



Sanctuary Energy Storage System

8kW Hybrid Inverter / Charger 13.5kWh Lithium Battery

Powerful Inverter and Energy Storage unit to provide power to your home during black outs, emergencies or daily use.

The Lion Sanctuary System is a powerful solar inverter and energy storage system the power of the sun to power your home, cabin, or houseboat.

Now you can power your residence in emergencies and during peak cost times, giving you peace of mind, power for your family and cost savings to your wallet.

The new Lion Energy Sanctuary System combines our efficient 8k hybrid inverter/charger with our powerful Lithium Iron Phosphate 13.5k battery. The combination provides for true energy independence whether you are On-Grid, Off-Grid or Mobile.



The Sanctuary System can be expanded to 27kWh or 40.5kWh

69" H x 18.5" W x 10.5" D

Sanctuary 8kW Energy Storage Inverter

Model #50170167 Sanctuary 8K

Product Type	Hybrid Inverter / Charger
Enclosure	IP65
Ambient Temperature	32°F to 86° F
Weight	70 lbs.
Dimensions	26.8" H x 18.5" W x 9.3" D
Compliance	UL1741, UL9540, UL1699

Charge Mode

Battery Voltage	48VDC (40V - 60V)
Battery Current	190ADC Max
AC Input Voltage	208/240VAC (120VAC)
AC Input Frequency	60Hz
AC Input Rated Current	33.4AAC
Max AC Input Current	38.3AAC Max
Max AC Input Power	8800W
PV Input Voltage	370VDC (100VDC - 500VDC)
MPPT Input Range	125VDC - 425VDC
PV Input Current	22ADC + 22ADC
Max PV Input Power	10400W (max 36 panels)
Max PV ISC	25ADC + 25ADC

On-Grid Mode

AC Output Voltage	208 / 240VAC (120VAC)
AC Output Frequency	60Hz
AC Output Rated Current	33.4AAC
Max AC Output Current	38.3AAC Max
Max AC Output Power	8800W
AC Output Rated Power	8000W
AC Output Power Factor	0.8 leading to 0.8 lagging
Max AC ISC	145AAC
Battery Discharge Voltage	40V - 60VDC
Battery Discharge Current	190ADC Max
Battery Discharge Power	8800W

Off-Grid Mode

AC Output Voltage	208 / 240VAC (120VAC)
AC Output Frequency	60Hz
AC Output Rated Current	33.4AAC
AC Output Rated Power	8000W
Max Continuous AC Passthrough	90AAC
Peak Output Power	16000W 10 Seconds
Battery Discharge Voltage	40V - 60VDC
Max Discharge Current	190ADC Max
PV Input Voltage	370VDC (100VDC - 500VDC)
MPPT Input Range	125VDC - 425VDC
PV Input Current	22ADC + 22ADC
Max PV Input Power	10400W (max 36 panels)
Max PV ISC	25ADC + 25ADC

Install in a climate controlled environment to maintain a temperature between 32° to 86° F.

This Grid support Interactive Inverter complies with ULSTD.1741, UL1741 SA, CPUC RULE21,SRD-UL-1741-SA-V1.1, IEEE1547-2003, FCC 15 class-B, UL1699B Arc-Fault Circuit-protection Type 1.



CAUTION:

- High voltage, warning electric shock!
- Keep the equipment well ventilated.
- The capacitors store hazardous energy. Do not touch!

The Lion Sanctuary has a powerful built-in inverter to pass the energy from a solar panel system into the Sanctuary's energy storage component (lithium iron phosphate battery).

It is highly rated at 90A pass through and UL certified.



Sanctuary 13.5kWh Battery

Lithium Iron Phosphate Battery

Model #50170132 Sanctuary 13.5k Battery

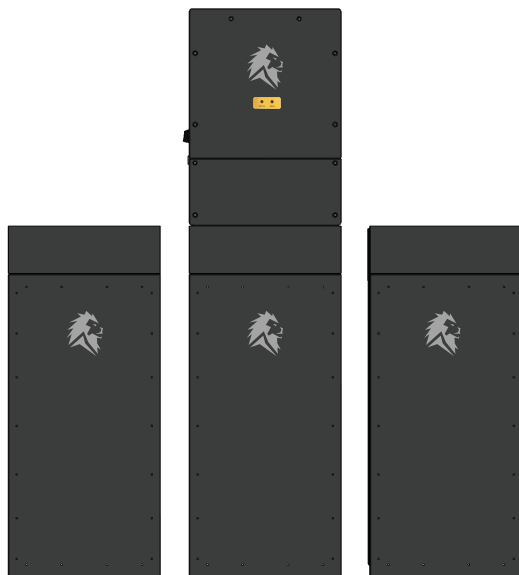
Battery Type	Lithium Iron Phosphate
Voltage Range	40 - 55.6VDC
Capacity	13,875.2Wh
Parallelable Capacity	41,625.6Wh MAX
Quantity	3 MAX
Charging Temperature Range / Current	32° to 86° F / 150A
Discharging Temperature Range / Current	-4° to 86° F / 160A
Weight	277 lbs.
Dimensions	39.75" H x 18.5" W x 9.75"D
Compliance	UL1973, UL9540

CAUTION:

Read all instructions before installation, operation and maintenance of the system.



The energy storage component of the Lion Sanctuary System™ is a high-performing lithium iron phosphate battery that contains 13.5kWh of solar produced energy. If more stored energy is needed, upgrade to either the 27kWh or 40.5kWh options. This unit has a standard 10 year warranty with an option to upgrade to a 25 year warranty.

