

Sol-Ark-5K-48-ST Specifications

Solar Output Power 6500W

Max allowed PV Power	3250W+3250W = 6,500W
Max PV power delivered to Battery & AC outputs	6500W
Max DC voltage	500V
MPPT voltage range	150-425V
Starting voltage	125V
Number of MPPT	2
Max Solar Strings per MPPT	2
Max DC current per MPPT (self limiting)	10A/10A
Max AC Coupled Input (Micro/String Inverters)	9,600W / 9,600W

AC Output Power 5000W On Grid & 5000W Off Grid

Connections	120/240/208V split phase
Continuous AC power to Grid (On-Grid)	5000W 20.8A L-L (240V) 3500W 29.1A L-N (120V)
Continuous AC power to Load (Off-Grid)	5000W 20.8A L-L (240V) 3500W 29.1A L-N (120V)
Surge AC power 10sec	16000VA L-L (240V)
Surge AC power 100ms	25000VA L-L (120V)
Frequency	60/50Hz
Continuous AC power with Grid or Generator	15120W 63A L-L (240V) 7560W 63A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption typical – no load	60W
Sell back power modes	Limited to Household or Full Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	4ms
Power Factor	+0.9 - 1.0

Battery (optional) Output Power 5000W

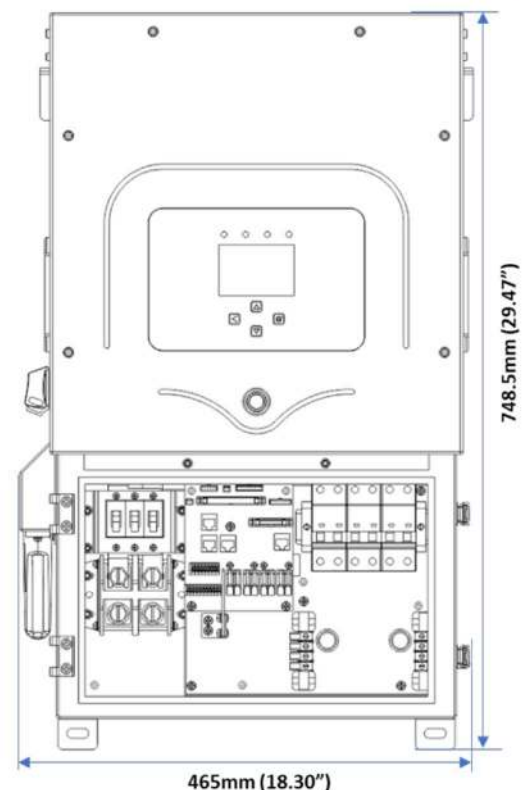
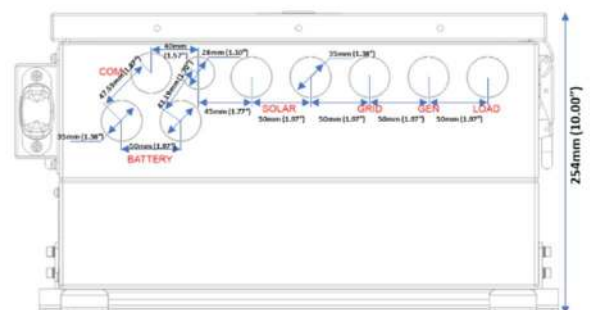
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 – 9900Ah
Voltage Range	43.0 – 63.0V
Continuous Battery charging output	120A
Charging curve	3-stage w/ equalization
Grid to Battery Charging Efficiency	96.0%
External temperature sensor	included
Current shunt for accurate % SOC	integrated
External Generator Start based on voltage or % SOC	integrated
Communication to Lithium battery	CanBus & RS485

General

Dimensions (H x W x D)	30.0" x 18.30" x 10.00"
Weight	78 lbs
Enclosure	NEMA Type 3R
Ambient Temperature (3 variable speed fans)	-25 to 55C, >45C derating
Display	Color touch screen
Wi-Fi Communication (monitoring or SW updates)	included
Snap on sensors for limited selling to Household	included
Standard Warranty (verified by HALT testing)	5 years

Protection & Certifications

Electronics certified safety by SGS labs to NEC & UL specs – NEC 690.4B & NEC 705.4/6	Yes
Grid Sell Back – UL1741-2010/2018, IEEE1547a-2003/2014, FCC 15 class B, UL1741SA, CA Rule 21, HECO Rule 14H	Yes
PV DC disconnect switch – NEC 240.15	integrated
Ground Fault Detection – NEC 690.5	integrated
PV rapid shutdown control – NEC 690.12	integrated
PV Arc Fault detection – NEC 690.11/UL1699B	integrated
PV input lightning protection	integrated
AC input/output 63A breakers	integrated
Battery breaker / disconnect	integrated
User wiring enclosure w/ ¾" & 1" knock-outs	integrated





