# Innovative All-in-one ESS



## **KEY FEATURES**



**High Integration**Highly integrated ESS with outdoors cabinet design provides high protection class



### **Flexible**

Supports system parallel connection and easy for expansion



## Safe and Reliable

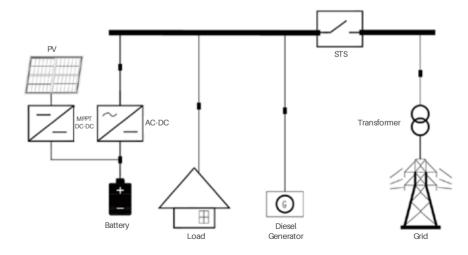
Three level BMS structure for good cooperation and better operation performance



**Pre-Engineered System**Easy for on-site installation and saves the cost

# **DIAGRAM**

Outdoor Cabinet ESS for micro-grid island, hotel, farm and other suitable applications PCS Power optional power range: 30~200KW Battery optional capacity range:100~400KWh Be suitable for 2~4 hours back up





# **SPECIFICATION**

| System Type                    | Optim US-B1-100             |
|--------------------------------|-----------------------------|
| General Data                   |                             |
| Dimension(W*H*D mm)            | 1500*2320*1107.5            |
| Weight(Kg)                     | 2600 (incl. battery)        |
| Working Temperature Range (°C) | -20~60                      |
| Protection Class               | IP54                        |
| Altitude                       | 3000                        |
| Humidity                       | 0~95%                       |
| Fire Extinguishing             | Perfluoro                   |
| Air Conditioner                | 2kW                         |
| Anti-Corrosion                 | C3 (Optional upgrade to C5) |
| Authentication level           | CE/IEC62619/UN38.3/UN3536   |
| Battery Data                   |                             |
| Battery Type                   | Li-ion (LFP)                |
| Nominal Capacity (kWh)         | 113.7                       |
| Battery Item                   | Powercube-M1C               |
| Battery Module Qty.            | 24                          |
| DC Voltage Range(V)            | 696~864                     |
| Max. Operation Current (A)     | 148                         |
| Efficiency                     | 95%                         |

# **SPECIFICATION**

Communication Type

| System Type                    | Optim US-B1-100   |
|--------------------------------|---|
| PCS DC/AC Data On-grid Mode    |   |
| Rated AC Power (KW)            | 60 (expandable to 4×60)   |
| Rated AC Output Voltage(V)     | 400   |
| Rated AC Output Frequency (Hz) | 50/60   |
| Max. AC Current(A)             | 86  |
| Overload Capacity              | 110%@1min   |
| AC PF                          | 0.8 (leading) ~0.8 (lagging)  |
| THDi                           | ≤3%   |
| Isolation Type                 | Non-isolation   |
| Peak Efficiency                | 98.5%   |
| Unbalanced capacity            | 100%  |
| PCS DC/AC Data Off-grid Mode   |   |
| Output voltage accuracy        | ≤1%   |
| Unbalanced capacity            | 100%  |
| Voltage harmonic distortion    | <2% @line load  |
| Overload capacity              | ≤110%   |
| PV DC/DC Data Parameter        |   |
| Rated Power(kW)                | 60 (expandable to 4×60)   |
| PV Input Voltage(Vdc)          | 200 - 850   |
| Max. current(A)                | 100   |
| Max. Efficiency(%)             | 98.5%   |
| Operation Mode                 |   |
| On/off-grid Switch             | Optional STS module, switching time<20ms  |
| EMS                            | 10 inch LCD Touch Panel<br>Self-Consumption; Micro-grid control; Demand response;<br>Remote Control; Time of use; |





