## Sal-Ark

## Sol-Ark-5K-48-ST Specifications

## Solar Output Power 6500W

| Max allowed PV Power | $3250 \mathrm{~W}+3250 \mathrm{~W}=6,500 \mathrm{~W}$ |
| :--- | :---: |
| Max PV power delivered to Battery \& AC outputs | 6500 W |
| Max DC voltage | 500 V |
| MPPT voltage range | $150-425 \mathrm{~V}$ |
| Starting voltage | 125 V |
| Number of MPPT | 2 |
| Max Solar Strings per MPPT | 2 |
| Max DC current per MPPT (self limiting) | $10 \mathrm{~A} / 10 \mathrm{~A}$ |
| Max AC Coupled Input (Micro/String Inverters) | $9,600 \mathrm{~W} / 9,600 \mathrm{~W}$ |
| 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) <br> 3500W 29.1A L-N (120V) |
| Surge AC power 10sec Surge AC power 100 ms | 16000VA L-L (240V) <br> 25000VA L-L (120V) |
| Frequency | 60/50Hz |
| Continuous AC power with Grid or Generator | 15120W 63A L-L (240V) <br> 7560W 63AL-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) | 4 ms |
| Power Factor | +-0.9-1.0 |

## Battery (optional) Output Power 5000W

| Type | Lead-Acid or Li-Ion |
| :--- | :---: |
| Nominal DC Input | 48 V |
| Capacity | $50-9900 \mathrm{Ah}$ |
| Voltage Range | $43.0-63.0 \mathrm{~V}$ |
| Continuous Battery charging output | 120 A |
| 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 L ithium battery | CanBus \& RS485 |


| General |  |
| :--- | :---: |
| Dimensions (H $\times$ W x D) | $30.0^{\prime \prime} \times 18.30^{\prime \prime} \times 10.00^{\prime \prime}$ |
| Weight | 78 Ibs |
| 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 Ho usehold | included |
| Standard Warranty (verified by HALT testing) | 5 years |

## Protection \& Certifications

| Electronics certified safety by SGS labs to NEC <br> \& UL specs - NEC 690.4B \& NEC 705.4/6 |  |
| :--- | :---: |
| Grid Sell Back - UL1741-2010/2018, <br> IEEE1547a-2003/2014, FCC 15 class B, <br> UL1741SA, CA Rule 21, HECO Rule 14H |  |
| PV DC disconnect switch - NEC 240.15 | Yes |
| Ground Fault Detection - NEC 690.5 | integrated |
| PV rapid shutdown control - NEC 690.12 | integrated |
| PV Arc Fault detection - NEC 690.11/ <br> UL1699B | integrated |
| PV input lightning protection | integrated |
| AC input/output 63A breakers | integrated |
| Battery breaker / disconnect | integrated |
| User wiring enclosure w/3/4" \& 1" knock-outs | integrated |




Battery Agnostic 48V Nominal \&
at least 50Ah

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

## Modes:

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


Sol-ArkLIMITLESS POWER


## Fighest Rating on Energy Sage

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

## 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 | Sol-Ark 5K | Tesla Powerwall 2 | Generac PWRcell | SolarEdge/LG EnergyHub | Enphase Encharge 10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| comparison <br> Install Simplicity | All-In-One Hybrid, <br> Solar Batt <br> Calculator <br> Some load mgm | 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 (0ff Grid) | ${ }^{63}{ }^{\text {a }}$ |  | 50A |  |  |
| Continuous Power (On Grid) | skw | 5kN | 7.6kW | skw | ${ }^{3.84 k W}$ |
| Usable Battery Energy | 20 k | 13.5kWh | 18 kWh |  | 10.5kWh |
| Battery Life Span | 15 Years (LFP) | 10 Years (NMC Active Cooling) | 10 Years (NMC Active Cooling) | 7 Years (NMC Passive Cooling) | 15 Vears (IFP) |
| PV to Batt to AC Efficiency | 93\% | 87\% |  | 82\% | 87\% |
| Charging Batt from Generator | Yes | No | No | No | , |
| Fleet Mgmt Tool w/ Remote Setup | Yes | No | Yes | Yes | Yes |

