

BMS电池管理系统

BMS battery management system

电池管理系统BMS(Battery Management System) 是对电池进行监控和管理的系统，通过对电压、电流、温度以及SOC等参数采集、计算，进而控制电池的充放电过程，实现对电池的保护，提升电池综合性能的管理系统，是连接动力电池和车辆的重要纽带。

Battery management system (BMS) is a system to monitor and manage the battery. By collecting and calculating the parameters of voltage, current, temperature and SOC, it can control the charging and discharging process of the battery, protect the battery and improve the comprehensive performance of the battery. It is an important link between the power battery and the vehicle.


一体式 BMS Integrated BMS



12V系列
12V series



动力电源：房车、监控电源
Power supply: RV, monitoring power supply



24V系列
24V series



工业设备：洗地机、搬运车等
Industrial equipment: floor washer, carrier, etc



48V系列
48V series



工业车辆：叉车、扫路车等
Industrial vehicles: forklift, sweeper, etc



80V系列
80V series



工业车辆：叉车、AGV等
Industrial vehicles: forklift, AGV, etc

产品特色及功能

Product features and functions

- 云端数据存储
- 1、远程信息采集和分析，产品信息科追溯；
 - 2、远程技术和服务支持；
 - 3、远程故障预警与诊断，数据无线存储；
 - 4、远程电池管理，状态实时监控，SOC过低警告，保证电池工作的稳定性和安全性；
 - 5、远程FAE支持，售后服务时效的保证。

- Cloud data storage
- 1. Remote information collection and analysis, product information department traceability;
 - 2. Remote technology and service support;
 - 3. Remote fault warning and diagnosis, wireless data storage;
 - 4. Remote battery management, real-time state monitoring and low SOC warning ensure the stability and safety of battery operation;
 - 5. Remote FAE support, after-sales service time guarantee.



核心优势

Core advantages

完整生态
Complete ecology

母公司拥有上游锂资源布局，同时赣锋电池在电池、模组、电池包方面都有产品，能打通上下游产业链。

The parent company has upstream lithium resource distribution, and Ganfeng battery has products in battery, module and battery pack, which can open up the upstream and downstream industry chain.

专业团队
Professional team

工程、技术、管理团队经验丰富，层次结构合理，设计能力突出。

The engineering, technical and management team has rich experience, reasonable hierarchical structure and outstanding design ability.

领先技术
Leading technology

中科院科研成果产业化；产品、材料从微观纳米级到宏观结构、模拟仿真等进行精确设计，开发理念遵循国际标准ISO26262模型。

The scientific research achievements of Chinese Academy of sciences are transformed into industry; products and materials are designed accurately from micro nano level to macro structure and simulation, and the development concept follows the international standard iso26262 model.

先进制造
Advanced manufacturing

通过了 IATF16949：2016，ISO 9001：2008，ISO 14000：2004，OHSAS 18000：2007等体系认证，全自动化产线配备MES制造系统，率先实现“透明化”工厂管理和产品全程追溯系统，保证产品质量可控。

It has passed the certification of iatf16949:2016, ISO 9001:2008, ISO 14000:2004, OHSAS 18000:2007 and other system certification. The fully automated production line is equipped with MES manufacturing system, and takes the lead in realizing "transparent" factory management and product whole process traceability system to ensure high quality and controllable product.

公司介绍

Company profile

江西赣锋锂业股份有限公司旗下全资子公司（股票代码：A股002460，H股01772）
Wholly owned subsidiaries of Jiangxi Ganfeng Lithium Industry Co., Ltd. (stock code: A shares 002460, H shares 01772)

江西赣锋锂电科技有限公司
主营：动力电池的电芯、模组、系统（LFP）

江西赣锋锂电科技有限公司成立于2011年6月，专业从事于新型锂离子电池的研发、生产和经营，主要产品为磷酸铁锂电芯、动力电池组、电池管理系统、储能电池组及风光电储能系统等。2020年单体电芯年产达10亿瓦时，平均日产达到3百万瓦时以上；二期工厂规划产能20亿瓦时/年。

Jiangxi Ganfeng LiEnergy Technology Co., Ltd.
Jiangxi Ganfeng LiEnergy Technology Co., Ltd. was founded in June 2011. It is in Xinyu hi-tech development zone, Jiangxi province. It is specialized in the research, development, production and operation of new lithium ion batteries, mainly product including lithium iron phosphate battery cell, power battery pack module, battery pack BMS system, energy storage battery pack and wind-solar energy storage system. The annual output of single cell reaches 1GW 2020 year, and the average daily output reaches 3 million Wh. The second phase plant is planned to have a capacity of 2 GWh every year.

