



# POWERING TINY HOMES OFF THE GRID



The SkyBox Mini is an all-in-one cabinet - perfect for tiny homes, studios, sheds, cabins, and off-grid retreats. Designed to run quietly and efficiently, it keeps the essentials powered day and night without taking up precious space. Small footprint, serious performance.

Standing at 1634mm high, with a width & depth of 600mm & weighing in at around 150kg, the mini has enough power to handle any Tiny Home.

HYBRID / OFF-GRID SPECIFICATIONS



5kW & 8kW (1phase)  
Inverter Hybrid & Off-Grid Model



SkyBox gives everyone freedom and independence from the power grid.

Acting as a central 'brain,' the SkyBox manages incoming power from your solar, wind, or hydro generators.

Balancing these power sources and storing excess energy in the internal batteries, SkyBox creates a reliable off-grid electricity supply.



|                                    | SBX5S-M                                   | SBX8S-M                |
|------------------------------------|---|------------------------|
| Max AC Input (A)                   | 35A                                       | 50A                    |
| <b>INVERTER</b>                    |   |                        |
| Output (V)                         | Output Voltage: 230VAC. Frequency 50Hz    |                        |
| Rated AC Output Active Power (W)   | 5000W                                     | 8000W                  |
| Max AC Output Active Power (W)     | 5500W                                     | 8800W                  |
| Peak Power 5s (W)                  | 10000W                                    | 16000W                 |
| Max AC Output Current (A)          | 21.7A                                     | 34.8A                  |
| Maximum efficiency                 | 97.6%                                     | 97.6%                  |
| <b>CHARGER</b>                     |   |                        |
| Max Charging Current               | 120                                       | 190                    |
| Max Discharging Current            | 120                                       | 190                    |
| <b>SOLAR</b>                       |   |                        |
| Max PV Input Power                 | 7500W                                     | 12000W                 |
| Max Open Circuit Voltage           | 500V                                      | 500V                   |
| Max PV Short Circuit Current       | 44A                                       | 44A                    |
| MPPT Input / (strings per tracker) | 1(1) / 2(1) / 3(2)                        |                        |
| Efficiency                         | 99.9%                                     | 99.9%                  |
| MPPTs (Strings per Tracker)        | 2 (1)                                     | 2 (1)                  |
| <b>BATTERIES</b>                   |   |                        |
| Nominal Voltage                    | 48V                                       |                        |
| Nominal Capacity (Wh)              | 5120 (Wh) multiplied by number of modules |                        |
| Usable Capacity (Wh)               | 5120 (Wh) multiplied by number of modules |                        |
| Max No. Modules                    | 3   |                        |
| Max Capacity                       | BSLBATT<br>15.36kWh                       |                        |
| Working Temperature                | 0° to +60°, >45° Derating                 |                        |
| Design Life                        | 15+ years                                 |                        |
| Cycle Life                         | >6000 Cycles                              |                        |
| Authentication Level               | IEC62619/CE/UN38.3                        |                        |
| Warranty                           | 10 Years to 70% retention                 |                        |
| <b>ENCLOSURE</b>                   |   |                        |
| Colour                             | White                                     |                        |
| Protection Category                | IP54                                      |                        |
| Weight                             | 150kg                                     |                        |
| Dimensions (h x w x d)             | 1634mm x 600mm x 600mm                    | 1634mm x 600mm x 600mm |

HYBRID / OFF-GRID SPECIFICATIONS



10kW (1phase) & 10kW (3phase)  
Inverter Hybrid & Off-Grid Model



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|                                    | SBX10S-M                               | SBX10T-M                                  |
|------------------------------------|--|---|
| <b>INVERTER</b>                    |  |   |
| Max AC Input (A)                   | 60A                                    | 14.5A                                     |
| Output (V)                         | Output Voltage: 230VAC. Frequency 50Hz |   |
| Rated AC Output Active Power (W)   | 10000W                                 | 10000W                                    |
| Max AC Output Active Power (W)     | 10000W                                 | 10000W                                    |
| Peak Power (W)                     | 15000W                                 | 15000W                                    |
| Max AC Output Current (A)          | 60A                                    | 14.5A per phase                           |
| Maximum efficiency                 | 97.6%                                  | 97.6%                                     |
| <b>CHARGER</b>                     |  |   |
| Max Charging Current               | 220A                                   | 210A                                      |
| Max Discharging Current            | 220A                                   | 210A                                      |
| <b>SOLAR</b>                       |  |   |
| Max PV Input Power                 | 15000W                                 | 15000W                                    |
| Max PV Short Circuit Current       | 39+19.5A                               | 39+19.5A                                  |
| MPPT Input / (strings per tracker) | 3/2 + 2 + 2                            | 2/2 (1)                                   |
| Efficiency                         | 99.9%                                  | 99.9%                                     |
| <b>BATTERIES</b>                   |  | <b>BSLBATT</b>                            |
| Nominal Voltage                    |  | 48V                                       |
| Nominal Capacity (Wh)              |  | 5210 (Wh) multiplied by number of modules |
| Usable Capacity (Wh)               |  | 5120 (Wh) multiplied by number of modules |
| Max No. Modules                    | 3                                      | 3   |
| Max Capacity                       |  | <b>BSLBATT</b><br>15.36kWh                |
| Working Temperature                |  | 0° to +60°, >45° Derating                 |
| Design Life                        |  | 15+ years                                 |
| Cycle Life                         |  | >6000 Cycles                              |
| Authentication Level               |  | IEC62619/CE/UN38.3                        |
| Warranty                           |  | 10 Years to 70% retention                 |
| <b>ENCLOSURE</b>                   |  |   |
| Colour                             |  | White                                     |
| Protection Category                |  | Built to IP54 protection standards        |
| Standard                           |  | IEC62208, IEC/EN/AS60529                  |
| Weight                             |  | 150kg                                     |
| Dimensions (h x w x d)             | 1634mm x 600mm x 600mm                 | 1634mm x 600mm x 600mm                    |

