

GREPOW

GREPOW

深圳市格瑞普电池有限公司
SHENZHEN GREPOW BATTERY LTD.,CO

格瑞普总经办 **演讲人**
2025/03/21

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Company Producing Capacity & Ability

企业简介

COMPANY INTRODUCTION

01

RECHARGEABLE BATTERY



格瑞普公司分布简介

Grepow Battery Company Introduction

● 深圳龙华总部 Shenzhen Longhua Headquarters

研发中心、样品中心、SMT、异形及扣式锂电池生产基地

员工：**800**人 占地面积：**40000m²**

R&D center, sample center, SMT, special-shaped and button lithium battery production base.

Employees: 800 people Area: 40,000 square meters



● 国际营销中心 International Marketing Center

海外业务、国内业务、电商运营、市场运营

员工：**150**人 使用面积：**2500m²**

Overseas business, domestic business, e-commerce operations, market operations

Employees: 150 people Usable area: 2,500 square meters

● 郴州生产基地 Chenzhou Production Base

锂电-镍氢生产基地

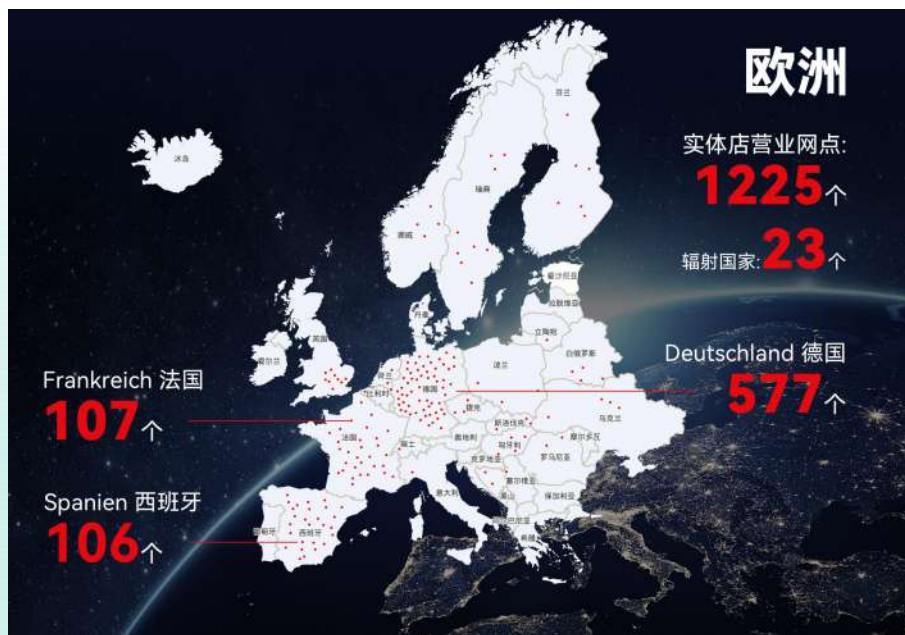
员工：**2200**人 占地面积：**154000m²**

Lithium Battery-NiMH Production Base

Employees: 2,200 Area: 154,000m²

格瑞普公司分布简介

Grepow Battery Company Introduction



德国公司 (杜塞尔多夫)

成立时间: 2009年

员工: 17人

实体营业网点: 1225个 仓储面积: 1200平方米



美国公司 (旧金山)

成立时间: 2012年

员工: 22个

实体营业网点: 1275个 仓储面积: 1300平方米

格瑞普公司分布简介

Grepow Battery Company Introduction

深圳市格瑞普电池有限公司(GREPOW)成立于1998年, 致力于生产可充电高倍率镍氢电池及配套产品。

Grepow is a company who established by 1998, started up with rechargeable high discharge rate Nickel-Matel Hydride Batteries manufacturing and pack.

• 1998

• 2008



格瑞普公司分布简介

Grepow Battery Company Introduction

2008年，我司涉足锂电事业，专精发展叠片型电池，聚焦于高倍率及高能量密度电芯；同期在模型领域，成立自主品牌 Gens Ace及格氏ACE。

In 2008, We set foot in the laminated high discharge rate batteries, focused on the high discharge rate and high-energy-density battery cells; In addition, focusing on the field of the RC Model, we have established our own brand, Gens Ace."

• 2008

Gens ace



• 2010



格瑞普公司分布简介

Grepow Battery Company Introduction

2011年，基于我司高倍率及高能量密度产品特性，开始着力于研发制造无人机相关领域电池，配合国内外知名厂商定制不同领域无人机电池，同期成立自主品牌TATTU。

By 2011, based on our product' features that high discharge rate and high energy density, we started working on the UAV industrial with many of the front-line UAV manufacturers and companies; By the time, our self-owned brand TATTU also be held!

• 2011



• 2012



格瑞普公司分布简介

Grepow Battery Company Introduction

2012年，成立德国，美国分公司。通过多年海外市场开拓，我司旗下品牌持续影响着全球高倍率电池市场。

In 2012, we established branches in Germany and the United States. Through years of overseas market development, our brands continue to have a significant impact on the global high magnification battery market.



• 2012

• 2013

格瑞普公司分布简介

Grepow Battery Company Introduction

2013年，格瑞普再次着力于探索智能电池应用，立足于“自主研发，自主设计，自主制造”的发展理念，量产符合市场需求的高性价比智能电池及配套充电器。

In 2013, Grepow once again focused on exploring intelligent battery applications, based on the development concept of "independent research and development, independent design, and independent manufacturing," mass-producing high-performance and cost-effective intelligent batteries and matching chargers that meet market demands.



• 2013

• 2020

格瑞普公司分布简介

Grepow Battery Company Introduction

2020年，我司产品类型继续扩展，开始进行全球首款多功能合一汽车应急启动电源的研发，成立Lokithor品牌。

In 2020, the product types of our company will continue to expand, and we will start the research and development of the world's first multi-functional integrated vehicle emergency start power supply and establish the brand Lokithor.



