

# Vertical Energy Storage System

AO-MB51150-5KW

AO-MB48200-5KW AO-MB51200-5KW

AO-MB48300-5KW AO-MB51200-5KW

## Long life and safety

Vertical industry integration ensures more than 6000 cycles with 80% DoD.

## Easy to install and use

Integrated inverter design, easy to use and quick to install. Small size, minimizing installation time and cost Compact and stylish design suitable for your sweet home environment.

## Multiple working modes

The inverter has a variety of working modes. Whether it is used for main power supply in the area without electricity or backup power supply in the area with unstable power to deal with sudden power failure, the system can respond flexibly.

## Fast and flexible charging

A variety of charging methods, which can be charged with photovoltaic or commercial power, or both at the same time

## Scalability

3 units can be paralleled for 3-phase output Maximum support for 6 units in parallel



## Application scenario >>>



# Parameters

|   | TW-AO-MB51150-5KW(16S)   | TW-AO-MB51200-5KW(16S)<br>TW-AO-MB48200-5KW (15S)     | TW-AO-MB51300-5KW(16S)<br>TW-AO-MB48300-5KW (15S)     |
|---|--|---|---|
| <b>BATTERY TECHNICAL SPECIFICATION</b>  |  |   |   |
| Battery model                           | TW-MB51150-120A-HWB(16S)   | TW-MB51200-120A-HWB(16S)<br>TW-MB48200-120A-HWB (15S) | TW-MB51300-120A-HWB(16S)<br>TW-MB48300-120A-HWB (15S) |
| Number of batteries                     | 1  | 1   | 1   |
| Battery Energy                          | 7.68kWh  | 10.24kWh/9.6kWh                                       | 15.36kWh/14.4kWh                                      |
| Battery Capacity                        | 150AH  | 200AH   | 300AH   |
| Weight (Approx.)                        | 91kg   | 134kg   | 140kg   |
| Dimension L×D×H                         | 810×520×300  | 1005×450×300  | 1005×520×300  |
| Battery Type                            | LiFePO4  |   |   |
| Battery Rated Voltage                   | 51.2V/48.0V  |   |   |
| Battery Working Voltage                 | 44.8 ~ 57.6V   |   |   |
| Maximum Charging Current                | 100A   |   |   |
| Maximum Discharging                     | 100A   |   |   |
| DOD Designed Life-span                  | 80%>6000 Cycles @ 0.2C/25℃ Charging/Discharging at 80%DOD, Until 80% Capacity. |   |   |
| <b>INVERTER TECHNICAL SPECIFICATION</b> |  |   |   |
| INVERTER TECHNICAL                      | TW-HSI 5000P   |   |   |
| <b>PV CHARGE</b>                        |  |   |   |
| Solar Charge Type                       | MPPT   |   |   |
| Maximum Input Power                     | 5500W  |   |   |
| PV Charging Current                     | 0~100A   |   |   |
| PV Operating Voltage Range              | 120~500V   |   |   |
| MPPT Voltage Range                      | 120~450V   |   |   |
| <b>AC CHARGE</b>                        |  |   |   |
| Maximum Charge Power                    | 3150W  |   |   |
| AC Charging Current Range               | 0~60A  |   |   |
| Rated Input Voltage                     | 220/230Vac   |   |   |
| Input Voltage Range                     | (170Vac~280Vac) ±2%/(90Vac-280Vac)±2%  |   |   |
| <b>AC OUTPUT</b>                        |  |   |   |
| Rated Output Power                      | 5500W(16S)/5000W(15S)  |   |   |
| Maximum Output Current                  | 22A  |   |   |
| Frequency                               | 50Hz/60Hz  |   |   |
| Overload Current                        | 40A  |   |   |
| <b>BATTERY INVERTER OUTPUT</b>          |  |   |   |
| Rated Output Power                      | 5500W(16S)/5000W(15S)  |   |   |
| Maximum Peak Power                      | 11KVA  | 11KVA   | 11KVA   |
| Power Factor                            | 1  |   |   |
| Rated Output Voltage(Vac)               | 230Vac   |   |   |
| Frequency                               | 50Hz   |   |   |
| Auto Switch Period                      | <15ms  |   |   |
| THD                                     | <3%  |   |   |
| <b>GENERAL DATA</b>                     |  |   |   |
| Communication                           | RS485/CAN/WIFI   |   |   |
| Storage time /temperature               | 6 months @25℃;3 months @35℃;1 months @45℃;                                     |   |   |
| Charging temperature range              | 0~45℃  |   |   |
| Discharging temperature range           | -10~45℃  |   |   |
| Operation Humidity                      | 5% ~ 85%   |   |   |
| Nominal Operation Altitude              | <2000m   |   |   |
| Cooling Mode                            | Force-Air Cooling  |   |   |
| Noise                                   | 60dB(A)  |   |   |
| Ingress Protection Rating               | IP20   |   |   |
| Recommended Operation Envi              | Indoor   |   |   |
| Installation Method                     | Vertical   |   |   |
| Certification                           | UN38.3, MSDS, EN55032, EN55024, EN61000 -3-2, EN61000-3-3                      |   |   |