

SOL-ARK 8K

*More Affordable:
5-15% less solar panels &
5-20% less batteries than others!*

World's Most Efficient Battery Inverter



S&P GLOBAL PLATTS
GLOBAL ENERGY AWARDS
2018 FINALIST

THE
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AWARDS 18

Sol-Ark 8K: Renewable Energy Technology of 2018

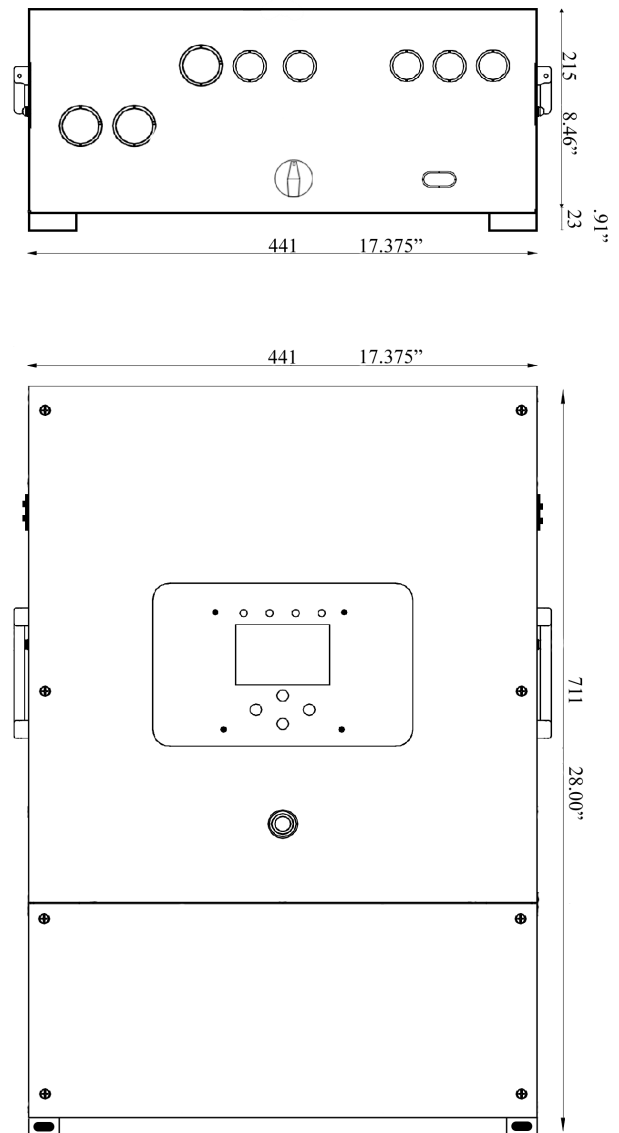
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Sol-Ark 8K: Home Energy Product of 2018

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Sol-Ark-8K-48-ST Specifications	
Solar	
Max allowed PV Power	11000W
Max allowed PV Power per MPPT	5500W
Max DC voltage	500V
MPPT voltage range	150-425V
Starting voltage	175V
Number of MPPT	2
Solar Strings per MPPT	2
Max DC current per MPPT	18A (self limiting)
AC Output	
Connections	120/240V split phase
	8000W 33A L-L (240V)
Continuous AC power on Solar or Battery	4000W 33A L-N (120V)
	20,000VA L-L (240V)
Surge AC power 5sec	10,000VA L-N (120V)
Frequency	60/50Hz
	12000W 50A L-L (240V)
Continuous AC power with Grid or Generator	6000W 50A 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)	2ms
Battery (optional)	
Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	90 – 2000Ah
Voltage Range	41.0 – 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	75 lbs
Enclosure	NEMA type 1 (Indoor Use)
Ambient Temperature (4 variable speed fans)	-25 to 55C, >45C derating
Display	Color touch screen
Wi-Fi Communication (monitoring or SW updates)	integrated
Snap on sensors for limited selling to Household	included
Standard Warranty	5 years
Optional Extended Warranty	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	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 overcurrent fuse	integrated	
User wiring enclosure w/ ¾" & 1" knock-outs	integrated	
Solar Flare/EMP Hardened to 2015 MIL-STD-461G (Independently tested June 2018)	optional	