DATASHEET

Sol-Ark 18K 2P-N

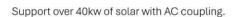
The Most Powerful Inverter Ever



Powerful. Intelligent. Reliable

Engineered for the most grueling off-grid or back-up 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 power-house 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.







Keep motor loads online.



American engineered data transmission.



Deliver 18kw continuously.



Sol-Ark 18k 2P-N



Input Data (PV)	
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 1	500V
Max. Operating Input Current per MPPT Max. Short Circuit Current per MPPT	36A 54A
No. of MPP Trackers	3
No. of PV Strings per MPPT	2
Output Data (AC)	
Continuous Power	18,000W
Surge Power (10s)	36,000W
Nominal AC Voltage	120/240; 208 0.88Un < U < 1.1Un
Grid Frequency	60/55-65
Output Current (Cont.)	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 Current	350A
Battery Disconnecting Means	200A/pole x 2
Charging Controller	3-Stage with Equalization
Automatic Generator Start (AGS)	2 Wire Start - Integrated
BMS Communication	CANBus & RS485 MODBUS
	General Data
Dimensions $[H \times W \times D \text{ (mm)}]$	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 ²	3000 m (9843 ft)
Noise	< 50 dB
Communication and Monitoring	Wi-Fi & LAN Hardware Included
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