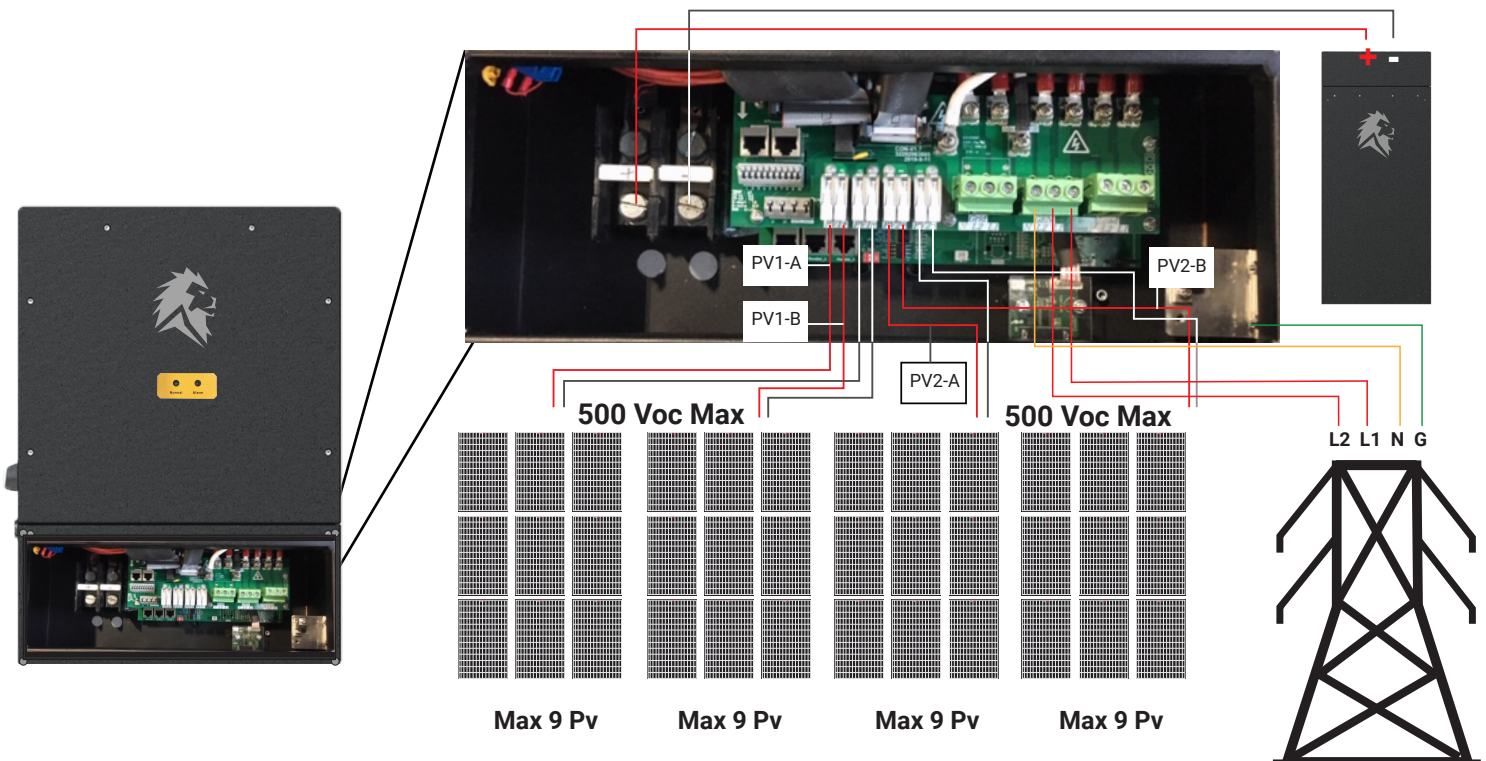


The Sanctuary System can be expanded to 27kWh or 40.5kWh

System Connections

A maximum of 36 panels can be connected. They must be connected properly as indicated below. To achieve proper configuration with solar panels, loads must be equalized between MPPTs and its inputs. Each MPPT has two (2) sets of inputs that must be balanced as shown in the table to the right.

# of Panels	PV 1 - A	PV 1 - B	PV 2 - A	PV 2 - B
5	5	-	-	-
6	6	-	-	-
7	7	-	-	-
8	8	-	-	-
9	9	-	-	-
10	5	5	-	-
11	6	-	5	-
12	6	6	-	-
13	7	-	6	-
14	7	7	-	-
15	8	-	7	-
16	8	8	-	-
17	6	6	5	-
18	6	6	6	-
19	6	6	7	-
20	7	7	6	-
21	7	7	7	-
22	7	7	8	-
23	8	8	7	-
24	8	8	8	-
25	8	8	9	-
26	7	7	6	6
28	7	7	7	7
30	8	8	7	7
32	8	8	8	8
34	9	9	8	8
36	9	9	9	9



Lion Sanctuary System Options

The Lion Sanctuary Solar Energy Storage System comes in three different configurations - Standard, Deluxe and Premium. Which configuration you install depends on your energy storage needs. Additionally, you can connect multiple Sanctuary Inverters in parallel. For specific information on how to do that, contact Lion Energy directly at 801-727-9270.



1

Standard

8k Inverter/Charger with
13.5kWh Energy Storage

Now you can power your residence in emergencies and during peak cost times, giving you peace of mind, power for your family and cost savings to your wallet.



2

Deluxe

8k Inverter/Charger with
27kWh Energy Storage

Add extra energy storage capacity to the Standard Sanctuary System.



3

Premium

8k Inverter/Charger with
40.5kWh Energy Storage

Need even more energy storage capacity? Upgrade to Premium to provide maximum capacity.