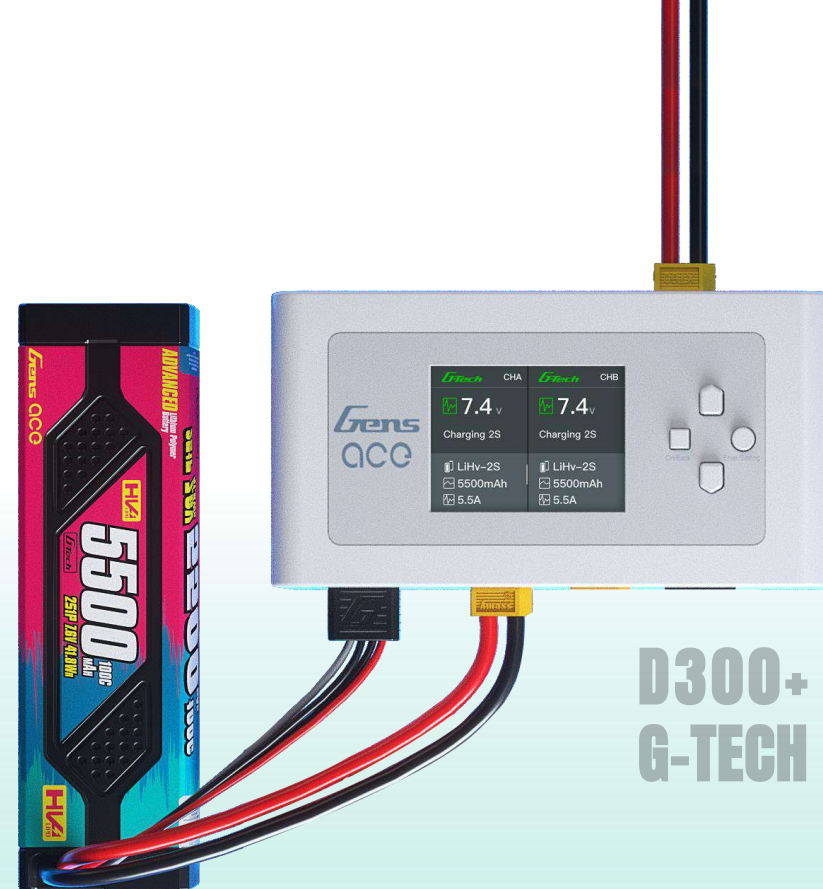
• 2020

• 2023

企业简介 COMPANY INTRODUCTION

格瑞普公司分布简介

Grepow Battery Company Introduction



智能化充放电方案已成为市场主流，广受用户好评。

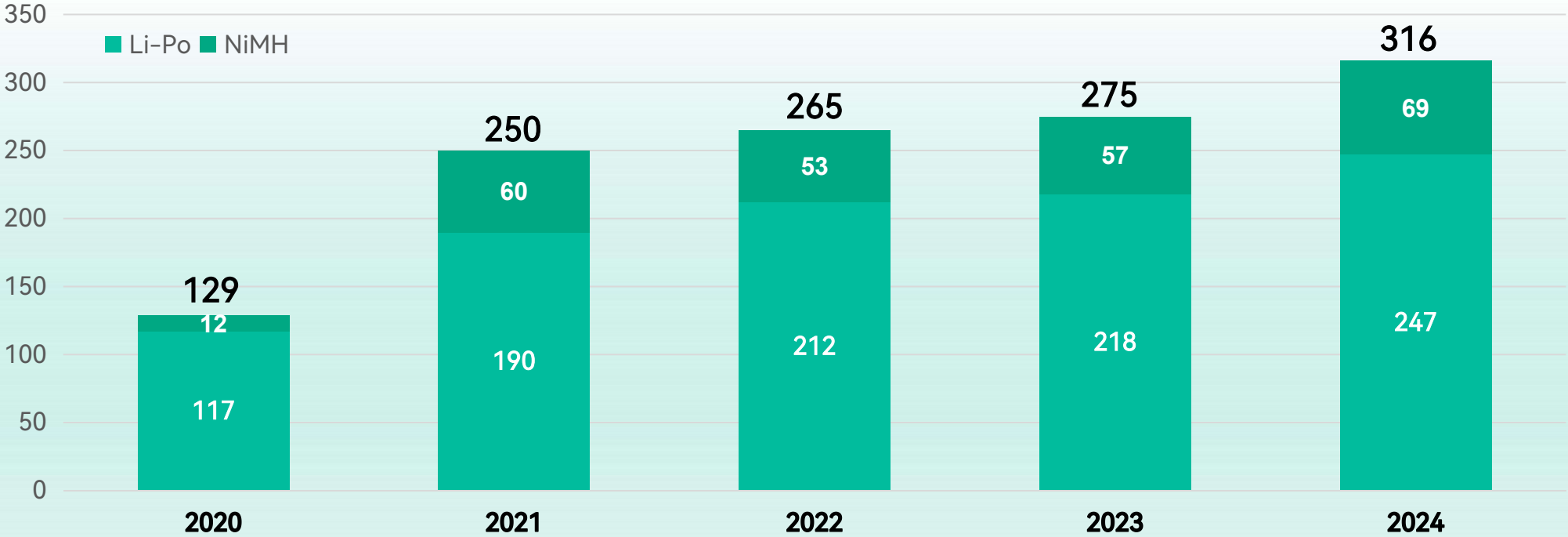
The intelligent charging and discharging solutions have become the mainstream in the market and have received wide acclaim from users.

• 2023

• Future

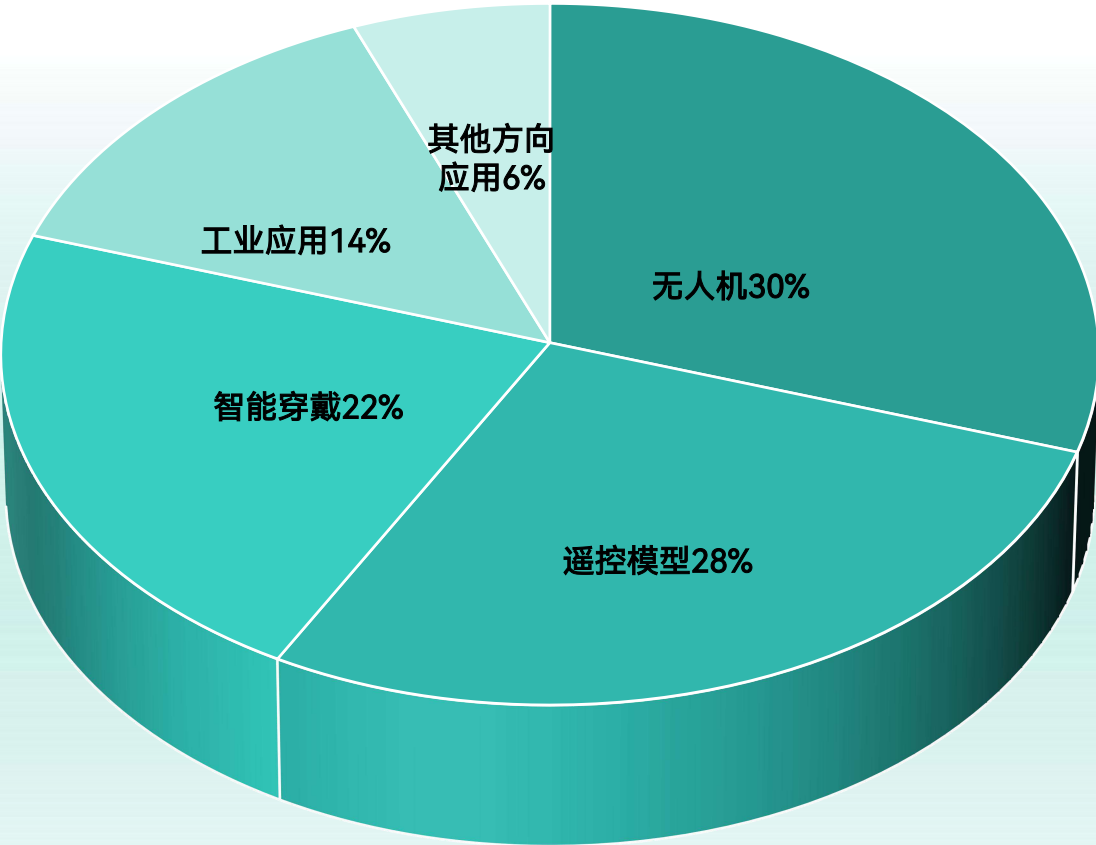
销售额 Sales of Sum (Million USD)

Unit: 百万 USD



格瑞普主要业务领域

GREPOW MAJOR BUSINESS FIELDS



该饼图显示了每个领域的百分比及其占整体业务比例的比例。
This pie chart shows the percentage for each sector and their proportion to the overall business proportion.

