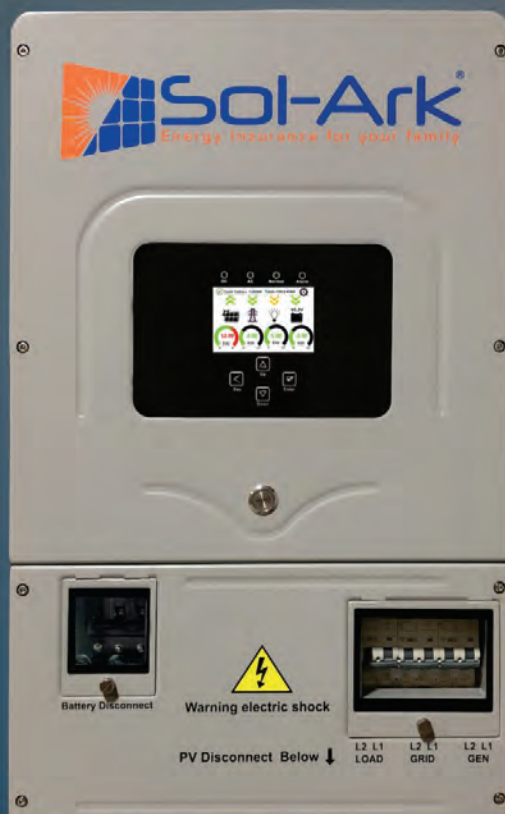


SOL-ARK 12K

STACKABLE
HYBRID



+



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**COMMERCIAL /
MEDICAL**

No Glitch Transfer



MILITARY

Cage Code: 7U4P4



GRID SELL

+Time of Use



OFF-GRID

Battery Agnostic



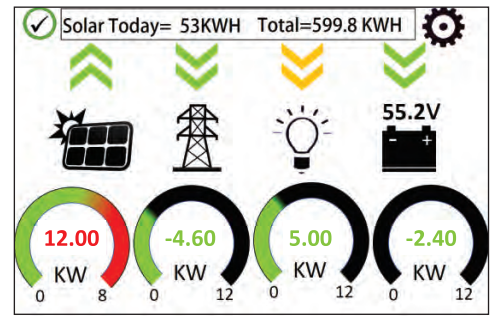
RETRO-FIT

AC Coupling

Competitor Comparison

| Brand & Model | Sol-Ark 12K | | | | | Sol-Ark 8K | | | | |
|---------------|--------------------------------------|--|--|--|--|----------------------------------|--|--|--|--|
| | MSRP Price | | | | | Tesla 2x Powerwall2 + String Inv | | | | |
| | Solar PV Continuous Power | | | | | Sonnen ECO-16 + String Inv | | | | |
| | Inverter AC Continuous Power | | | | | Schneider XWPPro6.8 + 3xMPPT80 | | | | |
| | Inverter Battery Continuous Power | | | | | Outback Radian FPR-8048A | | | | |
| | Off Grid Inverter AC Peak Power (5s) | | | | | SolarEdge 7600A + 32xP400 | | | | |
| | System Idle Power | | | | | Pika X7600 + 4xS2500 | | | | |
| | AC to DC Charger | | | | | Outback Skybox 2xSBX5048 | | | | |
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STACKABLE, No Glitch, ALL-IN-ONE HYBRID



Color Touch Display

Two Built-In 500V Charge Controllers

1 - 6 PV Strings

Battery Disconnect

48V Battery Input

Battery Temp Sensor

Auto-Generator Start

Rapid Shut Down Signal

Current Sensors Included

Battery Communication

PV Disconnect

Wiring Knockouts & WiFi

50A Breakers:

AC In/Out, AC Load Out,

AC Gen In/Smart Load Out



Limitless

PARALLEL STACKING, GRID SELL, METER ZERO, TIME OF USE, SMART LOAD, AC COUPLING, PEAK SHAVING, 20 kW PEAK POWER

Highly Accelerated Life Testing

PROVEN TO LAST WELL BEYOND THE STANDARD 10 YEAR WARRANTY

Engineered, Tested, Serviced in U.S.A

TALK TO A US BASED ENGINEER 7 DAYS A WEEK

No Glitch Switch (4ms)

FASTEST TRANSFER TIME IN THE INDUSTRY

Free Remote Monitoring / Programming



Sol-Ark-12K-P Specifications

| |
|----------------------------------|
| Solar Output Power 12000W |
|----------------------------------|

| | |
|--|-------------------------|
| Max allowed PV Power | 9000W+9000W = 16,500W |
| Max PV power delivered to Battery & AC outputs | 12000W |
| Max DC voltage | 500V@18A, 450V@20A |
| MPPT voltage range | 150-425V |
| Starting voltage | 175V |
| Number of MPPT | 2 |
| Solar Strings per MPPT | 2 w/o fuses, 3 w/ fuses |
| Max DC current per MPPT (self limiting) | 20A@300V, 18A@400V |
| Max AC Coupled Input (Micro/String Inverters) | 7,600W |