# BSLBATT 48V LITHIUM POWER LITHIUM BATTERY

## B-LFP48

2.5kWh/5.0kWh/6.6kWh

8.1kWh/10kWh

## FEATURES

- 5.12kWh expandable up to 81.92kWh
- AC Coupled for both new and retrofitted installations
- 4.8kW charge and discharge rate
- LiFePo4 cell, safe and environmentally friendly
- Suitable for both indoor and outdoor installation (IP65 rating)
- Premium 10 Year Warranty
- Modular design gives highest flexibility
- 16 Cell lithium batteries as denoted with the voltage 51.2v
- Multiple communication interfaces: RS485, RS232, CAN
- Long life cycle, more than 6000 times
- Safety Cert. RCM, IEC, FCC, TUV, CE, UN38.3, and so on
- Module level auto-balancing
- 0.5C/1C continual charge and discharge
- Proven BMS with widest compatibilities with inverters
- Simple buckle fixing minimize the installation time and cost

## APPLICATIONS

- Back-up power
- Self-consumption optimisation
- Off-grid power supply



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## FIELDS OF APPLICATION

- › Hotels
- › Domestic-residential
- › Schools or Institutions
- › Places of public interest
- › Gyms and sports facilities
- › Shops and small businesses
- › Car parks in shopping centres and supermarkets



Lithium battery  
BSLBATT

**LiFePO<sub>4</sub>**  
Lithium Battery



# BSLBATT 48V LITHIUM BATTERY

## Nominal Parameters

| Battery Technology        | Lithium iron Phosphate(LiFePO4) |              |              |                |              |              |
|---------------------------|---------------------------------|--------------|--------------|----------------|--------------|--------------|
| Model                     | B-LFP48-50E                     | B-LFP48-100E | B-LFP48-130E | B-LFP48-160E   | B-LFP48-200E | B-LFP48-300E |
| Rated Voltage(V)          | 51.2                            | 51.2         | 51.2         | 51.2           | 51.2         | 51.2         |
| Rated Capacity(Ah)        | 50                              | 100          | 130          | 160            | 200          | 300          |
| Energy(kWh)               | 2.56                            | 5.12         | 6.66         | 8.19           | 10.24        | 15.36        |
| Dimension one(mm)         | 485*390*132                     | 485*442*177  | 560*442*177  | 640*405*225    | 485*503*267  | 485*700*267  |
| Dimension two(mm)         | W485*H510*D180                  |              |              | W630*H780*D160 |              |              |
| Weight(Kg)                | 29                              | 48           | 56           | 85             | 96           | 120          |
| Design life(25°C)         | 10 years                        |              |              |                |              |              |
| Cycle life(80% DOD @25°C) | 6000 cycles                     |              |              |                |              |              |

## Electrical Characteristics

| Voltage Range(V)DC                  | 44.8 to 58.4V DC                   |      |      |      |      |      |
|-------------------------------------|------------------------------------|------|------|------|------|------|
| Peak Current                        | 100A                               | 150A | 150A | 180A | 150A | 150A |
| Continuous Current                  | 50A                                | 100A | 100A | 150A | 100A | 100A |
| Max continuous charge current(A)    | 50A                                | 100A | 100A | 100A | 100A | 100A |
| Max continuous discharge current(A) | 50A                                | 100A | 120A | 150A | 180A | 280A |
| Battery Pack Round-Trip Efficiency  | > 95% ( under specific condition ) |      |      |      |      |      |
| Communication Interface             | RS232/RS485/CAN                    |      |      |      |      |      |
| DC Disconnect                       | Circuit Breaker, Contactor, Fuse   |      |      |      |      |      |

## Operating Conditions

| Installation Location | Indoor / (stand wall-mounted) |             |          |  |  |  |
|-----------------------|-------------------------------|-------------|----------|--|--|--|
| Operating Temperature | Charge                        | -10 to 45°C |          |  |  |  |
|                       | Discharge                     | 15 to 30°C  |          |  |  |  |
|                       | Storage                       | -10 to 45°C |          |  |  |  |
|                       |                               | 25°C        | 6 months |  |  |  |
|                       |                               | 45°C        | 3 months |  |  |  |
|                       | 60°C                          | 1 month     |          |  |  |  |
| Humidity              | 5% to 95%                     |             |          |  |  |  |
| Altitude              | Max. 2,000m                   |             |          |  |  |  |
| Cooling Strategy      | Natural Convection            |             |          |  |  |  |

## Certification

|                                    |   |
|------------------------------------|---|
| Safety                             | UL1642/CE/RCM/FCC/TUV (IEC 62619) /UL1973 |
| EMC                                | IEC61000-6-1 , IEC61000-6-3               |
| Hazardous Materials Classification | Class 9                                   |
| Transportation                     | UN38.3                                    |
| IP LEVEL                           | IP23                                      |