

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 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 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 12K
Application	On or Off-Grid
AC Connections	1 Bi-Directional Grid Port (50A double-pole), 1 UPS Load Output (50A double-pole), 1 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
Solar PV Continuous Power	12 kW
Inverter AC Continuous Power	9kW
Inverter Battery Continuous Power (MAX)	To grid: 9 kW To load: 8 kW
Max Output Charging Current	190 ADC
CEC Weighted Efficiency	96.5%
Warranty Period	10 yr standard

Inverter (continued)	
Parallel Stacking	Yes (needed for true 3 phase power) ¹
Other Features	EMP hardened upon request (against Nuclear EMP and Solar Flare), Smart Load capabilities (CTs included)
Solar PV - DC Coupled	
Sol-Ark Dual MPPT	1 - 6 PV String Inputs (3 max per MPPT)
Max Connected PV Power	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 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
Solar PV - AC Coupled	
Max AC Coupled Input	7.6 kW (string or micro-inverters)
Solar PV - DC & AC Coupled	
Max Combined Solar Input (DC + AC)	16.5 kW
Best Combined Input Combination	3 kW AC + 12 kW DC
Good Combined Input Combination	4 kW AC + 11 kW DC
OK Combined Input Combination	5 - 7.6 kW AC + 9 - 7 kW DC 1 kW AC + 15 kW DC
Other Features	
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
Battery	
SimpliPhi Power	(x6) AmpliPhi 3.8 kWh-48V
Rated kWh Capacity @ C/2	22.8 kWh
Usable kWh Capacity @ 80% DoD	18.24 kWh
Max Combined Output Power	11.4 kW DC
Max Combined Charge Current	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

1. While Sol-Ark permits the stacking of their Sol-Ark 12K, the Sol-Ark AccESS unit is not designed for stacking and doing so voids the AccESS Warranty.