

Sol-Ark-8K-48-ST Spec	ification	
Solar Output Power 9000W		
Max allowed PV Power	5500W+5500W = 11,000V	
Max PV power delivered to Battery & AC outputs	12000W	
Max DC voltage	500V@18A	
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)	18A@400V	
Max AC Coupled Input (Micro/String Inverters)	9,600W / 9,600W	
AC Output Power 8000W On Grid & 8000W Off Grid		
Connections	120/240/208V split phase	
	8000W 33.3A L-L (240V)	
Continuous AC power to Grid (On-Grid)	4800W 40A L-N (120V)	
Continuous AC power to Load ( Off-Grid)	8000W 33.3A L -L (240V) 4800W 40A L-N (120V)	
Surge AC power 10sec	16,000VA L-L (240V)	
Surge AC power 16ms	25,000VA L-L (240V)	
Parallel Stacking	Not Supported	
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	
	Limited to Household or	
Sell back power modes	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 8000	w	
Туре	Lead-Acid or Li-Ion	
Nominal DC Input	48V	
Capacity	50 – 9900Ah	
Voltage Range	43.0 – 63.0V	
Continuous Battery charging output	185A	
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 x W x D)	30.0" x 18.30" x 10.00"	
( x x y	78 lbs	
Weight	, 0 103	
Weight	NEMA tupo 2D	
Enclosure	NEMA type 3R	
Enclosure  Ambient Temperature (3 variable speed fans)	-25 to 55C, >45C derating	
Enclosure  Ambient Temperature (3 variable speed fans)  Display	-25 to 55C, >45C derating Color touch screen	
Enclosure  Ambient Temperature (3 variable speed fans)	-25 to 55C, >45C derating	

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



