NTAUKABLE











COMMERCIAL / **MEDICAL**



PV Disconnect Below ↓ L2 L1 L2 L1 LOAD GRID

MILITARY Cage Code: 7U4P4



GRID SELL +Time of Use

No Glitch Transfer



OFF-GRID Battery Agnostic



RETRO-FIT AC Coupling

Competitor Comparison

MSRP Price System Idle Powe **Brand & Mode** Solar PV Continuous Power Inverter Battery Continuous Powe Off Grid Inverter AC Peak Power (5s AC to DC Charge Inverter AC Continuous Powe

User Interface PV to Batt Efficiency @ 659 AC to Batt Efficiency @ 65% Batt to AC Efficiency @ 659

On Grid PV to AC Efficiency @ CE

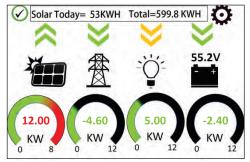
Off Grid or Time of Use Low Cost Easy Insta PV -> Batt -> AC Losses @ 659 Grid Failure UPS Transfer Time EMP/Solar Flare Hardened to >100KV/n AC Coupling to existing Inverter Warrant

UL1741SA/Rule 21 & 14H (Grid Sell only **NEC UL1699B Arc Faul Generator Suppor** AC Load Shedding for TOU & Off Grid

