



## NELUMBO BBox PVA Three Phase Hybrid Storage System

The next energy independence innovation.

# WITH POWER THERE ARE INFINITE POSSIBILITIES IN LIFE

Three Phase independent control with unbalance input/output.

Modular design let each demand have the most appropriate product match.

Plug in and play, with remote commissioning and control.



## Anti-backflow

These functions are designed to enable stable grid operation even when the PV system density is very high and to prevent unwanted interruptions to feed-in and associated yield losses if grid parameters exceed the thresholds.



## Parallel Connection

Every system can be paralalled to realize bigger power.



## Demand Response

High over-loading penalty from grid distribution? One key to optimize.



## Peak Valley Mode

Maximum 5 schedules can be defined to charge and discharge from grid every day.

## Typical Running Modes



## Maximum Solar Self-consumption

According to the demand of real-time loading, the inverter dynamically adjusts the charge and discharge of the battery.



## Smart Micro Grid Solution(Off-grid)

Frequency regulation function integrated as standard, NELUMBO BBOX is a perfect solution for off-grid running with also smart dry-contact control to offer superior flexibility for genset integration.



## Emergency Power Back-up(UPS Level)

Scheduled back-up plan with full automatical control, BBOX can be an ideal solution to replace traditional UPS with superior energy/power density with full monitoring approval.



## Hybrid Inverter



### Model

1.3kW - Three Phase-Dual MPPT  
 98.2% Max. Efficiency

### Energy Capacity

13,000 W Max. Input Power  
 1,000 V Max. DC Input Voltage  
 13/13 Max. Input Current

### Power Output

1.1kW, 16.5A Max. Output to Grid  
 <10ms UPS Switching Time  
 3 / N / PE, 230(400) Rated Output Voltage

### Size and Weight

698W\*613H\*356D mm  
 28 kg

### General Data

IP65 Protection Degree  
 -30~60°C Operation Temperature  
 WiFi/LAN(Optional) Communication  
 OLED & LED Display

### Compliance:

IEC62109, IEC62116, VDE4105,  
 VDE0126, AS4777, RD1699,  
 NBR16149, IEC61727, IEC60068,  
 IEC61683, EN50549, EN61000

5Box PVA  
 13kW/7.8kWh

5Box PVA  
 13kW/10.4kWh

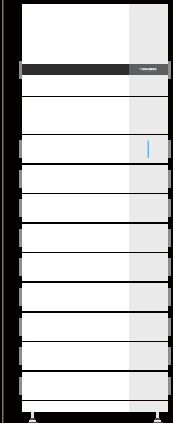
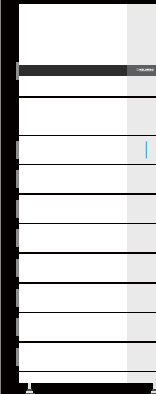
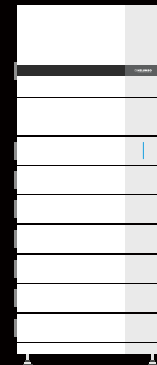
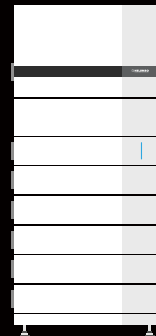
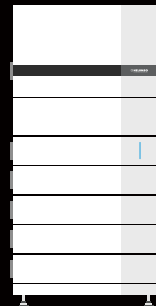
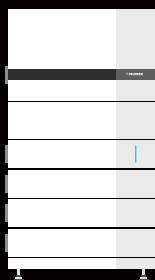
5Box PVA  
 13kW/13.0kWh

5Box PVA  
 13kW/15.6kWh

5Box PVA  
 13kW/18.1kWh

5Box PVA  
 13kW/20.7kWh

## LiFePO4 Battery System



Number of Battery Modules

3

4

5

6

7

8

Battery Capacity

7.8 kWh  
 259.2 V

10.4 kWh  
 345.6 V

13.0 kWh  
 432.0 V

15.6 kWh  
 518.4 V

18.1 kWh  
 604.8 V

20.7 kWh  
 691.2 V

Maximum Discharge Power(AC) with only battery/Period

6.4kW/60mins

8.6kW/60mins

10kW/70mins

10kW/84mins

10kW/97mins

10kW/111mins

Size(W\*H\*Dmm) and Weight(kg)

698\*1268\*356  
 168 kg

698\*1405\*356  
 198 kg

698\*1542\*356  
 228 kg

698\*1695\*356  
 258 kg

698\*1756\*356  
 288 kg

698\*1953\*356  
 318 kg

DOD Recommended

90%

Power connection type

Hard Connection with Positioner

Warranty

8000 Cycles within 10 Years Guarantee