


# Sol-Ark®

## 30K-3P-208V

## Spec Sheet



Solar Input Power 39,000W	
Max Allowed PV Power	39,000W
Max PV Power Delivered to Battery & AC Outputs	30,000W
Max DC Voltage (Voc)	500V @ 36A
MPPT Voltage Range	170-500V
Starting Voltage	150V
Number of MPPT	4
Max Solar Strings Per MPPT	2
Max DC Current per MPPT (Self Limiting)	36A
Max AC Coupled Input into the GEN terminal (Micro / String Inverters)	54kW w/ no PV <sub>DC</sub> ** 30kVA w/ 39kW PV <sub>DC</sub>

\*\* Software Limitation: 180A x 120V x 3

AC Output Power 30,000W On & Off-Grid	
Connections	120V / 208V Three Phase
Continuous AC Power with PV	30,000W 83.4A (208V)
Continuous AC Power from Batteries	30,000W 83.4A (208V)
Surge AC Power   7 sec	45,000VA   125A (208V)
Parallel Stacking	Yes—Up to 12
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	72,000W 200A L-L (208V) 36,000W 200A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	60W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	+/- 0.8 - 1.0

Battery (optional) Output Power 30,000W	
Type   Number of Inputs	Li-Ion   2 Inputs
Nominal DC Input	> 300V
Capacity	50 — 9900Ah
Voltage Range	150V—500V
Continuous Battery Charging Output	100A (50A per Input)
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
Battery Fuse	Integrated
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage or %SOC	Integrated
Communication to Lithium Battery*	CanBus & RS485

\*ONLY works with Li-Batteries under Closed-Loop Communications

General	
Dimensions (H x W x D)	35.2" x 20.8" x 11.6"
Weight	172 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-40~60°C, >45°C Derating
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty (verified by HALT Testing)	10 years

Protections & Certifications	
Electronics Certified Safety by TÜV Rheinland to NEC & UL Specs	Yes
Grid Sell Back — UL 1741-2021 3rd Edition (incl UL1741SB), CSA C22.2, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020, UL1699B Arc-Fault Circuit-protection Type 1	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	Integrated
PV Input Lightning Protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Surge Protection	DC Type II / AC Type II