

SIMPLIPHI YOUR POWER WITH AccESS to a fully integrated energy storage & management solution with Sol-Ark equipment

APPLICATIONS

SIA (Standard Interconnection Agreement) customers: AccESS allows for solar PV power to be stored in batteries for a backup power source, or for self-consumption during evenings or other set times.

NEM (Net Energy Metering) customers: Add energy storage to an existing net-metered solar array for standby power or energy arbitrage purposes.

Off-grid customers: Up to 11 kW or 12 kW Solar MPPT combines power generation and energy management in a single package.

Disaster recovery customers: Reliable, 98% efficient, non-toxic backup power in the event of a power outage.

SPECIFICATIONS

AccESS Sol-Ark-8K-15.2kWh

AccESS Sol-Ark-12K-22.8kWh

General

Dimensions	29.5" W x 76"H (w/feet) x 20" D / 75 cm W x 193 cm H x 51 cm D
Weight	600 lbs. (270 kg.) w/o batteries
Enclosure Rating	NEMA 3R Outdoor Rated
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Charging Temperature (batteries)	32°F to 120°F (0°C to 49°C)
Mounting	Free-standing or Pad-mounted
Enclosure Warranty Period	2 years
Certifications	UL1741SA Rule 21, HECO Rule 14H, PREPA approved and Rapid Shutdown compliant Included batteries ETL certified and certified to UL 1973

Inverter

Sol-Ark	Sol-Ark-8K	Sol-Ark-12K
Application	On or Off-Grid	On or Off-Grid
AC Connections	1 Bi-Directional Grid Port (50A double-pole), 1 UPS Load Output (50A double-pole) 1 Bi-Directional Generator Port (40A double-pole); can be used for Smart Loads output	
Output Frequency (selectable)	60 Hz or 50 Hz	
Output Voltage	L-N: 120VAC; L-L: 240VAC L-L: 208VAC (2/3 phases) 230VAC	
Off-Grid Output Power System	8 kW Continuous	12 kW Continuous
Solar PV Continuous Power	9.5 kW	12 kW
Inverter AC Continuous Power	8 kW	9.6 kW
Inverter Battery Continuous Power	8 kW	8 kW
Max Output Charging Current	185 ADC	185 ADC
CEC Weighted Efficiency	96.5%	96%
Warranty Period	5 yr standard / 10 yr optional extended	10 yr standard
Parallel Stacking	No	Yes (needed for true 3 phase power)
Other Features	EMP hardened upon request (against Nuclear EMP and Solar Flare), Smart Load capabilities (CTs included)	

SPECIFICATIONS	AccESS Sol-Ark-8K-15.2kWh	AccESS Sol-Ark-12K-22.8kWh
Solar PV		
DC Coupled		
Sol-Ark Dual MPPT	1 - 4 PV String Inputs (2 max per MPPT)	1 - 4 PV String Inputs (2 max per MPPT)
Max Connected PV Power	11 kW (6 kW max per MPPT)	16.5 kW (8 kW max per MPPT) 12 kW max simultaneous utilization
Min PV Array Starting Voltage	175 VDC	
Max Open Circuit PV Array Voltage	500 V _{oc} per PV String	
MPPT Voltage Range	150 – 425 VDC	
Max Array Short Circuit Current	20A per MPPT	33A per MPPT
Max Array Operating Current	18A per MPPT	20A per MPPT
AC Coupled		
Max AC Coupled Input	7 kW (string or micro-inverters)	7.6 kW (string or micro-inverters)
DC & AC Coupled		
Max Combined Solar Input (DC + AC)	13 kW	16.5 kW (15 kW preferred)
Best Combined Input Combination	3 kW AC + 10 kW DC	3 kW AC + 12 kW DC
Good Combined Input Combination	4 kW AC + 9 kW DC	4 kW AC + 11 kW DC
OK Combined Input Combination	5 - 7 kW AC + 8 - 6 kW DC 2 kW AC + 11 kW DC	5 - 7.6 kW AC + 9 - 7 kW DC 1 kW AC + 15 kW DC

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Other Features		
Internet Connected Computer or Phone App	SmartESS Monitor	PowerView ES Monitor and Programming
Automatic Generator Start	Two-wire automatic generator start	
Battery		
SimpliPhi Power	(x4) PHI 3.8 kWh-48V	(x6) PHI 3.8 kWh-48V
Rated kWh Capacity @ C/2	15.2 kWh	22.8 kWh
Usable kWh Capacity @ 80% DoD	12.16 kWh	18.24 kWh
Max Combined Output Power	7.6 kW DC	11.4 kW DC
Max Combined Charge Current	150 ADC	225 ADC (limited by the Sol-Ark to 185A)
Charging Temperature	32°F to 120°F (0°C to 49°C)	
Depth of Discharge	Up to 100% DoD	
Round Trip Efficiency	98%	
Cycle Life	10,000+ cycles (@ 80% DoD)	
Warranty Period	10 years	