- 30% 无人机
UAV/Drone
- 28% 遥控模型
Remote Control Hobby
- 22% 智能穿戴
Wearable Devices
- 14% 工业应用
Industrial Application
- 6% 其他方向应用
Special Application



国际资质 & 专利

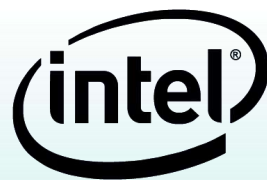
Global Standards

ISO9001	质量体系认证 Quality Management System
ISO14001	环境体系认证 Environmental Management System
ISO13485	医疗器械质量管理体系 Quality Management System for Medical Devices
ISO45001	职业卫生与安全认证 Occupational Health and Safety
ISO16949	自动化管理系统认证 Automotive Quality Management Systems
OHSAS18001	健康安全认证 Health & Safety Management
AS9100D	航空体系证书（申请中） Quality Management System (applying)



格瑞普主要客户

Grepu Battery Company main customers



企业制造 与能力

COMPANY PRODUCING
CAPACITY & ABILITY



02

RECHARGEABLE BATTERY



电芯生产能力

Cell Production capacity

Ni-MH
镍氢电池

500,000
Pcs/Day

Shaped
异形电池

60,000
Pcs/Day

Button
扣式电池

10,000
Pcs/Day

LiPo
锂聚合物电池

500,000
Ah/Day

- 210台自动叠片机械 210 x Auto-Stacking Machines
- 44台自动切片机械 44 x Auto-Cutting Machines
- 15条自动焊接机 15 x Auto-Welding lines



电芯生产

Cell Production process

全自动叠片机约
Auto-Stacking Machines About:

300台/Units

质量管控团队专业工程师
Quality Control Leading Enginners About:

120人/Individuals

全自动生产率高达
Automatic Productivity Rate About:

72%

产线水分控制在
Producing Line Humidity Control:

≤2%

全自动注液产线
Auto-Injecting Machines About:

6 条工作产线/Working Lines

总占地面积约
Total floor space About:

121,000m²

生产能力

Production capacity

格瑞普不仅具备电芯生产制造能力，同时具备智能产品集成组装、SMT、高精度产品检测能力，芯生产制造能力，也具备智能产品集成组装、SMT贴片加工、高精度产品检测能力。

Greep not only has the ability of cell production and manufacturing, but also has the ability of intelligent product integrated assembly, SMT and high-precision product testing.



生产能力

Production capacity



特点：小批量多品种灵活
Features: small batch variety flexible



pack产线 大拉线：6条+6条 U形小拉：4条+12条
pack production line Large pull lines: 6 +6 U shaped
small pull lines: 4 +12

技术与 研发能力

TECHNOLOGY AND
R & D CAPABILITY



团队介绍

TEAM INTRODUCTION



电芯研发团队

Cells R&D Team

包含不同电池材料研发团队
团队120余人

There are more than 120 engineers,
including LCO, NCM and LiFe development.



电子研发团队/PACK设计团队

Electronic R&D Team & Pack Design

超过100名工程师致力于
结构与BMS电子设计

There are more than 100 engineers,
including BMS software and hardware
development.



质量管控团队

Quality Control Team

超过 90 名工程师领导质量管控团队
为所有客户提供最优质的产品

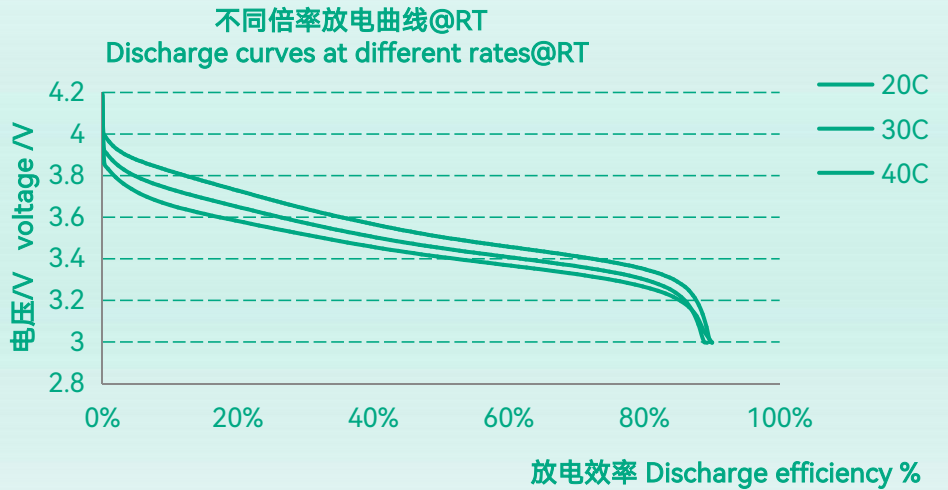
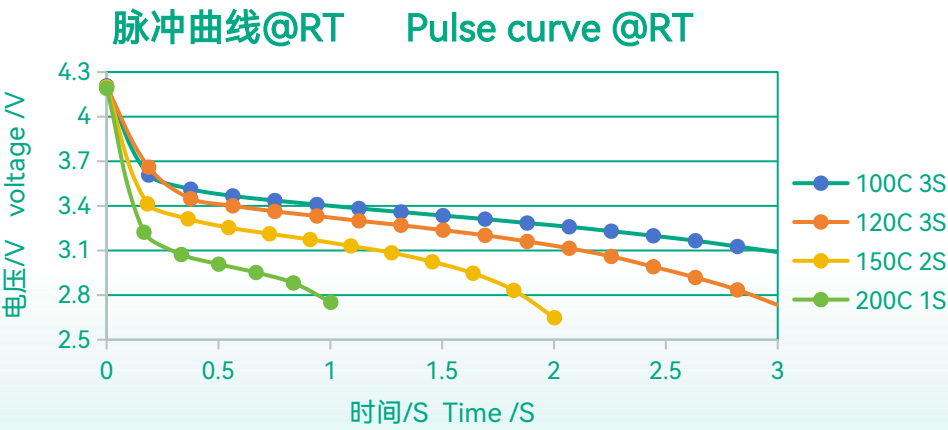
There are more than 90 leading engineers in a
quality control department, help us providing
the best quality products for all clients.

