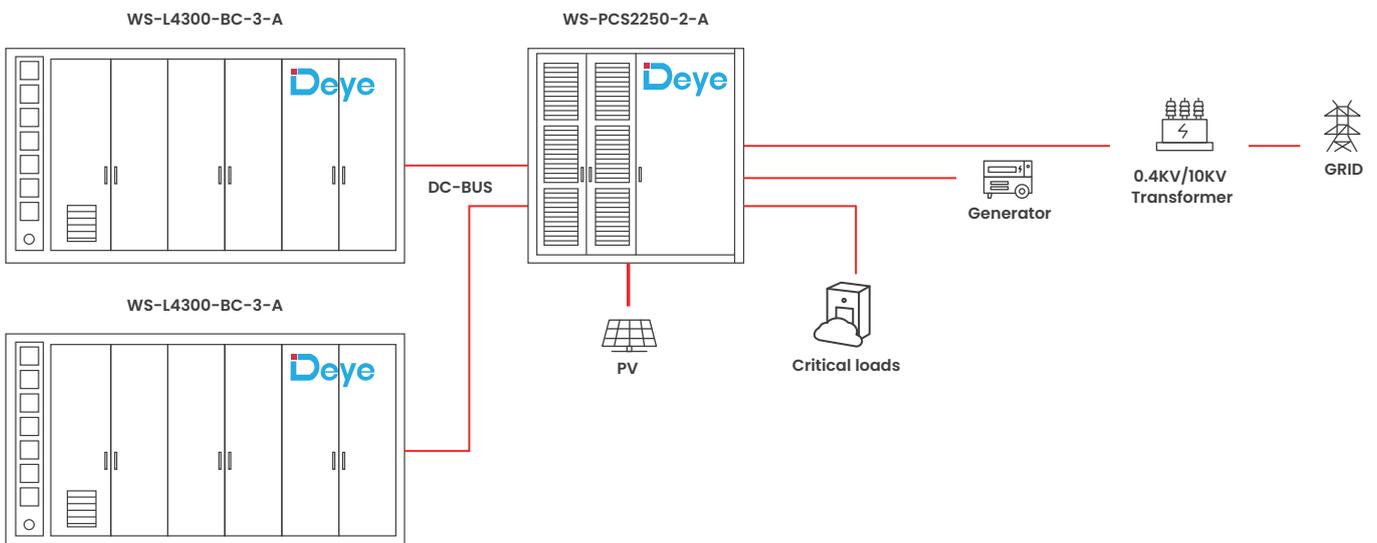
Typical Application Scenarios



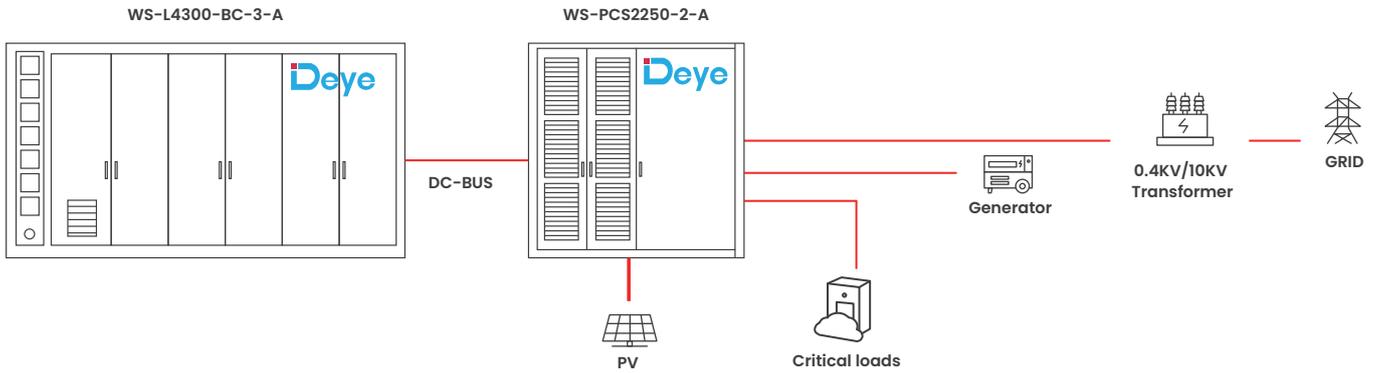
6-hour Energy Storage Solution



4-hour Energy Storage Solution

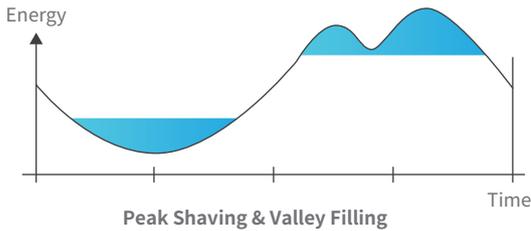


**2-hour Energy Storage Solution**

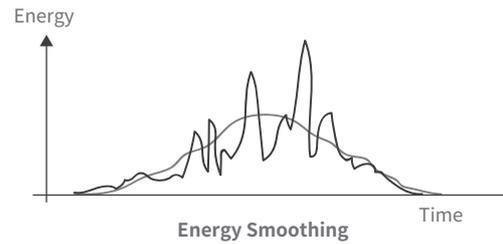


**Application Scenarios**  
Ideal for medium to large C&I microgrid applications

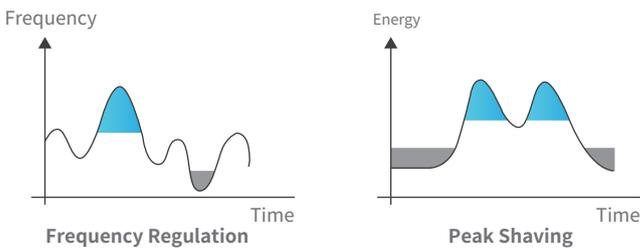
1. Applied in medium to large-scale C&I applications (Peak Shaving & Valley Filling)



2. Integrated with renewable energy storage systems to smooth power output



3. Used for Peak Shaving and Frequency Regulation on the power generation side



4. Participates in virtual power plants to provide ancillary power services (electricity trading)

