

分布式储能

一体化解决方案

DISTRIBUTED ENERGY STORAGE INTEGRATED SOLUTION

能量块
Energy block

能量链
Energy chain

能量云
Energy cloud

引擎聚能，驱动绿色未来

分布式储能一体化解决方案

THE ENGINE GATHERS ENERGY TO DRIVE A GREEN FUTURE
DISTRIBUTED ENERGY STORAGE INTEGRATED SOLUTION

湖南引擎新能源有限公司
Hunan ENGINE New Energy Co. LTD

长沙经济技术开发区东六路南段77号金科亿达科技城B20栋
Building B20, Jinke Yida Science and Technology City, No.77, South
Section of East Sixth Road, Changsha Economic and Technologi-
cal Development Zone

www.engenpower.com

info@engenpower.com

+86 181 0131 4023 / 199 1889 8894



用户侧解决方案
User side solution

ENGINE AiTo -HV

密集成 高安全 多兼容 同冷暖 可升级 长寿命

产品名称 / Product name

ENGINE AiTo -HV

产品型号 / Product model

ENE-HESS-LFP-HV-AITO-KWh



技术参数 Technical parameter

交流侧参数 / AC side parameters	额定输出功率 Rated output power	50/63/80/105KW	额定电网频率 Rated grid frequency	50/60 Hz
	电网连接 Grid connection	三相四线 (3W/N+PE) three-phase four-wire (3W/N+PE)	可调功率因数 Adjustable power factor	1 超前 ...1 滞后 1 leading...1 lagging
	额定输出电压 Rated output voltage	230/400V AC	最大总电流谐波畸变率 Maximum total current harmonic distortion rate	<3%
保护功能 Protection function	防孤岛保护、直流反接保护、直流浪涌保护、交流浪涌保护、交流过流保护、交流短路保护、交流过压保护 Anti-island protection, DC reverse connection protection, DC surge protection, DC surge protection, AC surge protection, AC overcurrent protection, AC short circuit protection, AC overvoltage protection			

直流侧参数 / DC side parameters	电芯类型 Cell type	磷酸铁锂 LiFePO4	单模块电压范围 Single module voltage range	89.6~115.2V DC
	电芯规格 Cell specification	3.2V100Ah	系统电压范围 System voltage range	692.8~921.6V DC
	电池模块数量 Battery system configuration	支持 1~8 个串联 Support 1~8 Series	标准充电电流 Standard charging current	0.5C@ 持续 0.5C@lasts
	单模块额定容量 Single module rated capacity	10.24kWh/12.8kWh/13.31kWh	最大充电电流 Max charging current	1C@ 脉冲 1C@pulse
	单模块额定电压 Single module rated voltage	102.4V DC	标准放电电流 Standard discharge current	0.5C@ 持续 0.5C@lasts
系统总额定容量 Rated total energy(kwh)	81.92KWh/102.4kWh/106.5kWh	最大放电电流 Max discharge current	1C@ 脉冲 1C@pulse	

EMS参数 / EMS parameters	储能系统整体监视 Overall monitoring of ess	实时监测储能系统的运行状态、工作状态、功率、SOC、SOH、告警信息等 Real-time monitoring of the operating status, working status, power, SOC, SOH, alarm information, etc. of the ess	
	控制功能 Overall monitoring of ess	动态调压, 削峰填谷, 需量控制, 动态扩容、VPP 调峰 Dynamic voltage regulation, peakshaving and valley filling, demand control, dynamic capacity expansion	
	通信协议 Overall monitoring of ess	以太网: Modbus TCP, IEC61850 MMS/RS485; Modbus RTU/CAN: 功能预留 Ethernet: Modbus TCP/IEC61850 MMS/RS485; Modbus RTU / CAN: Function reserved	
	云端数据传输 Overall monitoring of ess	4G	

基本参数 / System parameter	单模块重量 Single module weight	约 100Kg (单箱) 100Kg (single)	运行湿度 Operating humidity	5~95%, 相对湿度 5~95%, relative humidity
	单模块尺寸 (W*H*D) Single module size (W*H*D)	450X950X132 mm (单箱) 450X950X132 mm (Single)	工作海报高度 Working poster height	2000 米 (>2000 米逆变器降频) 2000meters (inverter frequency reduction above 2000meters)
	系统尺寸 (W*H*D) ESS size (W*H*D)	650X2100X1200 mm	消防系统 Fire protection	PCAK 与箱体内部均为气溶胶灭火器 Aerosol fire extinguisher
	防护等级 IP Rating	IP54	认证 Certification	MSDS/UN38.3/CE/ 运输鉴定报告 MSDS/UN38.3/CE/Transportation
	冷却方式 (选配) Cooling method (optional)	自然冷却 / 强制风冷 Free cooling/Forced air cooling	报警与保护 Alarm and protection	具备 Yes
	设计寿命 Design life	10 年 10 years	指示灯状态 Indicator status	电源 / 运行 / 报警 Power/operation/alarm
	循环次数 Cycle number	8000 次 (SOC≤70%、25°C) 8000 times (SOC≤70%、25°C)	安装方式 Installation method	落地式 Floor-standing
	强制风冷 Forced air cooling	2KW 户外专用空调 2KW outdoor dedicated air conditioner		
	传感器 (选配件, 需要配合 EMS 使用) Sensor (optional, need to cooperate with EMS)	消防三合一传感器、声光报警器 / 水浸 / 门禁 / 电量电表 Fire three-in-one sensor, sound and light alarm/Water immersion/Access control		
	环境温度 Communicationinterface	充电: 0°C~50°C / 放电: -20°C~50°C / 存储: -10°C~45°C Charging: 0°C~50°C/Discharging: -20°C~50°C/Storage: -10°C~45°C		



Industrial and commercial

50-63KW(PCS)81.92KWh/102.4kWh/106.5kWh



Back-up power



Off-grid



Micro-grid



Fuel saving solution



Self-consumption



Demand charge management

Features and Advantages

- ▶ Fully Modular Design, High System Integration, Easy Installation, Minimal Maintenance and Operations.
- ▶ Flexible Expansion, Supports Up to 10 Units in Parallel, Maximum Capacity Expandable to 1.06MWh.
- ▶ PACK-Level Active Safety Monitoring and Warning System, Intelligent Fire Protection System, and Temperature Control System for Safe and Controllable Operations.
- ▶ Engine Cloud Platform Management System, Supports Remote/Local Monitoring, Intelligent Cloud-Based Maintenance and Operations.
- ▶ Application Areas: Telecommunication Energy Storage, Grid Frequency Regulation Energy Storage, Renewable Microgrid Energy Storage, Large-Scale Industrial and Commercial Distributed Energy Storage, Data Center Energy Storage, Photovoltaic Power Generation, and More.