DATASHEET

Sol-Ark 18K-2P-LV

The Most Powerful Inverter Ever

Powerful. Intelligent. Reliable.

Engineered for the most grueling off-grid or backup needs, the 18K-2P-LV can deliver industry-leading continuous power from batteries to support large loads. The 18K-2P-LV delivers 36kW of surge power for 10s to ensure HVAC units and motors have no problem starting in a grid-down scenario. To ensure adequate production, the 18K-2P-LV 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.

SNAPPOWER

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.



DATASHEET

Limitless 18K-2P-LV

Residential Hybrid Inverter

SKU: Limitless 18K-2P-LV

Input Data (PV)	
Max. Supported PV Power	32,400W
Max. Usable PV Power	28,800W
Max. AC Coupled Input	28,800W
Rated MPPT Operating Voltage Range	150 - 425V
Startup Voltage	125V
Max. DC Input Voltage [1]	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 Frequency	50 / 60Hz
Max. Output Current	75A
Max. Grid Passthrough Current	200A
CEC Efficiency	97.0%
Max Efficiency	97.6%
Stackable	Yes; Max 12
Battery Input Data (DC)	
Nominal DC Voltage	48V
Operating Voltage Range	41 - 63V
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 (34 x 18.2 x 11.1 in)
Weight	62.14 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
Standard Warranty	10 Years
Protection and Certifications	
Certifications and Listings	UL1741 CRD-Multimode, 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

[1] 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.

[2] Derating occurs above 3000m (9843 ft).

Sol-Ark has a policy of continuous improvement and reserves the right to modify specifications at any time, and without prior notice. See **sol-ark.com** for the latest information.