高倍率锂电芯

High C-rate lithium cell

高倍率电芯特性 Cell Characteristic:

- ① 大倍率放电性能优异、高放电平台及长循环寿命;
Excellent discharge performance: large C rate, high discharge platform and long cycle life
- ② 放电倍率可满足持续**50C**，脉冲**200C**;
Discharge rate: continuous 50C, pulse 200C
- ③ 支持**8C**快充;
Support 8C fast charge
- ④ 单体电芯能量密度比高，高达**258Wh/kg**;
The energy density ratio of single cell is high, up to 258 Wh/kg
- ⑤ 电芯倍率支持**10C-50C**可供选择;
Cell magnification support 10C-50C selection range
- ⑥ 温度范围广：可在**-40℃~60℃**条件使用;
Wide temperature range: -40℃~60℃ conditions for usage



高能量密度半固态电芯

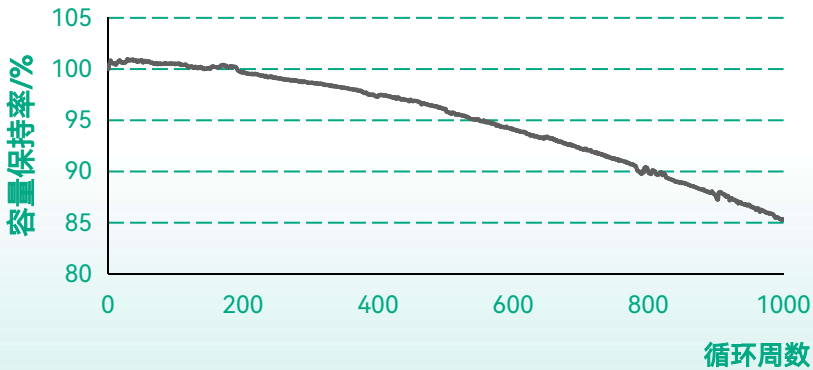
system silicon carbon anode cell

主要特征 Major charactors:

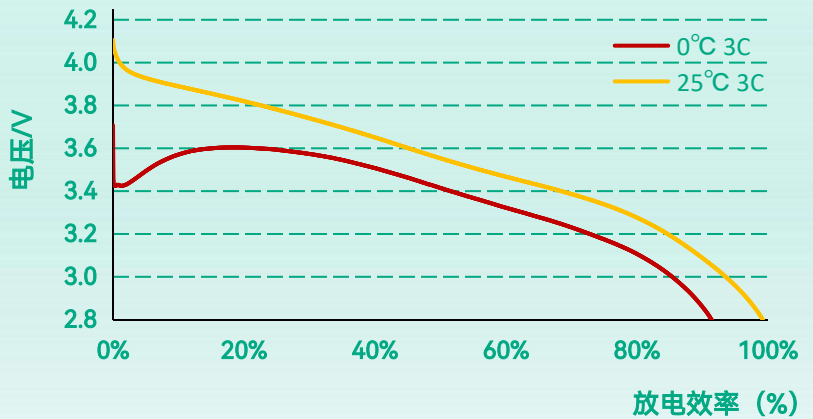
- ① 高能量密度，最高电压4.25V，最低电压2.5V; 重量能量密度 > 350Wh/Kg
High energy density: maximum voltage 4.45V, minimum voltage 2.5V;
Weight energy density >350Wh/Kg
- ② 循环性能：1C充3C放1000周循环保持率87%
Cycle performance: 1C charge 3C discharge, 1000 cycles retention rate of 87%
- ③ 高温储存性能：60℃储存30天不胀气
High temperature storage: performance 60℃ storage for 30 days without flatulence
- ④ 电芯倍率：3-5c，脉冲10C
Cell c-rate:3-5c
- ⑤ 应用领域：测绘无人机、巡查/监视无人机、消防/安防无人机、机器人
Applications: mapping drones, patrol/surveillance drones, fire/security drones、robot



1C充3C放@RT



不同温度3C放电



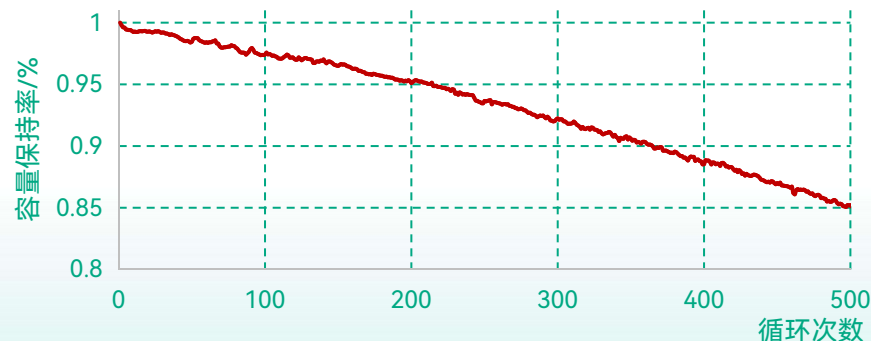
高倍率半固态电芯

system silicon carbon anode cell

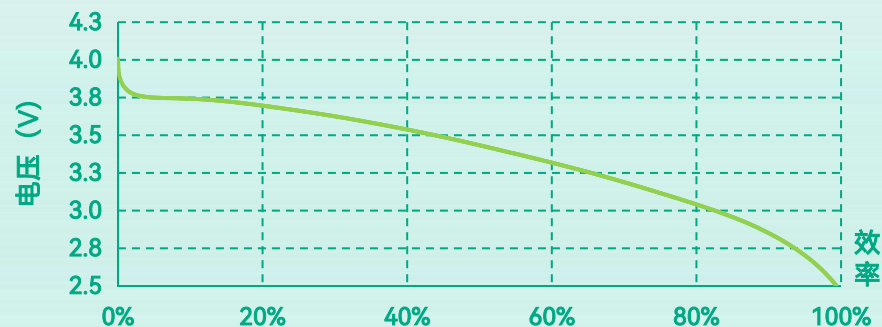
主要特征 Major charactors:

- ① 高能量密度，最高电压4.25V，最低电压2.5V; 重量能量密度 > 330Wh/Kg
High energy density: maximum voltage 4.25V, minimum voltage 2.5V;
Weight energy density >330Wh/Kg
- ② 循环性能：1C充5C放500周循环保持率85%
Cycle performance: 1C charge 3C discharge, 1000 cycles retention rate of 87%
- ③ 高温储存性能：60℃储存30天不胀气
High temperature storage: performance 60℃ storage for 30 days without flatulence
- ④ 电芯倍率：5C-15fangdian
Cell c-rate:5-15c
- ⑤ 应用领域：测绘无人机、巡查/监视无人机、消防/安防无人机
Applications: mapping drones, patrol/surveillance drones, fire/security drones