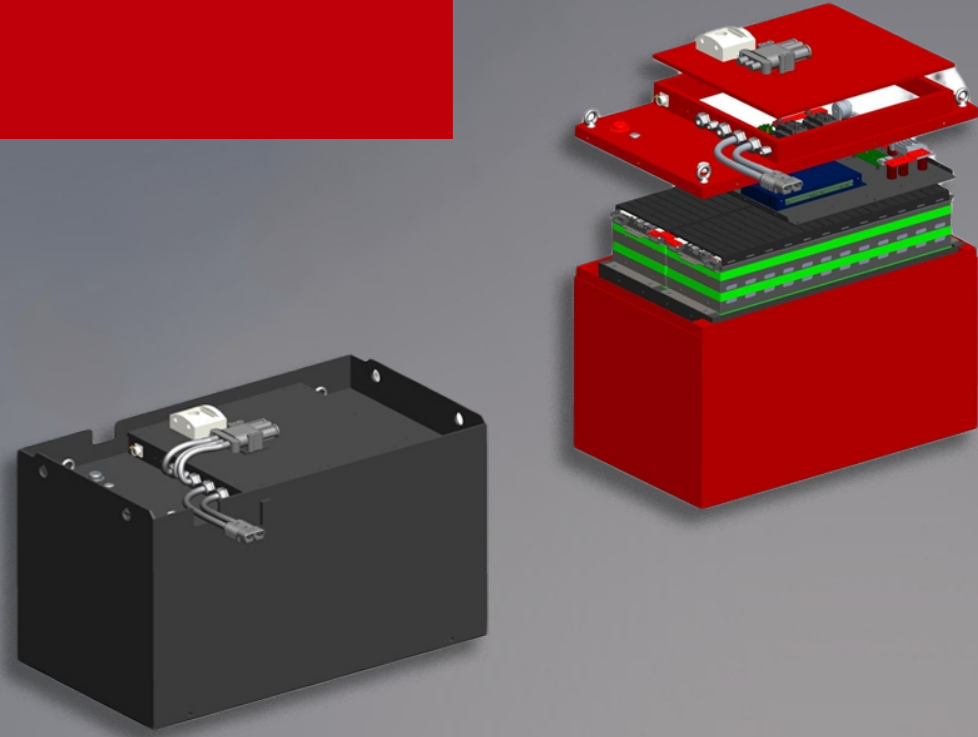
电话 Tel: 0790-6969082
网站 Web: http://www.ganfengbattery.com
地址 Add: 江西省新余高新开发区阳光大道2551号
No.2551 Sunshine Avenue, Xinyu City, Jiangxi Province

电话 Tel: 0512-65696188-8085
地址 Add: 苏州工业园区兴浦路333号纳米城II期2号楼106室
Room 106, Building 2, Nano City II, 333 Xingpu Road, Suzhou Industrial Park, Suzhou City, Jiangsu Province

POWER BATTERY
动力电池

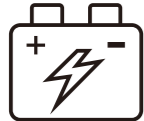
工业车辆电池系统领导者

To be the leader of Lithium power battery system for industrial vehicle



主要产品

Main products



电 芯
Cell



模 组
Module



系 统
System

应用领域

Application area



物流行业

Logistics industry
搬运、堆垛车辆
Transport and stacking vehicles
叉车、AGV
Forklift, AGV
高空作业平台
Aerial work platform



航空地勤

Aviation ground service
牵引车
tractor
行李履带车
Luggage crawler



轨道交通

Rail transit
轨道牵引
Track traction
和谐号启动备电
Harmony starts standby power



电动船舶

Electric ship
游览船
Tour boats
摆渡船
a ferry
海钓船
Sea fishing boat



交通运输

Transportation
重卡
Heavy truck
冷藏车
Refrigerated truck
环卫车
Sanitation vehicle



两轮出行

Two rounds of travel
电动自行车
Electric bicycle
电动摩托车
Electric motorcycle
共享电单车
Sharing motorcycles

方形电芯

Prismatic Cell



产品型号 Model	3914895		48173125		53173200		71173200	
化学体系 Chemical system	LFP/C		LFP/C		LFP/C		LFP/C	
额定容量 Nominal capacity (Ah)	50	60	86	100	206	228	277	302
充放倍率 Charging & discharging rate	1C/1C	1C/1C	1C/1C	1C/1C	1C/1C	1C/1C	1C/1C	1C/1C
能量密度 Energy density(Wh/L)	145	160	130	145	162	175	162	175
循环寿命 Cycle life	4000	3000	4000	3000	3000	3000	3000	3000
应用领域 Application area	BEV/ESS	BEV	BEV/ESS	BEV/ESS	BEV	BEV	BEV	BEV