AC Output Power 9600W On Grid & 8000W Off Grid

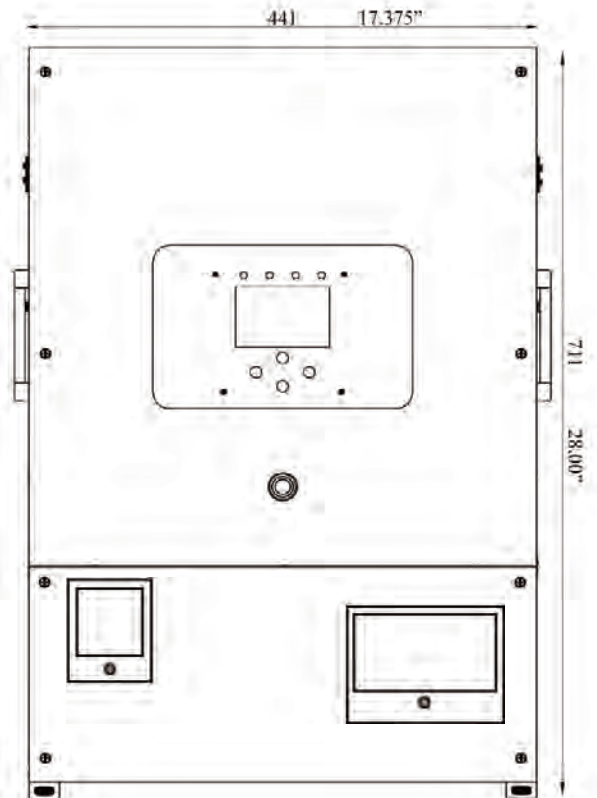
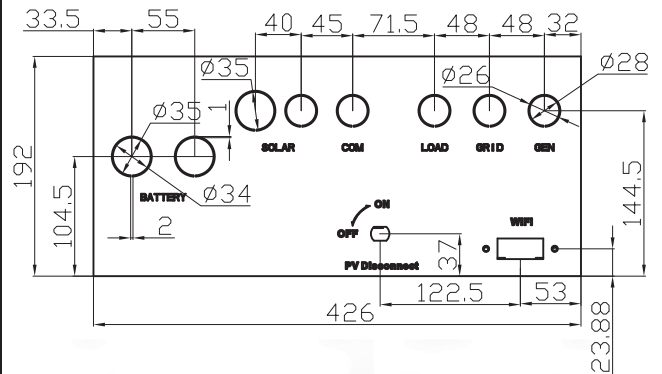
| | |
|--|---|
| Connections | 120/240/208V split phase |
| Continuous AC power to Grid (On Grid) | 9600W 40A L-L (240V) 4800W 40A L-N (120V) |
| Continuous AC power to Grid (Off Grid) | 8000W 40A L-L (240V) 4800W 40A L-N (120V) |
| Surge AC power 5sec | 20,000VA L-L (240V) 10,000VA L-N (120V) |
| Parallel Stacking | 2-3 (240V), 3 or 6 (208V) |
| Frequency | 60/50Hz |
| Continuous AC power with Grid or Generator | 12000W 50A L-L (240V) 6000W 50A L-N (120V) |
| CEC Efficiency | 96.0% (Peak 97.0%) |
| Idle Consumption typical – no load | 60W |
| Sell back power modes | Limited to Household or Full Grid-Tied |
| Design (DC to AC) | Transformer less DC |
| Response Time (Grid-Tied to Off-Grid) | 4ms |
| Power Factor | +0.9 - 1.0 |

Battery (optional) Output Power 8000W

| | |
|--|-------------------------|
| Type | Lead-Acid or Li-Ion |
| Nominal DC Input | 48V |
| Capacity | 90 – 2000Ah |
| Voltage Range | 43.0 – 61.0V |
| Continuous Battery charging output | 190A |
| 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) | 28.0" x 17.375" x 9.37" |
| Weight | 77 lbs |
| Enclosure | NEMA type 1 (Indoor Use) |
| 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) | 10 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 50A breakers | integrated |
| Battery breaker / disconnect | integrated |
| User wiring enclosure w/ ¾" & 1" knock-outs | integrated |
| Solar Flare/EMP Hardened to 2015 MIL-STD-461G (Independently tested June 2018) | optional |