常温循环1C充5C放



5C放电

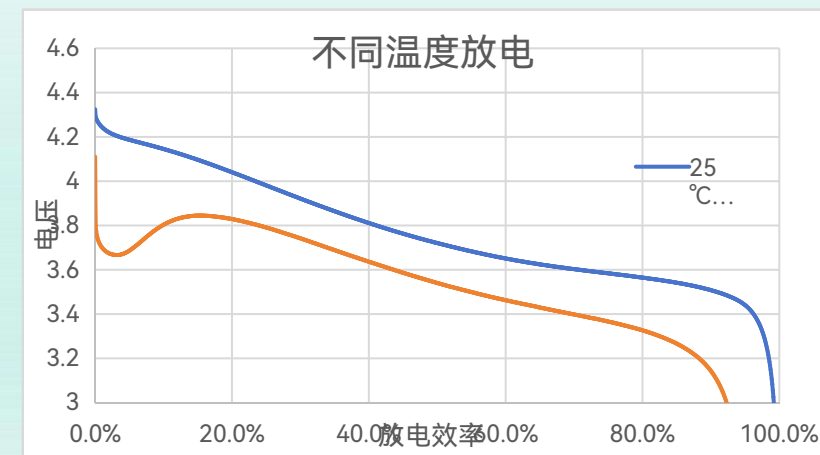
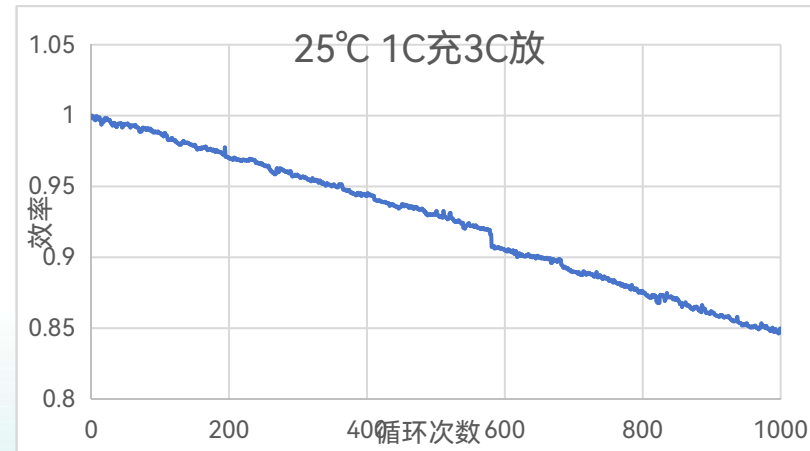


超高压电芯

Wide temperature range lithium cell

电芯特征 Major characteristic:

- ① 高能量密度，最高电压4.45V，最低电压3.0V; 重量能量密度 > 290Wh/Kg
High energy density: maximum voltage 4.45V, minimum voltage 3.0V;
Weight energy density >290Wh/Kg
- ② 循环性能：1C充3C放1000周循环保持率85%
Cycle performance: 1C charge 3C discharge, 1000 cycles retention rate of 85%
- ③ 高温储存性能：60°C储存30天不胀气
High temperature storage: performance 60°C storage for 30 days without flatulence
- ④ 电芯倍率：3-5c
Cell c-rate:3-5c
- ⑤ 应用领域：测绘无人机、巡查/监视无人机、消防/安防无人机
Applications: mapping drones, patrol/surveillance drones, fire/security drones.



超低温磷酸铁锂电芯

Ultra-low temperature lithium iron phosphate (LIFEPO4) cell

电芯特征 Major characteristic:

① 超低温放电: -60°C 3C放电、 -70°C 1.5C放电

Ultra-low temperature discharge: -60°C 3C discharge, -70°C 1.5C discharge

② 温度范围广: 可满足 $-70\sim 45^{\circ}\text{C}$ 使用;

Wide temperature range: can meet $-70\sim 45^{\circ}\text{C}$ usage;

③ 安全性能高: 符合GB31241、UL1642、EC62133等安规要求。

High safety performance: in line with GB31241, UL1642, EC62133 and other safety requirements

④ 应用领域: 应用于特种装备、航天工业、深潜装备、极地科考、医疗电子等应用领域, 工程机械启动电源及12V-24V UPS

Application: Used in special equipment, aerospace industry, deep dive equipment, polar research, medical electronics and other application fields, construction machinery starting power supply and 12V-24V UPS.

-60°C 3C放电曲线



异形及扣式电芯 Shaped Battery

电芯特征 Major characteristic:

电芯特性 Features of Battery

- ① 形状各异：充分利用空间，可根据用电设备电池仓的形状设计对应的电芯形状。

Shaped battery: Improve space utilization to the maximum, Grepow could base on device battery compartment into specialized shapes;

- ② 专利工艺：制袋工艺，有效防止内短路，实现低内阻。

Patented working craft: Enveloping craft, avoid the inner short circuit, and provide low inner resistance;

- ③ 单体电芯能量密度比高，可达 275Wh/kg。

Highest energy density, could achieve 275Wh/Kg

- ④ 最大化空间利用率

Maximum space utilization.

- ⑤ 应用领域：如手表、手环、戒指、眼镜、手套、项链、服饰及鞋等

Usage fields: Such as smart watch, smart band, smart ring, VR/AR, gloves, necklace, etc.

异形电芯循环特性 Shaped Battery Cycling Features

常温状态下，可实现 0.5C 电流充放，循环寿命达1000周，容量保持率 88%以上。

In regular room temperature, could realize 0.5C charge/discharge, cycle life could go by 1,000 cycles, capacity retention rate up to 88%



BMS开发

Lithium iron phosphate (LIFEPO4) cell

高精度SOC算法

High precision SOC algorithm

电流、温度、电压报警和多重保护

Current, temperature, voltage alarms
and multi-protection

短路保护

Short circuit protection

防打火

Anti-spark

防反接

Anti reverse connection

自加热功能

Battery self-heating

均衡功能

Battery self-balancing

蓝牙通讯

Bluetooth communication

APP在线升级

APP Online upgrade

UAVCAN Jiyi/Boying/VK/PX4/Ardupilot Automatically

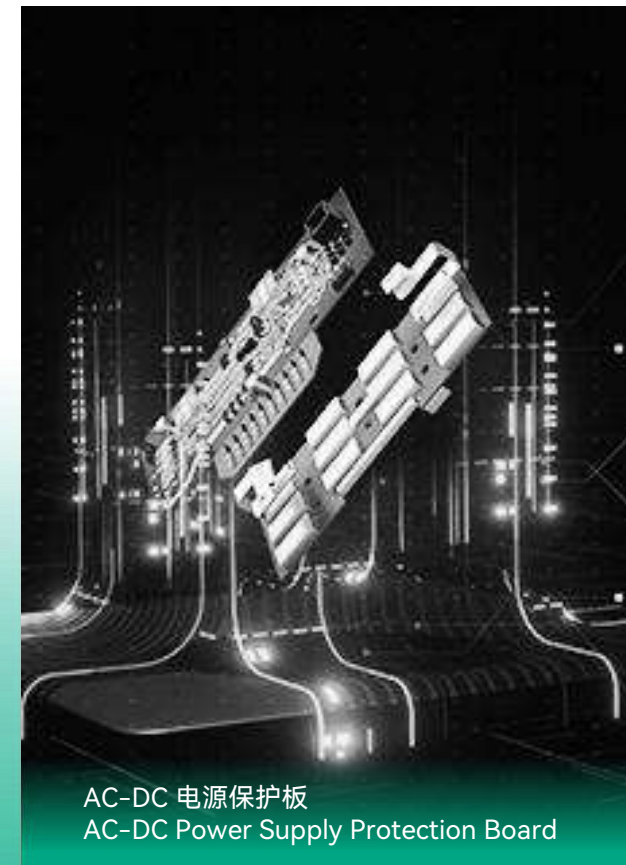
Communication 6S/12S/14S/18S/24S Solution



