

12K-3P-L



15.6 KW SOLAR INPUT POWER

x2 built-in MPPTs for max DC coupled power of 15,600 W

Max AC coupled solar input of 3,000 W

Max combined solar input of 18,600 W

French Cleat for easy installation

Built-in solar array disconnect

Outdoor rated
NEMA 3R



12 KW OUTPUT POWER OFF-GRID

Continuous AC power of 12,000 W

Supports 380/400/420V (L-L) connections

*Supports 208/230V (L-L) at half output power

Remote WIFI / Ethernet
and local monitoring



BATTERY AGNOSTIC

Lead Acid or Li-ion battery chemistry support

Any battery with nominal DC voltage of 48V

240A continuous battery charging output

Closed loop communication w/ most High-End Li Batteries



FULL GENERATOR COMPATIBILITY

Full generator compatibility on both GRID & GEN terminals

Up to 12 KW generators on GEN terminal

Standby generator connection for battery backup

Two Wire for automatic generator start



INSTALLATIONS
SIMPLIFIED

Do not spend time piecing multiple parts for basic functions.
A Sol-Ark All-in-One system does it all, and does it better.



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Spec Sheet

**South America
& Caribbean**



Battery Input Data (Optional)

Type	Lead-Acid or Li-Ion
Nominal DC Input	48V
Capacity	50 — 9900Ah
Voltage Range	40V-60V
Continuous Battery Charging Output	240A
Charging Curve	3-Stage w/ Equalization
Grid to Batt Charging Efficiency	96.0%
External Temperature Sensor	Included
Current Shunt for Accurate % SOC	Integrated
External Gen Start Based on Voltage	Integrated
Communication to Lithium Battery	CanBus & RS485

Solar String Input Data

Max Allowed PV Power	15,600W
Rated DC Voltage / Max	550V / 800V
MPPT Voltage Range	200-650V
Starting Voltage / Min Voltage	160V
Number of MPPT	2
Max Solar Strings Per MPPT	2 + 1
Max DC Current per MPPT (A)	26A + 13A
MPPT Efficiency	99.90%

General

Dimensions (H x W x D)	27.6 x16.6 x 11.1 in
Weight	76.1 lbs
Enclosure	IP65 / NEMA 3R
Ambient Temperature	-25~60°C, >45°C Derating
Noise	< 45 dB
Installation Style	Wall-Mounted
Wi-Fi & LAN Communication	Included
Standard Warranty	5 Years

AC Output Data

Grid Type	Three Phase (3P) [220/380V, 230/400V, 240/420V]
Rated AC Output	12,000W
Peak Power (Off-Grid)	18,000W 5S
Rated AC Output Current (A)	18.2A / 17.4A
Parallel Stacking	Yes - Up to 8
Frequency	60/50Hz
Max continuous AC passthrough (A)	45A
Max Efficiency	97.6%
Idle Consumption Typical—No Load	TBD
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

Protections & Certifications

PV Input Lightning Protection	Yes
Grid Sell Back — UL1741-2010/2018, IEE- E1547a-2003/2014	Yes
Anti-Islanding Protection	Integrated
PV String Input Reverse Polarity Detection	Integrated
Insulation Resistor Detection	Integrated
Residual Current Monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output shorted Protection	Integrated
Surge Protection	DC Type II / AC Type II