

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			