

# AccESS™ and AmpliPHI™

a fully integrated energy storage & management solution with closed loop communications and Sol-Ark equipment



SimpliPhi Power's AccESS™ with AmpliPHI™ 3.8kWh batteries and Sol-Ark inverter is a fully integrated and pre-programmed energy storage and management solution with closed-loop communications that self-monitors, keeps the lights on and lowers utility bills, creating peace of mind for homeowners and businesses. The AccESS maximizes PV generation by storing excess power for critical backup, evening hours and daily self-consumption to offset Time-Of-Use rates. Net-Metered customers can add energy storage to existing grid-tied solar systems for standby power or energy arbitrage. Off-grid customers can take advantage of integrated MPPT charge controls to create stand-alone systems for whole-home power and generator optimization with auto start capabilities. The UL 9540 Certified AccESS AmpliPHI system scales easily to increase energy capacity with the BOSS.6 or BOSS.12 that automatically recalculates, reprograms and reconfigures settings in the Sol-Ark inverter, creating resilience, energy security and daily cost savings with 98% efficient, safe and reliable access to power – 24/7.

## AccESS AmpliPHI Sol-Ark 12k

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 UL 9540, included batteries ETL certified and certified to UL 1973
Inverter	
Sol-Ark	Sol-Ark 12K
Application	On or Off-Grid
AC Connections	1 Bi-Directional Grid Port (63A double-pole), 1 UPS Load Output (50A double-pole), 1 Generator Port (63A 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 in 1X and 2X Sol-Ark 12K configurations, 3/3 phases in 3X Sol-Ark 12K quantity configurations)   230VAC
Off-Grid Output Power System	9 kW Continuous
Solar PV Continuous Power	12 kW
Inverter AC Continuous Power	9 kW
Inverter Battery Continuous Power (MAX)	To grid: 9 kW per Sol-Ark 12K
Max Output Charging Current	185 ADC
CEC Weighted Efficiency	96.5%
Warranty Period	10 yr standard

<b>Inverter (continued)</b>	
Parallel Stacking	Yes (needed for true 3 phase power)
Other Features	EMP hardened upon request (against Nuclear EMP and Solar Flare) EMP protection does not include the paired batteries, Smart Load capabilities (CTs included)
<b>Solar PV - DC Coupled</b>	
Sol-Ark Dual MPPT	1 - 6 PV String Inputs (3 max per MPPT)
Max Connected PV Power	13kW 12 kW max simultaneous utilization
Min PV Array Starting Voltage	175 VDC
Max Open Circuit PV Array Voltage	500 Voc per PV String
MPPT Voltage Range	150 – 425 VDC
Max Array Short Circuit Current	33A per MPPT
Max Array Operating Current	20A per MPPT @ 300V   18A per MPPT @ 400V
<b>Solar PV - AC Coupled</b>	
Max AC Coupled Input	9.6 kW (string or micro-inverters)
<b>Other Features</b>	
Internet Connected Computer or Phone App	PowerView ES Monitor and Programming
Communications	Closed loop communications between batteries and Sol-Ark inverter
Automatic Generator Start	Two-Wire Automatic Generator Start
<b>Battery</b>	
SimpliPhi Power	AmpliPHI 3.8 kWh-48V
Rated kWh Capacity @ C/2	19 kWh, up to 136.8 kWh with additional BOSS cabinets
Usable kWh Capacity @ 80% DoD	15.2 kWh, up to 109.4 kWh with additional BOSS cabinets
Max Combined Output Power	11.4 kW DC or up to 69.1 kW DC (limited to up to 27 kW AC by up to 3 x Sol-Ark 12K's)
Max Combined Charge Current	Limited to 185A per Sol-Ark 12K
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
Model Number	A-XPHI-SA, A-XPHI-2SA-SP, A-XPHI-3SA-SP, A-XPHI-3SA-3P