

## SKYBOX MAX - I DESCRIPTION



19 inches  
12 battery rack



19 inches  
8 battery rack

The SkyBox MAX - I series utilizes advanced LiFePO<sub>4</sub> cell technology, known for its superior thermal stability, high cycle life, and excellent safety profile. Each battery module has a nominal capacity of 100Ah and energy of 5.12 kWh, allowing you to scale your system to perfectly match your energy storage requirements.

- High-quality LiFePO<sub>4</sub> cell chemistry for enhanced safety and longevity
- Modular design with capacities ranging from 15.36 kWh to 61.44 kWh
- Flexible system voltage options from 153.6V to 614.4V
- Intelligent battery management system (BMS) for optimal performance and protection
- Compact and lightweight design for easy installation and maintenance
- 10-year warranty for peace of mind

With a recommended depth of discharge (DOD) of 90% and a cycle life of  $\geq 6000$  cycles at 25°C, the SkyBox MAX - I series ensures maximum usable energy and long-term performance. The system also features a wide operating temperature range of -20°C to 55°C, making it suitable for various environments.

The SkyBox MAX - I series comes equipped with a high-voltage box (HVB750V/100A) that enables seamless integration with your existing power system. The high voltage box supports an operating voltage range of 120-750 Vdc and a maximum charge/discharge current of 125A, ensuring efficient power transfer and compatibility with a wide array of inverters and chargers.

Safety is a top priority with the SkyBox MAX - I series. The system features multiple layers of protection, including over-voltage, under-voltage, over-current, short-circuit, and temperature monitoring. The IP20-rated enclosure provides protection against dust and debris, while the built-in status indicators keep you informed of the system's operating status at all times.

Sky Energy's commitment to quality and customer satisfaction is evident in the 10-year warranty provided with the SkyBox MAX - I series. With its robust design, advanced features, and exceptional performance, the Sky Energy's SkyBox MAX - I LiFePO<sub>4</sub> battery system is the ideal choice for those seeking a reliable and efficient energy storage solution.

**SKYBOX MAX - I SPECIFICATIONS**



**MAIN PARAMETER**

<b>Cell Chemistry</b>	LiFePO4	
<b>Module Energy (kWh)</b>	5.12kWh	
<b>Module Nominal Voltage (V)</b>	51.2V	
<b>Module Capacity (Ah)</b>	100Ah	
<b>Battery Module Number</b>	SkyBox MAX - I (40)	SkyBox MAX - I (60)
<b>Battery Module Qty In Series (Optional)</b>	8	12
<b>System Nominal Voltage (V)</b>	409.6V	614.4V
<b>System Operating Voltage (V)</b>	332.8V~467. 2V	499.2V~700V
<b>System Energy (kWh)</b>	40.96kWh	61.44kWh
<b>System Usable Energy (kWh)<sup>1</sup></b>	36.86kWh	55.29kWh
<b>Rated DC Power</b>	40.96	61.44
<b>Charge/Discharge<sup>2</sup> Current (A)</b>	Recommend Nominal Peak Discharge (2 mins, 25°C)	50A 100A 125A
<b>Working Temperature (°C)</b>	Charge: 0 °C ~55 °C/Discharge: -20 °C ~55 °C	
<b>Status Indicator</b>	Yellow: Battery High Voltage Power On Red: Battery System Alarm	
<b>Communication Port</b>	CAN2.0/ RS485	
<b>Humidity</b>	5%~85%RH	
<b>Altitude</b>	≤2000m	
<b>IP Rating of Enclosure</b>	IP20	
<b>Dimension (W/D/H,mm)</b>	530W * 602D * 1599H	530W * 602D * 2187H
<b>Weight Approximate (kg)</b>	408kg	594kg
<b>Installation Location</b>	Rack Mounting	
<b>Storage Temperature (°C)</b>	0 °C ~35 °C	
<b>Recommend Depth of Discharge</b>	90%	
<b>Cycle Life</b>	25±2°C,0.5C/0.5C, EOL70%≥6000	
<b>Warranty<sup>3</sup></b>	10 years	
<b>Certification</b>	CE/IEC62619 /VDE2510-50/ UL1973 /UL9540A/ UN38.3	

<sup>1</sup> DC Usable Energy, test conditions: 90% DOD, 0.2C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

<sup>2</sup> The current is affected by temperature and SOC.