\$6,850 \$20,850 \$4,82200 \$1,8900 \$1,89000 \$1,9900 \$1,91		Sol-Ark 12K	Outback Skybox	Pika X7600 +	SolarEdge 7600A +	Outback Radian	Schneider XWPro6.8+	Sonnen ECO-16	Tesla 2x Powerwall2	Sol-Ark 8K
12kW 25,5kW 26,5kW 25,5kW 25,6kW 25,	Brand & Model	40.000	2xSBX5048	4xS2500	32xP400	FPR-8048A	3xMPPT80	+ String Inv	+ String Inv	
13KW 2A5.5KW 8KW 7.6KW 8KW 6.8KW 8KW 2A5KW 8KW 2A5KW 8KW 2A5KW 8KW 2A5KW 8KW 2A5KW 2A5KW 3KW 6.8KW 3KW 2A5KW 2A5KW 3KW 6.8KW 3KW 2A5KW 3KW 6.8KW 3KW 2A5KW 3KW 3A5KW	MSRP Price	\$6,850	\$11,000	\$6,500	\$5,500	\$8,000	\$9,900	\$24,000	\$19,400	\$6,100
9.6KW 2.5KW 7.6KW 8KW 6.8KW 8KW 2.5KW 8KW 2.5KW 6.7KW 6.7KW 6.7KW 8KW 2.5KW 2.5KW 20KW 12KW 12KW <t< td=""><td>lar PV Continuous Power</td><td>12KW</td><td>2x5.5KW</td><td>8KW</td><td>7.6KW</td><td>7.7KW</td><td>11.6KW</td><td>12KW</td><td>12KW</td><td>MXI6</td></t<>	lar PV Continuous Power	12KW	2x5.5KW	8KW	7.6KW	7.7KW	11.6KW	12KW	12KW	MXI6
8KW 2x5KW 6.7KW 5KW 6.8KW 2x5KW 2x5KKW 2x5KW 2x5KKW 2x5KW 2x5KKW 2x5KWW 2x5KKW	ter AC Continuous Power	9.6KW	2x5KW	7.6KW	7.6KW	8KW	6.8KW	8KW	2x5KW	8KW
20KW 12KW 6.6KW 12KW 12KW <t< td=""><td>attery Continuous Power</td><td>8KW</td><td>2x5KW</td><td>6.7KW</td><td>SKW</td><td>8KW</td><td>6.8KW</td><td>8KW</td><td>2x5KW</td><td>8KW</td></t<>	attery Continuous Power	8KW	2x5KW	6.7KW	SKW	8KW	6.8KW	8KW	2x5KW	8KW
60W 580W 780W 780W 780W 780W 780W 780W 780W 7	erter AC Peak Power (5s)	ZOKW	10KW	12KW	6.6KW	12KW	12KW	12KW	14KW	ZOKW
185A 200A 6.7kW 5kW 115A 140A 115A N/A	System Idle Power	M09	280W			M9Z	48W	M09	78W	W09
color color Text Text Text touch X 97.5% 81.0% 97.5% 96.0% 82.0% 92.5% 95.0% 96.0% 80.0% 93.0% 91.0% 85.0% 91.5% 85.0% 95.0% 95.0% 94.5% 93.0% 93.0% 92.5% 90.2% 93.0% 95.0% 96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 97.0% 96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 97.0% 7 7 7 7 7 7 7 7 8ms 8ms 8ms 100ms 200ms 8ms 100ms 200ms 90 colors 10 yr 10 yr 12/20/25 yr 10 yr 7 7 7 9 colors 10 yr 12/20/25 yr 10 yr 10 yr 10 yr 10 yr 9 colors 10 yr 10 yr 10 yr 10 yr </td <td>AC to DC Charger</td> <td>185A</td> <td>200A</td> <td>6.7KW</td> <td>5KW</td> <td>115A</td> <td>140A</td> <td>115A</td> <td>N/A</td> <td>185A</td>	AC to DC Charger	185A	200A	6.7KW	5KW	115A	140A	115A	N/A	185A
touch touch Text Text Text Text Text touch X 97.5% 81.0% 92.0% 91.0% 97.5% 96.0% 82.0% 92.5% 96.0% 80.0% 93.0% 91.0% 85.0% 91.5% 95.0% 95.0% 94.0% 95.5% 96.5% 90.2% 88.0% 95.0% 96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 95.0% 96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 95.0% 96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 97.0% 96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 97.0% 7 X X X X X X X 96.0% 95.0% 95.5% 96.5% 90.2% 88.5% 97.0% 97.0% 7 X X		color	color					color		color
97.5% 81.0% 92.0% 91.0% 97.5% 96.0% 82.0% 92.0% 92.5% 91.0% 85.0% 91.5% 95.0% <th< td=""><td>User Interface</td><td>touch</td><td>touch</td><td>Text</td><td>Text</td><td>Text</td><td>Text</td><td>touch</td><td>×</td><td>touch</td></th<>	User Interface	touch	touch	Text	Text	Text	Text	touch	×	touch
96.0% 93.0% 91.0% 85.0% 91.5% 85.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 93.0% 94.0% 95.5% 96.5% 90.2% 88.5% 93.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 95.0% 96.5% 96.5% 90.2% 88.5% 97.0% 97.0% 95.0% 95.0% 96.5% 96.5% 90.2% 88.5% 97.0% 97.0% 95.0% 95.0% 96.5% 96.5% 90.2% 88.5% 97.0%	to Batt Efficiency @ 65%	97.5%	81.0%	95.0%	91.0%	%5'.26	%0'96	85.0%	92.5%	97.5%
96.0% 94.5% 93.0% 88.0% 93.0% 93.5% 93.0% 95.0% 95.0% 96.5% 96.5% 90.2% 88.5% 97.0% 97.0% 96.5% 96.5% 90.2% 88.5% 97.0% 97.0% 96.5% 96.5% 90.2% 88.5% 97.0%	to Batt Efficiency @ 65%	%0'96	80.08	93.0%	91.0%	82.0%	91.5%	82.0%	%0'56	%0'96
96.0% 94.0% 95.5% 96.5% 90.2% 88.5% 97.0% 97.0% 7.0% 96.5% 90.2% 88.5% 97.0% 97.0% 96.5% 90.2% 88.5% 97.0% 97.0% 97.0% 96.5% 96.5% 90.2% 88.5% 97.0% 9	tt to AC Efficiency @ 65%	%0.56	94.5%	93.0%	88.0%	93.0%	95.5%	93.0%	%0'56	%5'56
7% 24% 15% 21% 10% 12% 25% 13% 4ms 20ms 1000ms 2000ms 8ms 8ms 100ms 2000ms y x x x x x x x 10 yr 5/10 yr 12/20/25 yr 5/10 yr 10 yr 10 yr 10 yr 10 yr 10 yr y x x x x x x x x y x	to AC Efficiency @ CEC	%0.96	94.0%	95.5%	%5'96	90.2%	88.5%	92.0%	97.0%	%5'96
4ms 20ms 1000ms 2000ms 8ms 8ms 100ms 2000ms optional +\$1.4K X <td>Off Grid or Time of Use oft -> AC Losses @ 65%</td> <td>2%</td> <td>24%</td> <td>15%</td> <td>21%</td> <td>10%</td> <td>12%</td> <td>25%</td> <td>13%</td> <td>7%</td>	Off Grid or Time of Use oft -> AC Losses @ 65%	2%	24%	15%	21%	10%	12%	25%	13%	7%
Optional +\$1.4K	ure UPS Transfer Time	4ms	20ms	1000ms	2000ms	8ms	8ms	100ms	2000ms	4ms
10 yr 5/10 yr 12/20/25 yr 5/10 yr 10	Hardened to >100KV/m	optional +\$1.4K	×	×	×	×	×	×	×	opt +\$1.2K
10 yr 5/10 yr 10 yr 12/20/25 yr 5/10 yr 10 yr 10 yr 10 yr 7	Low Cost Easy Install	1	,	,	1	×	×	1	1	. 1
V V	Warranty	10 yr	5/10 yr	10 yr	12/20/25 yr	5/10 yr	10 yr	10 yr	10 yr	5/10 yr
V X	ling to existing Inverters	,	1	À -	1	,	,	,	1	1
V X	Parallel Stacking	,	1	×	×	1	1	×	1	×
22KWh/2400cycles +\$5.2K 26KWh 20.3KWh 9.8KWh 26KWh 26KWh 16KWh 28KWh	120/240/208V 3Phase	,	×	1	×	×	1	×	1	X
22KWh/2400cycles +\$5.2K 26KWh 20.3KWh 9.8KWh 26KWh 26KWh 26KWh 28KWh	Generator Support	•	1	×	×	,	1	1	×	1
22KWh/2400cycles +\$5.2K 26KWh 20.3KWh 9.8KWh 26KWh 26KWh 26KWh 26KWh 28KWh	dding for TOU & Off Grid	,	1	×	×	×	×	1	X	,
22KWh/2400cycles +\$5.2K 26KWh 20.3KWh 9.8KWh 26KWh 26KWh 16KWh 28KWh	21 & 14H (Grid Sell only)	,	1	1	1	,	1	1	1	,
22KWh/2400cycles +\$5.2K 26KWh 20.3KWh 9.8KWh 26KWh 26KWh 16KWh 28KWh	NEC UL1699B Arc Fault	,	,	,	,	,	×	,	1	,
	1	22KWh/2400cycles +\$5,2K		20.3KWh	Č	26KWh	26KWh	16KWh	, c	22KWh +\$5.2K

