



## All-in-One Batteries

Power your home for a fraction of the cost. By running your home on the PowerCool All-in-One's substantial battery power, you can save circa 85% on your energy bills. And, in the process, you can drastically cut your home's carbon emissions.

Our advanced battery technology enables households to access renewable energy, gain power self-sufficiency and make consciously sustainable decisions.



### Flexibility

With the option to connect multiple units, you can scale your energy storage capacity as your needs grow.



### Touch-safe

No messy wires, no hot parts, and no clutter. The All-in-One is touch-safe for the whole family.



### Modular

Robust but light. With its modular design, the All-in-One is built with easy handling and fitting in mind.



### Long-lasting

We use high-capacity, energy-dense cell chemistry that increases the life of your product.



### Weatherproof

Water resistant, installable indoors or outdoors, and durable enough to function between 0-55°C.



### Adaptable

Two inverter options: a 3.6kW for homes with lower power demands and a 5kW for those who need more.

# Technical specification

	Ares 3.6KAL	Ares 5KAL
<b>PV Input</b>		
Max. Input Power	5.4 kW	7.5 kW
Max. PV Voltage	550 V	
MPPT Range	80–500 V	
Full MPPT Range	110 – 500 V	150 – 500 V
Normal Voltage	360 V	
Startup Voltage	100 V	
Max. Input Current	18.5 x 2 A	
Max. Short Current	26 x 2 A	
No. of MPP Tracker / No. of PV String	2/2	
<b>Battery Port</b>		
Max. Charge/Discharge Power	3.6 kW	5.0 kW
Max. Charge/Discharge Current	80 A	120 A
Battery Normal Voltage	51.2 V	
Battery Voltage Range	40 – 60 V	
Battery Type	Li-ion / Lead-acid etc.	
<b>AC Grid</b>		
Max Continuous Current	17.0 A	23.0A
Max Continuous Power	3.6 kVA	5.0 kVA
Nominal Grid Current	16.4 / 15.7 A	22.8 / 21.8 A
Nominal Grid Voltage	198 to 242 @ 220 / 207 to 253 @ 230 V	
Nominal Grid Frequency	50 / 60 Hz	
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)	
<b>Current THD</b>		
<b>AC Load Output(Back-up)</b>		
Max Continuous Current	17.0 A	23.0 A
Max Continuous Power	3.6 kVA	5.0 kVA
Max Peak Current (10min)	24.6 / 23.5A	34.1 / 32.7A
Max Peak Power (10min)	5.4 kVA	7.5 kVA
Nominal AC Voltage L-N	220 / 230 V	
Nominal AC Frequency	50 / 60 Hz	
Switching Time	< 10 ms	
Voltage THD	< 3 c	
<b>Efficiency</b>		
CEC Efficiency	97.0 %	98.1 %
Max. Efficiency	97.6 %	98.1 %
PV to Bat. Efficiency	98.1 %	98.1 %
Bat. between AC Efficiency	96.8 %	96.8 %
<b>Protection</b>		
PV Reverse Polarity Protection	Yes	
Over Current/Voltage Protection	Yes	
Anti-Islanding Protection	Yes	
AC Short Circuit Protection	Yes	
Residual Current Detection	Yes	
Ground Fault Monitoring	Yes	
Insulation Resister Detection	Yes	
PV Arc Detection	Yes	
Enclosure Protect Level	IP65 / NEMA4X	

	Ares 3.6KAL	Ares 5KAL
<b>General Data</b>		
Dimensions (W*H*D)	600 x 430 x 210 mm	
Weight	25 kg	
Topology	Transformerless	
Cooling	Intelligent Fan	
Relatively Humidity	0–100 %	
Operating Temperature Range	– 25 to 60 °C	
Operating Altitude	≤ 2000* m	
Noise Emission	< 25 dB	
Standby Consumption	< 10 W	
Mounting	Wall Bracket	
Communication with RSD	SUNSPEC	
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G	
Certification & Approvals	NRS097, G98/G99, EN50549–1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109–1, IEC62109–2	
EMC	EN61000–6–2, EN61000–6–3	
<b>Battery Cell Technology</b>		
	<b>PowerCool–LFP–VLV</b>	
Number of Pack	2pcs	4pcs
Total Energy*	10.24 kWh	20.48 kWh
Usable Energy*	9.72 kWh	19.45 kWh
Voltage Range	44.8 ~ 57.6 Vd.c	
Nominal Voltage	51.2 V	
Max. Charge Voltage	57.6 V	
Max. Continuous Charging Current	100 A	160 A
Max. Continuous Discharge Current	100 A	160 A
DOD	95 %	
Communication	CAN	
Dimension(L*W*H)	(600±2) * (215±2) * (680±5) mm	(600±2) * (215±2) * (1320±9) mm
Net Weight	(97±4) kg	(191±6) kg
Operating Condition	Indoor or outdoor	
Operating Temperature	Charging	0–55 °C
Temperature	Discharging	0–55 °C
Humidity	15% ~ 85% (No Condensation)	
Cooling Type	Natural	
IP Rating	IP66	
Installation Method	Stacked installation	
Warranty	10 years (5 free warranty + 5 paid warranty)	
Configuration	IEC62619,IEC63056,IEC61000–6–1,IEC61000–6–3,IEC62477–1,IEC60730,IEC62040,UN38.3,MSDS	

Testing conditions based on temperature 25°C at the beginning of life.

\*Total Energy/Usable Energy measured under specific conditions from PowerCool–LFP 0.2C CC–CV