<sup>3</sup> The warranty is due whichever reached first of warranty period or life cycle power.

**SKYBOX MAX - I FEATURES**



**H V B 7 5 0 V / 1 0 0 A - E U**

High Voltage Battery cluster control box conforming to European or British Standards

<b>Operating Voltage</b>	120~750Vdc
<b>Nominal Charge/Discharge Current</b>	100A
<b>Max. Charge/Discharge Current</b>	125A
<b>DC Input Rating</b>	12±2%V/4.15A
<b>Operating Temperature Range</b>	-20~65°C
<b>Ingress Protection</b>	IP20
<b>Dimension (W/D/H)</b>	440W * 570D * 150H (mm)
<b>Weight Approximate</b>	15.5kg

**H V B 7 5 0 V / 1 0 0 A - U S**

High Voltage Battery cluster control box conforming to European or British Standards



<b>Operating Voltage</b>	120~750Vdc
<b>Nominal Charge/Discharge Current</b>	100A
<b>Max. Charge/Discharge Current</b>	125A
<b>DC Input Rating</b>	12±2%V/4.15A
<b>Operating Temperature Range</b>	-20~65°C
<b>Ingress Protection</b>	IP20
<b>Dimension (W/D/H)</b>	440W * 570D * 150H (mm)
<b>Weight Approximate</b>	17kg



**SKYBOX MAX - I FEATURES**



**High voltage box Standard configuration:**

1. 120 ohm terminal resistance
2. 140mm communication cable
3. 220mm power cable
4. 1.5m power cable (US Version)  
2.1m power cable (EU Version)
5. Power plug

**SKYBOX MAX - IM5.1**

5.12 kWh battery module



<b>Battery Type</b>	LiFePO4(LFP)
<b>Nominal Voltage</b>	51.2Vdc
<b>Rated Capacity</b>	100Ah
<b>Rated Energy</b>	5.12kWh
<b>Nominal Charge/Discharge Current</b>	100A
<b>Peak. Discharge Current</b>	125A
<b>Charge Temperature</b>	0°C~55°C
<b>Discharge Temperature</b>	-20°C~55°C
<b>Storage Temperature</b>	0°C~35°C
<b>Ingress Protection</b>	IP20
<b>Dimension (W/D/H)</b>	440W * 570D * 133H (mm)
<b>Weight Approximate</b>	44kg

**Battery module Standard configuration:**



1. 110mm communication cable
2. 200mm power cable

**SKYBOX MAX - I FEATURES**



**EP CABLE 5.0 (OPTIONAL)**

Standard 5-meter power cable connected to the positive pole of the external PCS 1000V/4AWG cable



**EN CABLE 5.0 (OPTIONAL)**

Standard 5-meter power cable connected to the negative pole of the external PCS 1000V/4AWG cable



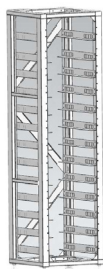
**EPWR CABLE 5.0 (OPTIONAL)**

Standard 5-meter cable connected to external 12VDC power supply



**ECOM CABLE 5.0 (OPTIONAL)**

Standard 5-meter communication cable connected to the external device

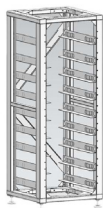


**3U-H RACK (OPTIONAL)**

Standard 19inch rack, can install 12 pcs batteries and 1 pcs High Voltage Battery cluster control box

**Dimension (W/D/H)** 589W \* 590D \* 2240H (mm)

**Weight Approximate** 85kg



**3U-L RACK (OPTIONAL)**

Standard 19inch rack, can install 8 pcs batteries and 1 pcs High Voltage Battery cluster control box

**Dimension (W/D/H)** 589W \* 590D \* 1640H (mm)

**Weight Approximate** 65kg