STACKABLE, No Clitch, 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

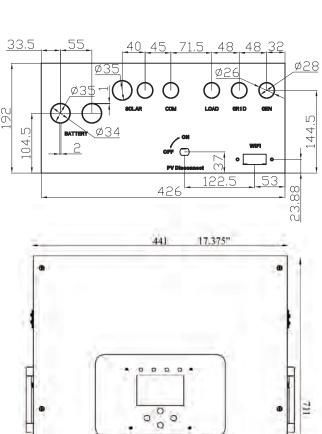
No Clitch Switch (Hms)

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			
x AC Coupled Input (Micro/String Inverters) 7,600W				
AC Output Power 9600W On Grid & 8000W Off Grid				
Connections	120/240/208V split phase			
	9600W 40A L-L (240V)			
Continuous AC power to Grid (On Grid)	4800W 40A L-N (120V)			
6.11.	8000W 40A L-L (240V)			
Continuous AC power to Grid (Off Grid)	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			
	12000W 50A L-L (240V)			
Continuous AC power with Grid or Generator	6000W 50A L-N (120V)			
CEC Efficiency	96.0% (Peak 97.0%)			
Idle Consumption typical – no load	60W Limited to Household or			
Sell back power modes	Full Grid-Tied			
Design (DC to AC)	Transformer less DC			
Response Time (Grid-Tied to Off-Grid)	4ms			
Power Factor Pattery (antique) Output Power 9000M	+-0.9 - 1.0			
Battery (optional) Output Power 8000M				
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			
	CanBus & RS485			
Communication to Lithium battery				
General				
General	28.0" x 17.375" x 9 37"			
General Dimensions (H x W x D)	28.0" x 17.375" x 9.37" 77 lbs			
General Dimensions (H x W x D) Weight	77 lbs			
General Dimensions (H x W x D) Weight Enclosure	77 lbs NEMA type 1 (Indoor Use)			
General Dimensions (H x W x D) Weight Enclosure Ambient Temperature (3 variable speed fans)	77 lbs NEMA type 1 (Indoor Use) -25 to 55C, >45C derating			
General Dimensions (H x W x D) Weight Enclosure Ambient Temperature (3 variable speed fans) Display	77 lbs NEMA type 1 (Indoor Use) -25 to 55C, >45C derating Color touch screen			
General Dimensions (H x W x D) Weight Enclosure Ambient Temperature (3 variable speed fans)	77 lbs NEMA type 1 (Indoor Use) -25 to 55C, >45C derating			



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28,00"

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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