



Sanctuary™ 3 Energy Storage System (AC ESS)

Sanctuary 3 Inverter / Sanctuary 3 Battery 14.3kWh

Technical Specifications

Sanctuary™ 3 Energy Storage System (AC ESS)

Multiple-Part ESS: This Energy Storage System (ESS) includes multiple integrated inverters and batteries. The sub-models listed below specify the number of each component used in the system configuration.

Primary Model: Sanctuary 3
Sanctuary 3 Inverter 18kW + Sanctuary 3 Battery 14.3kWh

	Sanctuary Sub-Model Configurations	Maximum Continuous Discharge Rate (MCDR)	Nameplate Energy Capacity (NEC)
☐	1i-1b*	12 kW	14.3 kWh
☐	1i-2b	12 kW	28.6 kWh
☐	1i-3b	12 kW	42.9 kWh
☐	2i-2b	24 kW	28.6 kWh
☐	2i-3b	24 kW	42.9 kWh
☐	2i-4b	24 kW	57.2 kWh
☐	2i-5b	24 kW	71.5 kWh
☐	2i-6b	24 kW	85.8 kWh
☐	3i-3b	36 kW	42.9 kWh
☐	3i-4b	36 kW	57.2 kWh
☐	3i-5b	36 kW	71.5 kWh
☐	3i-6b	36 kW	85.8 kWh
☐	3i-7b	36 kW	100.1 kWh
☐	3i-7b	36 kW	100.1 kWh
☐	3i-9b	36 kW	128.7 kWh
☐	3i-9b	36 kW	128.7 kWh
☐	4i-5b	48 kW	71.5 kWh
☐	4i-6b	48 kW	85.8 kWh
☐	4i-7b	48 kW	100.1 kWh
☐	4i-8b	48 kW	114.4 kWh
☐	4i-9b	48 kW	128.7 kWh
☐	4i-10b	48 kW	143.0 kWh
☐	4i-11b	48 kW	157.3 kWh
☐	4i-12b	48 kW	171.6 kWh

(*) i: inverter, b: battery

System

System Max Parallelable Inverter	4
Max Parallelable Battery	12
Max System Parallelable Weight	4,256lbs
Max System Parallelable Capacity	171.6kWh
Max Parallelable Overcurrent Protective Device	240A
Max Parallelable Output Power	48kW
Humidity Rating	0-95%
Ingress Protection (IP Rating)	NEMA 3R / IP65
Altitude Rating	0~4,000M (Derating above 2,000M altitude)
Max Internal Fault Current Rating	180A
Single Cycle Round Trip Efficiency (SCRTE)	89%
Usable Capacity	90%
Battery State of Health (SOH) at End of Warranty Period	70%

GEN / AC-Coupled PV Connection

Terminals	L1, L2, N, PE (split-phase 120 / 240 V)
Source	Single source only—generator or AC-coupled solar
Max Apparent Power	12 kW per inverter
Auto-Start	Supported

Certifications & Compliance:

- Sanctuary 3 Inverter 18kW: UL 1741, UL 1741SB, IEEE 1547:2018, IEEE Std 1547.1:2020, FCC 15 Class-B, UL1699B Arc-Fault Circuit
- Sanctuary 3 Battery 14.3 kWh: UL 1973, UL 9540A
- This ESS complies with UL Standard: UL 9540



Sanctuary 3 Inverter

Grid Support Interactive Inverter

Inverter 18kW

PV Input

Max PV Input Power	18kW
MPPT Input Voltage Range	120-430V
Max Input Current per MPPT	16A*4
Max Short Circuit Current per MPPT	22A

AC Output (On Grid)

Nominal Output Power	12kW
Max Apparent Power Output	13.2kW
Nominal AC Output Current	50A
Max AC Power Output	55A
Output Voltage	120/240V Split-Phase
Grid Frequency	60Hz
Max Grid Passthrough	200A
Output THDI	< 3%
Maximum Output Fault Current (AC) and Duration	71.1A (1 Cycle) 97.7A (3 Cycles) 97.7A (5 Cycles)

AC Output (Off Grid)

Nominal Output Power	12kW
Power Factor Range	-0.8 ~ +0.8
Nominal Output Current	50A
EPS Voltage	120/240V Split-Phase
EPS Frequency	60Hz
Output THDU	< 2%

Battery Compatibility

Battery Voltage Range	40V~58V
Max Charging Current	250A
Max Discharging Current	260A

General Data

Dimensions (H x W x D)	51.50" x 18.50" x 10.43"
Inverter Weight	194 lbs
Max Efficiency	96.5%
PV DCAFCI	Type 1
PVRSS	Tigo RSS Transmitters (RS2)
LRA (Locked Rotor Amps)	180apk

Sanctuary 3 Battery 14.3kWh

Battery Type	Lithium Iron Phosphate
Voltage Range	40 - 58.4VDC
Rated Voltage	51.2VDC
Capacity	14.3kWh
Isc rating (SCCR)	2040A/7ms
Operating Temperature*	-4°F to 131°F
Derate Range	Below 50°, Above 104° F
Weight	290lbs
Dimensions (HxWxD)	44.91" x 18.50" x 10.43"

*Power may be consumed for battery heating during part of this range.

CAUTION:

- High voltage, risk of electric shock!
- Keep the equipment well-ventilated!
- Capacitors store hazardous energy - Do not touch!
- Install in shaded locations is recommended.
- Read all instructions before installation, operation and maintenance of the system



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