软包电芯

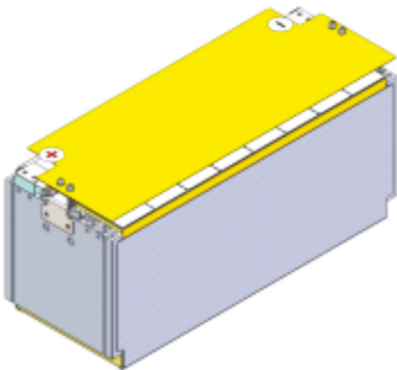
Pouch Cell



产品型号 Model	78117169	78133202	75159270	11165260
化学体系 Chemical system	LFP/C			
额定容量 Nominal capacity (Ah)	16	20	30	50
充放倍率 Charging & discharging rate	1C/1C	1C/1C	1C/1C	1C/1C
能量密度 Energy density(Wh/L)	350	325	330	360
循环寿命 Cycle life	2000	2000	2000	2000
应用领域 Application area	BEV	BEV	BEV	BEV

标准模组

Standard Module



名称 Item	技术参数 Technical parameter
电芯类型 Cell type	LFP/53173200
额定电压 Nominal Voltage (V)	12.8
额定容量 Nominal Capacity (Ah)	400
额定电量 Rated Energy (kWh)	1.28
系统成组方式 Series And Parallel	2P4S
工作电压范围 Operating voltage range (V)	10-14.6
工作温度范围 Operating temperature range	放电Discharge: 0°C-60°C 充电Charge: -20°C-60°C
循环寿命 Cycle life	2000次 (25°C)
模组重量 Weight (kg)	约35.6



名称 Item	技术参数 Technical parameter
电芯类型 Cell type	LFP/4820
额定电压 Rated Voltage (V)	51.2V
额定容量 Nominal Capacity (Ah)	20Ah
额定电量 Nominal Energy (kWh)	1024wh
工作电压范围 Operating voltage range (V)	40.0V-58.4V
使用温度 Operating temperature	放电Discharge: -20°C-60°C 充电Charge: 0°C-60°C
循环寿命 Cycle life	200次 (@25°C)
应用 Application	二轮车, 备电等 Two wheeled vehicle, standby power, etc

电池系统

Battery system



纯电动叉车电池系统
Battery system for electric forklift truck



AGV 电池系统
AGV Battery Pack System



纯电动乘用车电池系统
Battery system for Blade Electric Vehicle



纯电动客车电池系统
Battery system for electric bus



纯电动物流车电池系统
(邮政车、冷藏车等)
Battery system for electric carrier vehicle
(Mail truck, Refrigerator truck)

名称 Item	技术参数 Technical parameter				
电芯类型 Cell type	LFP/48173127	LFP/48173127	LFP/3914895	LFP/53173200	LFP/3914895
额定电压 Rated Voltage (V)	25.6 V	51.2 V	153.6 V	153.6 V	563.2 V
额定容量 Nominal Capacity (Ah)	172Ah	400Ah	120Ah	206Ah	120Ah
额定电量 Rated Energy (kWh)	4.4 kWh	20.48kWh	18.4 kWh	31.64 kWh	67.5 kWh
工作电压范围 Operating voltage range (V)	20-29.2 V	40-58.4 V	120-175 V	120-175.2 V	400-642.4 V
系统成组方式 Series And Parallel	2P8S	2P16S	2P48S	1P48S	2P176S
系统重量 System weight	80 kg	187.6 kg	160 kg	225 kg	587 kg
循环寿命 Cycle life	2000, 80%DOD	2000次 (25°C)	2000, 80%DOD	2000, 80%DOD	2000, 80%DOD
热管理方式 Thermal management mode	带加热 With heating	/	自然冷却 Natural cooling	带加热 With heating	液冷 Liquid cooling
防护等级 Protection class	IP54	IP54	IP67	IP67	IP67
箱体尺寸 Box size	615*205*630 mm	1050*550*350	1308*1232*150mm	1060*630*240mm	(2160*520*200) *2mm

叉车电池系统详情

Forklift battery system details

公司通过对中科院科研成果产业转移转化，将国际领先的锂电池管理技术应用于工业铅酸电池的锂电替代升级改造。

● 5年或10000小时超长循环寿命，LFP产品满足高安全性要求 ● 六款电芯、多种模组，覆盖工业动力电池系统的大部分需求

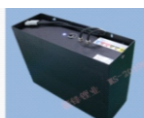
电压系列	12V	24V	48V	80V	96V	容量系列	1P	2P	3P	4P	5P	6P
额定电压(V)	12.8	25.6	48/51.2	80/83.2	96	电芯-86Ah	86	172	258	344	430	516
串联数量(S)	4	8	15/16	25/26	30	电芯-100Ah	100	200	300	400	500	600
主要应用	备用电源	AGV/等	叉车	叉车	特种车辆	电芯-206Ah	206	412	618			
						电芯-277Ah	277	554				



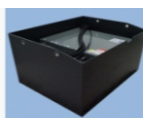
24V86Ah/100Ah



24V172Ah/200Ah



24V258Ah/300Ah



48V344Ah/400Ah



48V430/534Ah



80V344Ah/400Ah



80V430Ah/475Ah



80V534Ah/618Ah