主要功能 Main Functions:



充电保护板 Charging Protection Board
多串口操作 Multiple Serial Port Operations



AC-DC 电源保护板
AC-DC Power Supply Protection Board

应用领域 & 案例分析

COMPANY PRODUCING
CAPACITY & ABILITY



02

RECHARGEABLE BATTERY



应用领域分享

车载能源
On-board
energy



应急启动电源
Emergency starting
power supply

异形配套
special-shaped



安保安防
Security and
defense



海事设备
Maritime equipment



测绘航拍
mapping drone



无人机
UAV

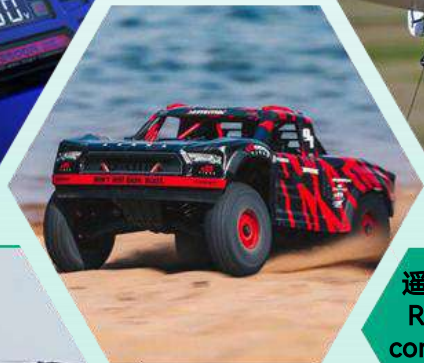


农业植保
Agricultural

遥控航模
remote control
model aircraft



遥控车模
Remote
control car
model



3C消费类
3C consumer



工业控制电源
Industrial application



能量储存
energy storage



物流无人机
Logistics drone

无人机行业

无人机板块 Drone

- 支持定制高倍率电池及配套BMS方案
- 具备电池自动管理系统，支持自动匹配飞控协议，支持IOS，Android系统通过APP进行信息查询
- 提供配套智能充电器
- Support for customized high discharge rate battery with smart battery manage system(BMS)
- Provide the smart battery products, self-fit to the drone controller protocol, add the function of battery self managing system, support ios, Android
- provide the set of the smart charger.



RC模型

RC model

格氏ACE、GENS ACE、TATTU已成为海内外模型市场一线品牌，针对全球市场需求开发了多系列的高倍率电池产品。
GENS ACE, TATTU has become a first-line brand in the model market at home and abroad, and has developed multiple series of high-rate battery products for the global market demand.



国内市场（含港澳台）主营航模、车模系列



海外市场，主营航模、车模系列



国内及海外市场，主营FPV 系列

充电器



TA1000

- AC 100V-240V
- Fuel Generator 1000W
- **25A Max**
- LiPo/LiHV 1-7S
- 2 Channels
- Soft pack Intelligent Charging
- Charge/Storage
- Prototype Stage



TA3200/TA3200HV

- AC 100V-240V
- AC110V: 10A/16A/22A
- AC220V: 6A/16A/32A
- Smart battery automatically charging
- LiPo/LiHV 6-14S
- 2 Channels
- Charge/Storage
- Prototype Stage



TA7200

- AC3000W10%
- Fuel Generator 7200W
- **120A Max**
- LiPo/LiHV 12-14S
- 398*225*217mm
- 2 Channels
- Prototype Stage



TA9000

- AC 100V-240V
- Fuel Generator 9000w
- **120A Max**
- LiPo/LiHV 12-22S
- 583*412.3*435.9mm
- 23kg
- Prototype Stage



TA9000PRO

- AC 100V-240V
- Fuel Generator 9000w
- **120A Max**
- LiPo/LiHV 12-18S
- 398*225*308mm
- 14kg
- Prototype Stage

支持Tattu智能电池自动充电，无需设置任何参数，充电值已编程在BMS中，充电器根据电池SOC、电压、温度对电池进行充电。

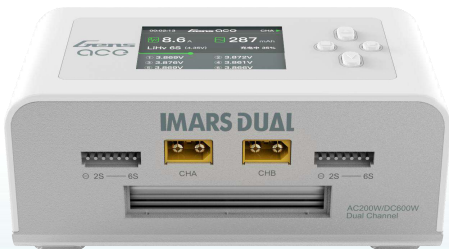
Support Tattu intelligent battery automatically charging without setting any parameters, the charging value has been programmed in the BMS, and the charger will charge the battery based on the battery SOC, Voltage, Temperature.

充电器



Imars MINI

- DC 5V-20V
- Fuel Generator 60W
- DC 3A
- LiPo / LiHV / LiFe(2-4S)
- NiMH(2-12S)
- 2 Channels
- 85X55X21mm
- 64g



Imars Dual

- AC 100-240V ; DC 1-30V
- AC 200W ; DC 2X300W
- DC 30A
- LiPo / LiHV / LiFe / Li-Ion(1-6S)
- NiMH / Cd(1-16S)
- 2 Channels
- 145X76X62mm
- 530g



Imars D300

- AC 100-240V ; DC 1-30V
- AC 300W ; DC 2X350W
- DC 34A
- LiPo / LiHV / LiFe / Li-Ion(1-6S)
- NiMH / Cd(1-16S)
- 2 Channels
- 85X55X21mm
- 64g



Imars D1000

- AC 100V-240V
- Fuel Generator 1000W
- **25A Max**
- LiPo/LiHV 1-7S
- 2 Channels
- Soft pack Intelligent Charging
- Charge/Storage
- Prototype Stage

支持运用G-Tech技术的多功能智能充电器, 同时保持对非智能电池的兼容性。在接入G-Tech智能电池时, 能自动识别电池类型、电压等参数, 实现即插即充, 精准充电。

Supports the use of multi-functional smart chargers utilizing G-Tech technology while maintaining compatibility with non-smart batteries. When connected to a G-Tech smart battery, it can automatically identify the battery type, voltage, and other parameters, enabling plug-and-charge functionality and precise charging.

应急启动电源 Jumpstarter

规格参数/Specification Parameter

电池类型/Battery types

锂聚合物电池 LiPo/磷酸铁锂电池 LiFe4Po

放电电流/Discharge current

从2000A-4000A，可定制/From 2000A to 4000A pulse current, provide the customization plan

工作温度范围/Usage temperature range: -40°C-60°C

启动电压/Startup voltage: 12V-36V

功能特点/Function Features

带气泵、水泵、吸尘器多功能合一/Multifunction within,such as air inflator,water pump,vacuum.

