

# DATASHEET

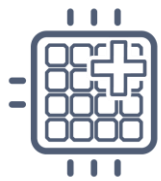
## Sol-Ark 18K 2P-N

The Most Powerful Inverter Ever

Powerful. Intelligent. Reliable.

Engineered for the most grueling off-grid or backup needs, the 18k 2P-N can deliver industry leading continuous power from batteries to support large loads. The 18k 2P-N delivers 36kW of surge power for 10s to ensure HVAC units and motors have no problem starting in a grid-down scenario. In order to ensure adequate production, the 18k 2P-N supports more PV than any other residential inverter (over 40kW when utilizing AC coupled functionality). This powerhouse unit runs American engineered firmware, keeps your data stateside, and comes standard with a 10-year warranty.

Don't rely on the grid, take control of your energy.



**MAXPV**  
BUILD BIGGER ARRAYS

Support over 40kw of solar with AC coupling.



**SNAPPPOWER**  
SURGE TO MEET LOCKED ROTOR AMPS

Keep motor loads online.



**DATALOCK**  
KEEP YOUR DATA SAFE

American engineered data transmission.



**MEGAPOWER**  
ULTIMATE POWER

Deliver 18kw continuously.



Input Data (PV)	
Max. Supported PV Power	32,400W
Max. Usable PV Power	28,800W
Max. AC Coupled Input	19,200W
Rated MPPT Operating Voltage Range	150 - 425V
Startup Voltage	125V
Max. DC Input Voltage <sup>1</sup>	500V
Max. Operating Input Current per MPPT	36A
Max. Short Circuit Current per MPPT	54A
No. of MPPT/Inputs	3/2
Output Data (AC)	
Continuous Power	18,000W
Surge Power (10s)	36,000W
Grid Voltage/ Frequency	120/240; 208 0.88Un < U < 1.1Un / 55-65
Max. Output Current	75A
Max. Grid Passthrough Current	200A
Max Efficiency	97.6%
Stackable	Yes; Max 12
Battery Input Data (DC)	
Nominal DC Voltage	48V
Operating Voltage Range	40 - 60V
Capacity	50 – 9900Ah
Continuous Battery Charge / Discharge Current	350A
BMS Communication	CANBus & RS485 MODBUS
General Data	
Dimensions [H x W x D (mm)]	863 x 464 x 282 mm
Weight	62.4 Kg / 137 lb.
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-40~+60°C, > 45°C Derating
Operating Altitude <sup>2</sup>	3000 m (9843 ft)
Noise	< 50 dB
Standard Warranty	10 Years
Protection and Certifications	
Certifications and Listings	UL1741 3rd SB, UL1741 CRD-PCS, IEEE1547-2018 and interoperability using IEEE2030.5, Hawaiian Electric SRD V2.0, UL1699B PVDC AFCI, UL1998, CSA C22.2 No. 107
PV DC Disconnect Switch	Integrated
Ground Fault Detection — NEC 690.5	Integrated
AC Output Breaker - 200A	Integrated
Surge Protection	DC Type II / AC Type II

<sup>1</sup> See Installation Manual for more details on sizing array strings. The highest input voltage is based on the open-circuit voltage of the array at the minimum design temperature.

<sup>2</sup> Derating occurs above 3000m (ft).