



AMPAURA AUSTRALIA

# Ampaura Power Stax 2 Energy Storage System

## Product Features

- UPS function, 10ms transition.
- Support DC-coupled, AC-coupled applications
- Support charging from diesel generator.
- Support for AFCI function.
- 2.0 DC/AC Ratio with 2 MPPT.
- Support multiple energy management modes:Self-Consumption,time-of-use (TOU), Battery Priority and Zero Export modes

## Application scenario



## System Parameters

| MODEL                          | 5KW Single Phase Inverter |           |           |
|--------------------------------|---------------------------|-----------|-----------|
| System schematic               | 10.24 kWh                 | 15.36 kWh | 20.48 kWh |
| Usable Energy                  | 9.21kwh                   | 13.82kwh  | 18.43kwh  |
| Rated output power             | 5kw                       |           |           |
| Qty of batteries (XCD BAT 5.0) | 2                         | 3         | 4         |



Ampaura Power Stax 2

## System Parameters

| MODEL                             | 5KW Single Phase Inverter          |              |              |
|-----------------------------------|------------------------------------|--------------|--------------|
| Operate temperature range         | -20℃ to +45℃ (derating above +45℃) |              |              |
| Storage temperature range         | -20 ℃ ~ +60 ℃                      |              |              |
| Allowable relative humidity range | 0% RH to 95% RH                    |              |              |
| Degree of protection              | IP65                               |              |              |
| Cooling                           | Natural convection                 |              |              |
| Noise                             | <35 dB                             |              |              |
| Altitude                          | ≤2000m                             |              |              |
| Display                           | LCD & App                          |              |              |
| Communication                     | RS485/WiFi/Dry contact/BLE         |              |              |
| DRM                               | Dry Contact                        |              |              |
| Mounting                          | Wall bracket                       |              |              |
| Weight                            | 153 kg                             | 210.1 kg     | 267.3 kg     |
| Dimension(W*H*D)                  | 740*1280*200                       | 740*1680*200 | 740*2080*200 |
| Product ordering model            | Inverter Module+N*Battery Mode     |              |              |
| Battery                           |                                    |              |              |
| Battery Type                      | LFP (LiFePO4)                      |              |              |
| Rated Capacity(kwh)               | 10.24kWh                           | 15.36kWh     | 20.48kWh     |
| Rated Power                       | 2500W                              |              |              |
| Nominal Battery Voltage           | 51.2V                              |              |              |
| Battery voltage range(V)          | 43.2 V- to 57.6 V-                 |              |              |
| Max. Charging Current(A)          | 120A                               |              |              |
| Max. Discharging Current(A)       | 120A                               |              |              |
| Depth of discharge (DOD)          | 90% adjustable                     |              |              |
| Dimension(W*H*D)                  | 740*440*200                        |              |              |
| Weight                            | 57.1KG                             |              |              |
| Cycle Life                        | ≥8000 Cycles                       |              |              |



System Parameters

| Inverter            |                              |                                             |
|---------------------|------------------------------|---------------------------------------------|
| Input(PV)           | Max.power(kW)                | 6kW (2*XCD BAT 5.0) 10kW (3or4*XCD BAT 5.0) |
|                     | Max.DC voltage (V)           | 500V                                        |
|                     | Start-up Voltage (V)         | 85V                                         |
|                     | MPPT voltage range(V)        | 70V to 450V                                 |
|                     | Number of MPP trackers       | 2                                           |
|                     | Max.Input per Current (A)    | 16A/16A                                     |
|                     | Max.Short Input Current (A)  | 22.5A/22.5A                                 |
| AC Output(Grid)     | Nominal AC Output Power(kW)  | 5kw                                         |
|                     | Max. AC Apparent Power(kVA)  | 5KVA                                        |
|                     | Rated Grid Voltage(V)        | 230V~ (L-N-PE)                              |
|                     | Grid voltage rang            | 170V~ to 265V~ (L-N-PE)                     |
|                     | Rated Frequence Range(HZ)    | 50Hz (According to local standard)          |
|                     | Rated Grid Current(A)        | 22A                                         |
|                     | Max. Input Current(A)        | 34A                                         |
|                     | THDI                         | <3%                                         |
|                     | PF                           | 0.8leading-0.8lagging                       |
|                     | AC grid connection type      | Single phase                                |
| EPS Output(Back-up) | Nominal Output Power(kW)     | 5kw                                         |
|                     | Nominal Output Current(A)    | 22.7A                                       |
|                     | Peak Power(10s)              | 6.5kw                                       |
|                     | Nominal Output Voltage(V)    | 230V~ (L-N-PE)                              |
|                     | Nominal Output Frequence(HZ) | 50Hz                                        |
|                     | Transfer Time(ms)            | <10ms                                       |
|                     | THDU                         | <3%@100% R Load                             |



System Parameters

| Inverter                 |                                                                                                       |                               |
|--------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|
| Efficiency               | Max. Efficiency                                                                                       | 98%                           |
|                          | European efficiency                                                                                   | 97.5%                         |
|                          | MPPT efficiency                                                                                       | 99.9%                         |
| Protection Devices       | PV Reverse-polarity Protection                                                                        | Yes                           |
|                          | DC Switch                                                                                             | Bipolar DC switch (125A/Pole) |
|                          | Insulation Resistance Monitoring                                                                      | Yes                           |
|                          | AC/DC Surge Protection                                                                                | DC Type II;AC Type III        |
|                          | AC Short-circuits Protection                                                                          | Yes                           |
|                          | Leakage Current Protection                                                                            | Yes                           |
|                          | Anti-islanding Protection                                                                             | Yes                           |
| GEN input port           | AFCI Protection                                                                                       | Yes                           |
|                          | Input voltage range                                                                                   | 170V~ to 265V~ (L-N-PE)       |
|                          | Max. continuous input current                                                                         | 26A                           |
| Certification            | Rated input frequency                                                                                 | 50Hz+5Hz                      |
|                          |                                                                                                       |                               |
|                          |                                                                                                       |                               |
| Certification & Standard | EN 62109、EN 61000、EN 62040、EN 62477、EN 50549、AS/NZS 4777.2、CEC、ROHS、EN 62619、EN 63056、EN 60730、UN38.3 |                               |