U.S. DEPARTMENT OF ENERGY



5KTM BROCHURE



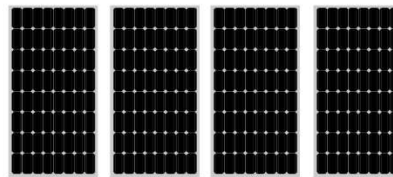
Cloud Monitoring & Programming

Modes:

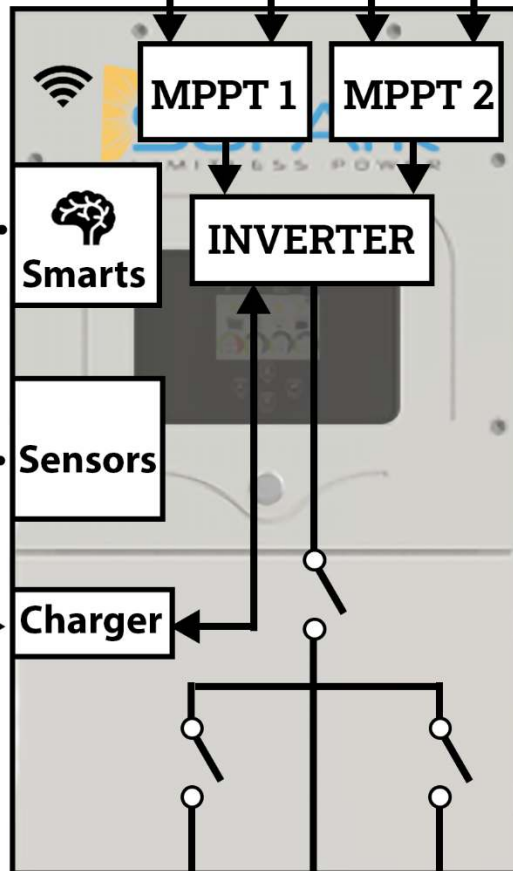
Grid Sell, Off-Grid, Meter Zero, Time of Use, & Peak Shaving

RSD/Emergency Stop, External CT Sensors, Parallel Comms/Battery Comms, Auto Gen Start

Battery Agnostic
48V Nominal & at least 50Ah



6.5kW DC Coupling
150V-425V @ 10A per MPPT



4ms UPS
No-Glitch Transfer

Smart Load
Prioritize Necessities & Run Luxuries With Less

Gen Breaker
Up to 12kW Generator Input

Grid or Generator
63A Passthrough

Off-Grid Loads
5kW Continuous
16kW Peak

AC Coupling
9.6kW Output



Highest Rating on Energy Sage

Nothing but positive reviews on EnergySage. We have a long track record of satisfied customers, as well as customers that have switched from other big names to go with our products instead.

5K™



Install Simplicity

Unlike many hybrid inverters, our system is an all-in-one unit. You don't have to piece together multiple parts to get basic functions. Ours does it all, does it better, and does it with simplicity.

7 Day/Week Engineering & Customer Support

Sol-Ark beats all competition at customer support. We have engineers ready to assist with all questions, diagnosis, homeowner support, and remote unit management. We can solve virtually any problem without a site visit.

Feature Comparison	Sol-Ark 5K	Tesla Powerwall 2	Generac PWRcell	SolarEdge/LG EnergyHub	Enphase Encharge 10
Install Simplicity	All-In-One Hybrid, Solar Batt. Calculator Some load mgmt	Entire home transfer Switch, No load mgmt	Entire home transfer switch, All-In-One Hybrid, Some load mgmt	Entire home transfer switch, No load mgmt	Entire home transfer switch, No load mgmt
7 day single support line	Yes	No	Yes	No	Yes
Peak Current (Off Grid)	63A	30A	50A	30A	24.6A
Continuous Power (On Grid)	5kW	5kW	7.6kW	5kW	3.84kW
Usable Battery Energy	20kWh	13.5kWh	18kWh	9.3kWh	10.5kWh
Battery Life Span	15 Years (LFP)	10 Years (NMC Active Cooling)	10 Years (NMC Active Cooling)	7 Years (NMC Passive Cooling)	15 Years (LFP)
PV to Batt to AC Efficiency	93%	87%	85%	82%	87%
Charging Batt from Generator	Yes	No	No	No	No
Fleet Mgmt Tool w/ Remote Setup	Yes	No	Yes	Yes	Yes