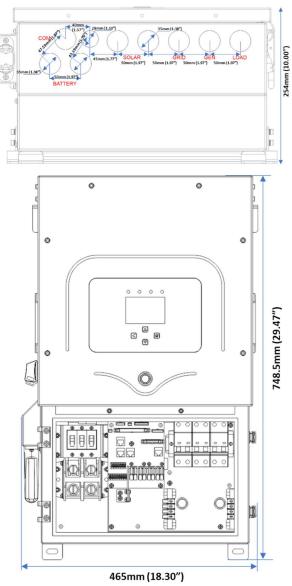


Sol-Ark-12K-P Specifications Solar Output Power 12000W		
Max PV power delivered to Battery & AC outputs	12000W	
Max DC voltage	500V@18A, 450V@20A	
MPPT voltage range	150-425V	
Starting voltage	175V	
Number of MPPT	2	
Max Solar Strings per MPPT	2	
Max DC current per MPPT (self limiting)	20A@300V, 18A@400V	
Max AC Coupled Input (Micro/String Inverters)	9,600W / 9,600W	
AC Output Power 9000W On Grid & 9000W Off Grid		
Connections	120/240/208V split phase	
	9000W 37.5A-L (240V)	
Continuous AC power to Grid (On-Grid)	4800W 40A L-N (120V)	
	9000W 37.5A-L (240V)	
Continuous AC power to Load (Off-Grid)	4800W 40A L-N (120V)	
Surge AC power 10sec Surge AC power 100ms	16,000VA L-L (240V) 25,000VA L-L (240V)	
Parallel Stacking	2-8 (240V), 2,3,6,9 (208V)	
Frequency	60/50Hz	
	15120W 63A L-L (240V)	
Continuous AC power with Grid or Generator	7560W 63A L-N (120V)	
CEC Efficiency	96.5% (Peak 97.5%)	
Idle Consumption typical – no load	60W	
Sell back nower moder	Limited to Household or Full Grid-Tied	
Sell back power modes	Transformerless DC	
Design (DC to AC)		
Response Time (Grid-Tied to Off-Grid)	4ms	
Power Factor	+-0.9 - 1.0	
Battery (optional) Output Power 9000W		
Type	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	
	3-stage w/ equalization 96.0%	
Charging curve	3-stage w/ equalization	
Charging curve Grid to Battery Charging Efficiency	3-stage w/ equalization 96.0%	
Charging curve Grid to Battery Charging Efficiency External temperature sensor	3-stage w/ equalization 96.0% included	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC	3-stage w/ equalization 96.0% included integrated	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC	3-stage w/ equalization 96.0% included integrated integrated	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to Lithium battery General	3-stage w/ equalization 96.0% included integrated integrated CanBus & RS485	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to L ithium battery <b>General</b> Dimensions (H x W x D)	3-stage w/ equalization 96.0% included integrated integrated CanBus & RS485 30.0" x 18.30" x 10.00"	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to L ithium battery <b>General</b> Dimensions (H x W x D) Weight	3-stage w/ equalization 96.0% included integrated integrated CanBus & RS485	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to L ithium battery <b>General</b> Dimensions (H x W x D) Weight Enclosure	3-stage w/ equalization 96.0% included integrated CanBus & RS485 30.0" x 18.30" x 10.00" 78 lbs NEMA Type 3R	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to L ithium battery <b>General</b> Dimensions (H x W x D) Weight Enclosure Ambient Temperature (3 variable speed fans)	3-stage w/ equalization 96.0% included integrated CanBus & RS485 30.0" x 18.30" x 10.00" 78 lbs NEMA Type 3R -25 to 55C, >45C derating	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to L ithium battery <b>General</b> Dimensions (H x W x D) Weight Enclosure Ambient Temperature (3 variable speed fans) Display	3-stage w/ equalization 96.0% included integrated CanBus & RS485 30.0" x 18.30" x 10.00" 78 lbs NEMA Type 3R -25 to 55C, >45C derating Color touch screen	
Charging curve Grid to Battery Charging Efficiency External temperature sensor Current shunt for accurate % SOC External Generator Start based on voltage or % SOC Communication to L ithium battery <b>General</b> Dimensions (H x W x D) Weight Enclosure Ambient Temperature (3 variable speed fans)	3-stage w/ equalization 96.0% included integrated CanBus & RS485 30.0" x 18.30" x 10.00" 78 lbs NEMA Type 3R -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 63A 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



April 2, 2021