500流明高亮手电筒/500 lumen flashlight

一键切换，自动启动/Smart startup,one button switch functions

外置OLED显示屏，操作信息实时呈现/OLED screen, real time message display.

智能软件管理/Smart software control

低温环境启动/Low temperature usage available

超安全、稳定、长寿命/High safety,stable function,long lifetime

可用于各类装备车辆/Large range usage for equipments and vehicle



适用于/Support for:

特种车辆、房车、越野车等各种车辆。

Special vehicles,recreational vehicles,off road vehicles and so on.

智能穿戴产品应用

头戴式设备智能头盔、战术护目镜/VR/AR devices and HUD devices

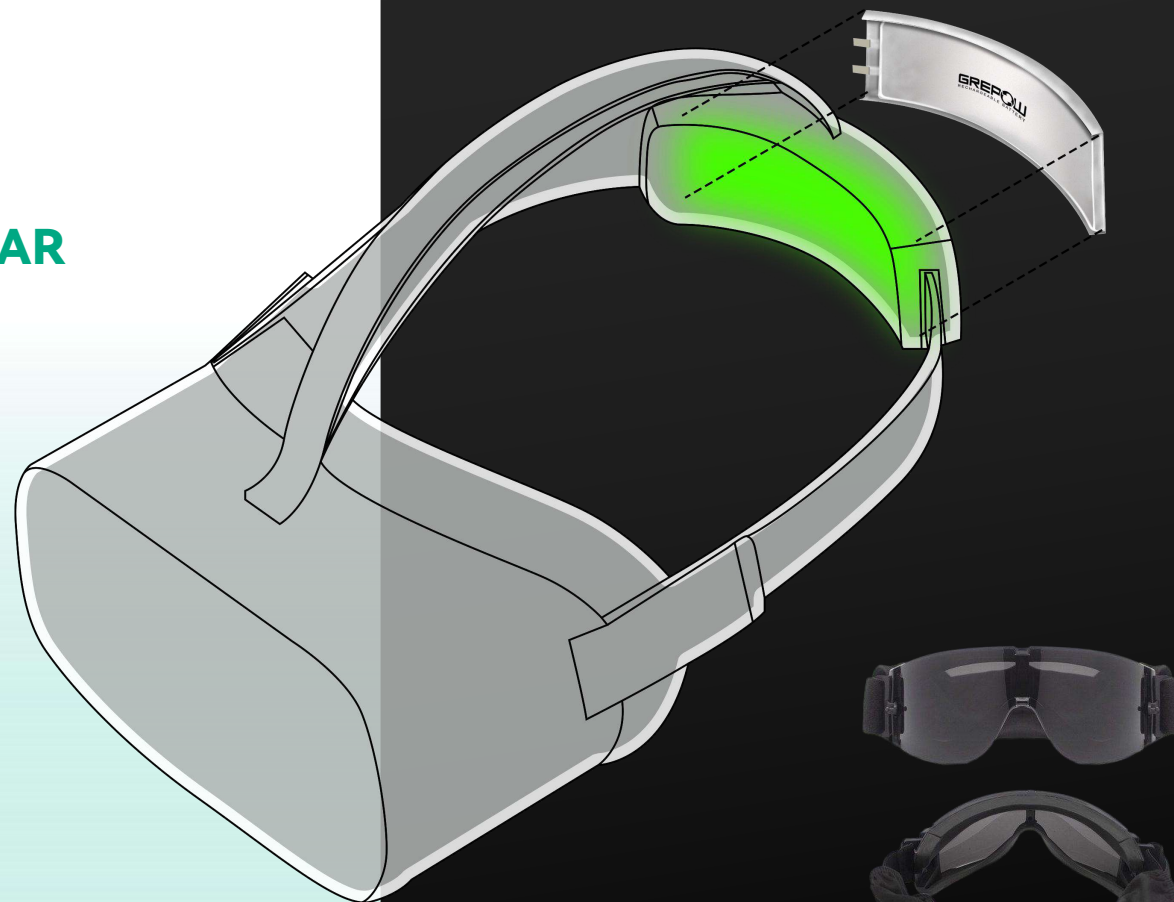
利用内部空间，最大化续航

Maximum space utilization to the highest capacity

多种异形电池方案，不影响使用体验

multiple shaped battery plan, improve user experience

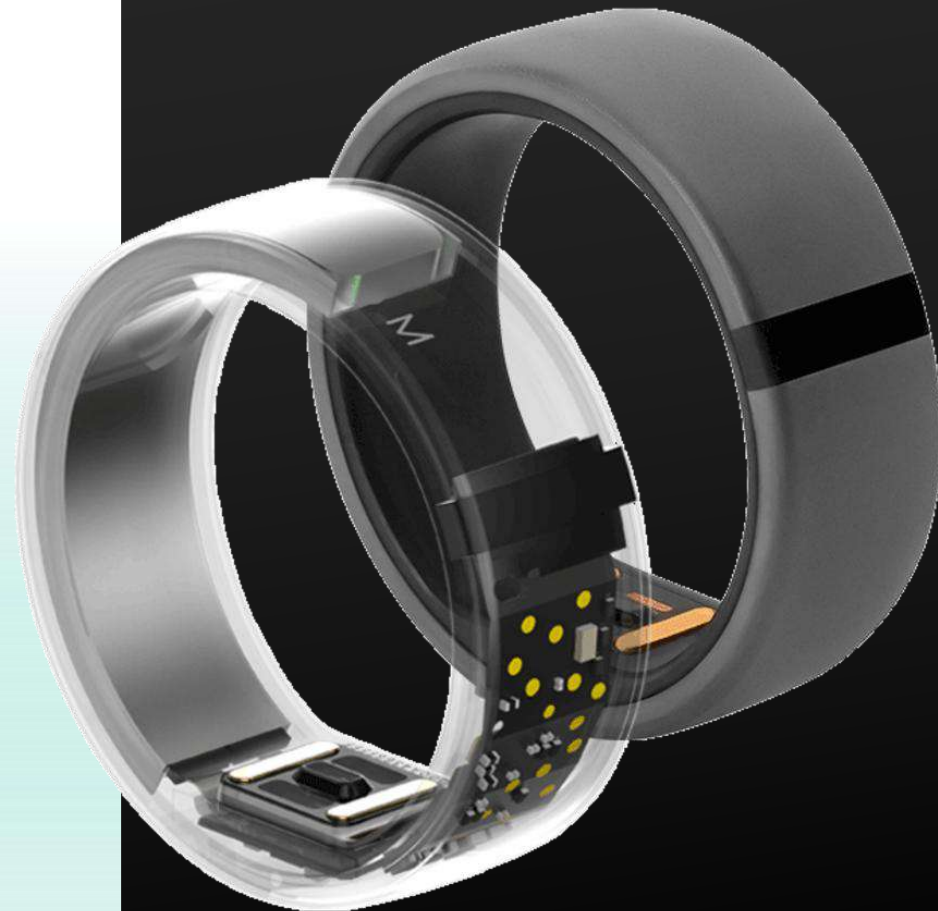
- 头戴式智能设备/ Headset smart devices
- 智能眼镜/ Smart glasses
- AR/VR设备/VR/AR glasses



