



SkyBox



Hybrid / Off Grid Product View



Hyrid Front View



Hyrid Internal View



Hyrid Right-Side View



Hyrid Left-Side View



SkyBox





HYBRID / OFF-GRID SPECIFICATIONS



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.



SBX5.0D-H-1 & SBX5.0D-O-1



SBX8.0D-H-1 & SBX8.0D-O-1

Transfer Switch	35A	50A
Max AC Input (A)	35A	50A
INVERTER		
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%
CHARGER		
Max Charging Current	120	190
Max Discharging Current	120	190
SOLAR		
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)
BATTERIES		
	PYLONTECH	BSLBATT
Nominal Voltage	48V	
Nominal Capacity (Wh)	4800 (Wh) multiplied by number of modules	5120 (Wh) multiplied by number of modules
Usable Capacity (Wh)	4560 (Wh) multiplied by number of modules	4966 (Wh) multiplied by number of modules
Max No. Modules	6	6
Max Capacity	PYLONTECH 28.8kWh	PYLONTECH 28.8kWh
	BSLBATT 30.72Wh	BSLBATT 30.72Wh
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	
MONITORING		
WiFi	Yes	
Ethernet	Yes	
ENCLOSURE		
Colour	White	
Protection Category	IP54	
Weight	270kg	
Dimensions (h x w x d)	1354mm x 1072mm x 601mm	1354mm x 1072mm x 601mm

HYBRID / OFF-GRID SPECIFICATIONS



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**SBX12.0D-H-1
&
SBX12.0D-O-1**

**SBX16.0D-H-1
&
SBX16.0D-O-1**

Transfer Switch	100A	100A
Max AC Input (A)	100A	100A
INVERTER		
Output Frequency and Voltage	50/60Hz; L/N/PE 230	50/60Hz; L/N/PE 230
Rated AC Output and UPS Power (W)	12000W	16000W
Max AC Output Power (W)	12000W	16000W
Peak Power 5s (W)	24000W	32000W
Max AC Output Current (A) Maximum	52.2A	69.6A
Maximum efficiency	97.6%	
Backup Power (W)	10000W	14000W
Backup Rated Current (A)	45A	63A
Backup UPS	6ms Automatic switchover time	
CHARGER		
Max Charging Current (A)	220A	290A
Max Discharging Current (A)	220A	290A
SOLAR		
Max PV Input Power	18000W	24000W
Max Open Circuit Voltage	500V	
Max PV Short Circuit Current	44A	
MPPT Input / (strings per tracker)	1(1) / 2(1) / 3(2)	
MPPT Efficiency	99.9%	
MPPTs (Strings per Tracker)	150-425V	
BATTERIES		
Nominal Voltage	40-60V	
Nominal Capacity (Wh)	5120 (Wh) multiplied by number of modules	
Usable Capacity (Wh)	4966 (Wh) multiplied by number of modules	
Max No. Modules	14	
Max Capacity	PYLONTECH 67.2kWh BSLBATT 71.68Wh	
Working Temperature	0° to +60°, >45° Derating	
Design Life	15+ years	
Cycle Life	>6000 Cycles	
Authentication Level	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	
Warranty	10 Years to 70% retention	
MONITORING		
WiFi	Yes	
Ethernet	Optional	
ENCLOSURE		
Colour	White	
Protection Category	IP65	
Weight	350kg	
Dimensions (h x w x d)	1600mm x 1800mm x 601mm	



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**SBX12.0D-H-3
&
SBX12.0D-O-3**

Transfer Switch	40A per phase
Max AC Input (A)	20A per phase
INVERTER	
Output (V)	Output Voltage: 230VAC. Frequency 50Hz
Rated AC Output and UPS Power (W)	12000W
Max AC Output Power (W)	12000W
Peak Power 10s (W)	24000W
Max AC Output Current (A)	52.17A
Maximum efficiency	97.6%
CHARGER	
Max Charging Current (A)	240A
Max Discharging Current (A)	240A
SOLAR	
Max PV Input Power	19300W
Max Open Circuit Voltage	800V
Max PV Short Circuit Current	44A
MPPT Input / (strings per tracker)	2 (2)
Efficiency	99.9%
MPPTs	2/2+1
BATTERIES	
Nominal Voltage	48V
Nominal Capacity (Wh)	5120 (Wh) multiplied by number of modules
Usable Capacity (Wh)	4966 (Wh) multiplied by number of modules
Max No. Modules	14
Max Capacity	PYLONTECH 67.2kWh
	BSLBATT 71.68Wh
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
MONITORING	
WiFi	Yes
Ethernet	Yes
ENCLOSURE	
Colour	White
Protection Category	IP54
Weight	350kg
Dimensions (h x w x d)	1600mm x 1800mm x 601mm

¹ Size is an approximation only and may vary depending on parts available.
² Size of cabinets is an approximation only and may vary depending on stock available and size of system Off-Grid Certified meaning the SkyBox has capabilities for renewable energy and generator inputs. SkyBox creates a power supply where no grid input or referencing is required.
³ Subject to change.



FEATURES



Protection Built to IP54 protection standards

Standard IEC62208, IEC/EN/AS60529

Material Body: 1.5mm galvanised steel sheet
 Gland Plate: 1.5mm galvanised steel sheet
 Door: 1.5mm galvanised steel sheet
 Device Mounting Plate: 1.5mm galvanised steel sheet
 Seal: EPDM Rubber

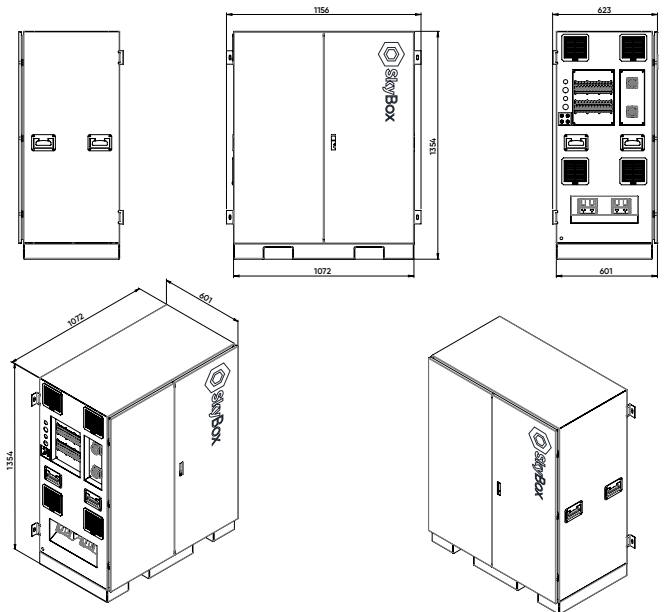
Body The robust monoblock body is fabricated using 1.5mm galvanised steel sheet. Flat face sealing surfaces are provided to increase seal life. Pre-fitted blind nutserts are incorporated to accommodate mounts and accessory fasteners to eliminate drilling and retain IP rating. Integral device plate mounts and M6 earth stud is provided.

Double Doors The robust surface mounted door is fabricated using 1.5mm galvanised steel sheet and incorporates concealed removable hinges with captive pins. The door is designed for a 110° opening. Each door contains integral cable management rail studs, M6 earth stud.

Seal Pinch weld EPDM replaceable seal

Lock 3 point locking system with key-lock swing handle.

DIMENSIONS (5kW and 8kW MODEL)



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

LiFePO₄
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