

AC COUPLED
ALL-IN-ONE ESS

IPOWER AES1-3K/3.6K/4.6K/5K-EG1

The LIVOLTEK AC coupled inverter is a cost-efficient solution to upgrade any existing PV inverter system to the hybrid one by adding a backup battery. This battery-based inverter allows you to store the surplus power to maximize self-consumption and protects you from rising electricity costs to achieve both grid-tied benefits and off-grid independence. Along with its ability to address the large retrofit market of existing PV systems, it also makes innovative residential storage solutions available for homes without solar-powered, ensuring energy flexibility and continuous power supply. In addition, you also get the added benefits of easy-to-install, reliability and use-friendly function.

Economically & Scalability

- Easy Installation: Unified built-in wiring box, factory pre-assembly and collective wiring design reduces 20% on-site installation time
- Affordable Upgrade: System scale-up requires no extra device due to integrated AC combiner box

Reliable Safety

- Remote monitoring, 7X24 Time of Use;
- Robust backup ability, switchover time <10ms;
- Max. 100A charging/discharging current

Versatile Application

- AC & DC SPD type II;
- IP65 & C5



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BESS SERIES

Model	AES1-3KEG1		AES1-3K6EG1		AES1-4K6EG1		AES1-5KEG1	
AC Output Data@Grid								
Rated AC Output Power	3kW		3.68kW		4.6kW		5kW	
Max. Apparent Power	3kVA		3.68kVA		4.6kVA		5kVA	
Max. Apparent Power from Grid	3kVA		3.68kVA		4.6kVA		5kVA	
Rated Output Voltage	L/N/PE , 220 / 230 V							
AC Voltage Range	176 ~ 276 V							
Rated Grid Frequency	50 / 60 Hz							
Grid Frequency Range	45-55 / 55-65 Hz							
Rated Output Current @230V	13 A		16 A		20 A		21.7 A	
Max. AC Current Output	13.6 A		16.7 A		20.9 A		22.7 A	
Max. AC Current From Grid	13.6 A		16.7 A		20.9 A		22.7 A	
Output Power Factor	~1 (Adjustable from 0.8 Leading to 0.8 Lagging)							
THDi @Rated Power	< 3%							
AC Output Data@EPS								
Rated Output Power	3kW		3.68kW		4.6kW		5kW	
Peak Output Power	3kW		3.68kW		4.6kW		5kW	
Rated Output Voltage	L/N/PE, 230V							
Rated Output Frequency	50 / 60 Hz							
Rated Output Current @230V	13 A		16 A		20 A		21.7 A	
Max. AC Current Output	13.6 A		16.7 A		20.9 A		22.7 A	
THDv @Linear Power	< 3%							
Automatic Switch Time	< 10ms							
Battery Input Data								
Battery Type	LFP							
Battery Voltage Range	40 ~ 60V							
Max.Charge/Discharge Power	3kW		3.68kW		4.6kW		5kW	
Max.Charge/Discharge Current	66 A		80 A		100 A		100 A	
Communication with BMS	CAN							
Efficiency								
Max. Efficiency	94%		94%		94%		94%	
Euro Efficiency	93.50%		93.50%		93.50%		93.50%	
Protection								
Anti-islanding Protection	Integrated							
Residual Current Monitoring Unit	Integrated							
AC Surge Protection	Type II							
AC Overcurrent Protection	Integrated							
AC Short Circuit Protection	Integrated							
AC Overvoltage Protection	Integrated							
Ground Fault Monitoring	Integrated							
Battery Reverse Protection	Integrated							
Remote Shutdown	Integrated							
General Data								
Dimension (W*H*D)	560*900*190 mm (inverter: 560*305*190mm; battery: 560*586*190mm)							
Weight	75 kg (inverter: 17kg; battery: 56kg)							
Cooling Method	Natural Convection							
Mounting Method	wall or floor mounting							
Operating Temperature Range	-10°C to 60°C							
Storage environments	-20°C to 65°C							
Operating Humidity	0% ~ 95%							
Typical Noise Emission	< 35 dB							
Display	LED/APP/Web							
Communication interface	RS485/CAN							
Max. Parallel Connection of Inverter	1 pcs							