智能穿戴产品应用

环形穿戴设备 Curved wearable devices

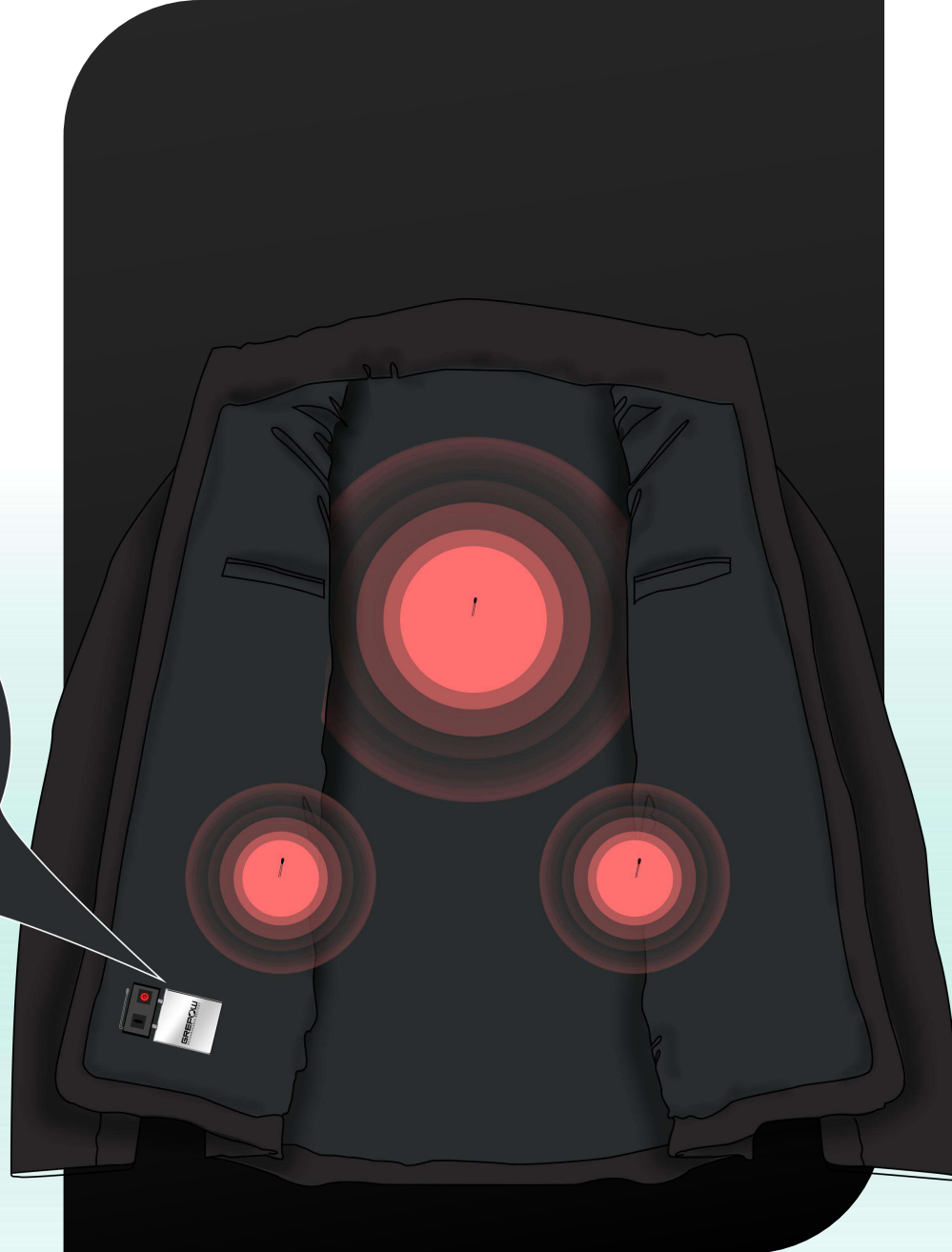
- 解决弯弧型产品用电需求
Deal with curved devices requirement
- 快充、长续航
Fast charging, longer working time



智能穿戴产品应用

加热设备方案 Heating Devices Solution

- 便携且可拆卸，安全可靠/Easy for assemble, high safety and reliability
- 低温环境下放电性能出色，发热快/Good discharge ability in low temperature
- 高能量密度却更轻更薄/High energy density with thinner and lighter
- 提供专业成套解决方案/Provide professional devices solution



发展定位

精耕细作，专业细分

科技创新不仅仅来自于自身学习和进步，同时需要对前沿项目进行配合和理解；项目落地是共同愿景，但是项目配合与专业细分领域的经验配合亦是重点，为技术团队技能进行拉高和了解市场情况有重要作用！格瑞普一直秉承着急客户之所急，尊重理解每一位客户！

- 合作单位：我司合作有70+ 的全球五百强企业，200+创新型方向企业，3000+全球高校项目
- 配合方向：针对航空航天，深海探索，可穿戴健康监测，农用植保，地理测绘，民生服务等项目，2024年，格瑞普电池公司，日新增项目平均17个；
- 公司信条：以细分领域为核心，致力于“小批量，多品种”，灵活应用，配合订制，专业工程服务，真实落地能力！



发展定位

细分领域，明确赛道

基于工厂产品特性，明确自身细分领域及赛道；利用优势制造能力，发掘更多市场机遇并强化出海能力；

- RC娱乐：基于我司高倍率电池特性，提供品质第一的可定制，可量产产品；让客户买的放心，玩的顺心；
- 低空经济：把握时代浪潮，紧跟政府号召，以我司无人机能源系统深耕优势，配合固有领域和新兴领域产品生态创新，实现以技术第一的项目落地方式；
- 可穿戴类异形产品：以专利生产能力，强化创新概念并提供优质服务，为客户概念产品助力，配合客户测试实验及改良，实现产品本身量产
- 多自主品牌并行：利用现有平台全部资源，以旗下自主品牌Gens ace, Tattu, Lokithor, Grepow Shaped Battery为品牌核心，同步配合客户OEM/ODM产品，共同绘制未来发展蓝图；



应用领域及案例分析

企业使命

- ü 专业电池研发及制造
Professional battery R&D and manufacturing
- ü 产品方案落地及量产
Product solution implementation and mass production
- ü 全世界最优秀的电源供应商
The world's best power supplier



藉由我们创新及可靠的产品
赋予客户改变自己的权力

With our innovative and reliable products
Empower customers to change themselves

核心价值观

平等尊重 感恩正直 团队担当 传承创新
core value

Equality and respect, gratitude and integrity, team
responsibility, inheritance and innovation

GREPOW

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THANKS FOR LISTENING

深圳市格瑞普电池有限公司
SHENZHEN GREPOW BATTERY LTD.,CO

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