
Illuminate The World
Empower The Future
Huaping Smart Information Technology (Shenzhen) Co., Ltd
AVCON

# CONTENT

# 01

# Company Introduction

# HUAPING GROUP

Huaping group. (stock code: 300074) is a well-known video product and application provider in China. It masters core technologies such as video processing, video and audio encoding and decoding, and network adaptability. It is committed to providing users with leading video and audio communication products and professional smart city industry visualization application solutions through the industry-oriented innovative application of video + technology, promoting the innovation of business models in various industries and improving the level of intelligence in people's lives.

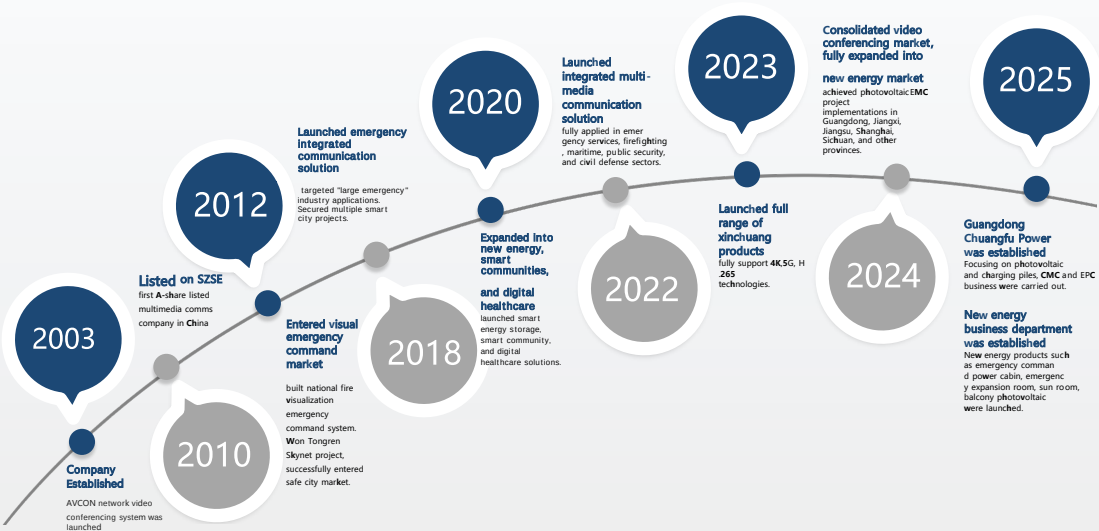
Huaping has successfully laid out new energy and smart cities while stabilizing the video market, and launched new industry solutions for smart energy storage and smart communities.

**The first multimedia communication company listed on A-STOCK market in China**

**The leading provider of visual command and dispatch platform in China**

**One-Stop Provider of clean energy solutions**

# Development History



# International Certification

应急通信优秀解决方案征集活动

一等奖

方 案 名 称：全场景应急通信指挥系统解决方案

获 奖 单 位：华平信息技术股份有限公司

主要完成人：吴建军、徐春勇、鞠保平、郭浩军、梁志周、王军、张政

2021-EC1A-04001

2021年9月29日

AVCON

KYLINSOFT 麒麟软件

麒麟软件NeoCertify认证

华平信息技术股份有限公司

AVCON全媒体融合通信平台软件（简称U8）

与

麒麟软件有限公司

银河麒麟高级服务器操作系统（兆芯版）V10

银河麒麟高级服务器操作系统（海光版）V10

银河麒麟高级服务器操作系统（AMD64版）V10

完成兼容性测试，能够达到通用兼容性要求及性能、

可靠性要求，满足用户的关键性应用需求

特此颁发NeoCertify认证

华平信息技术股份有限公司

2022年10月18日

麒麟软件有限公司

2022年10月18日

证书编号：202210185-032

统信软件产品互认证明

AVCON

【认证产品】

【认证结论】

华平信息技术股份有限公司

证 书

2024中国国际社会公共安全产品博览会

优秀创新产品奖

嵌入式移动图传终端

华平信息技术股份有限公司

中国安全防范产品行业协会

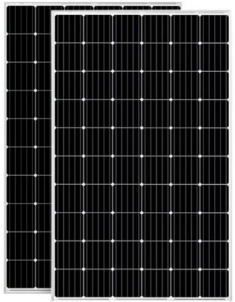
二〇二四年十月

02

# Main Products

# Balcony Solar System

- Environmentally Friendly
- Save on electricity bills
- Easy installation
- Dropshipping



## Product Advantages

- The photovoltaic system has a long life and is easy to maintain, requiring only regular cleaning of the panels
- The system has a simple structure and is quick to install, without the need for large-scale renovations
- It does not occupy the ground or roof, making full use of space.

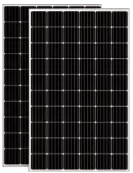
| Product Specifications | |
|---|---|
| Maximum Power | 430W |
| Power tolerance | 3% |
| System voltage | 22VDC |
| Maximum input current | 12.5A*2 |
| Output rated voltage | 230VAC |
| Output rated frequency | 50Hz |
| Weight | 60kg |
| Cell arrangement | 6*18 |
| Open circuit voltage (V) | 40.95V |
| Short circuit current (A) | 13.41A |
| Packing size | 175*117*12cm |
| Packing quantity | 260套 |
| STC: Light 1000W/m² Module temperature 25°C AM=1.5 | |

# Residential Solar System

- Policy Subsidy
- Emergency backup
- Save on electricity bills
- Environmental protection and emission reduction

## Product Advantages

- Produce green and environmentally friendly clean energy and reduce dependence on the power grid
- Provide backup power during power outages to enhance power supply reliability
- Reduce dependence on fossil fuels and reduce carbon emissions
- Utilize peak and valley electricity price differences to reduce electricity expenses

### N TYPE TOPCON BIFACIAL SOLAR PANEL

Max Module Efficiency 22.64%+

Positive power tolerance(0-+5w)

Reduced hot spot risk with optimized design

Higher energy yield with lower temperature

### THREE PHASE HYBRID INVERTER

100% unbalanced output, each phase

High voltage battery higher efficiency

AC couple to retrofit existing solar system

Support storing energy from diesel

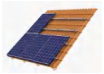

### SOLAR POWER SYSTEM INVERTER

High voltage battery higher efficiency

DC couple and AC couple to retrofit existingsolar system

6 time periods for battery charging/discharging

Support storing energy from diesel generator

| Product Name | AV-3KW-HY | AV-5KW-HY | AV-10KW-HY |
|---|---|---|---|
| Solar panels550W | 6PCS | 10PCS | 20PCS |
| DC disconnect switch | 1PCS | 2PCS | 3PCS |
| Home inverter | AVC-3K-SG04LP1-EU | AVC-5K-SG03LP1-EU | AVC-10K-SG04LP3-EU |
| Wall-mounted lithium iron phosphate battery | 5Kwh | 5Kwh | 10kwh |
| DC Cable4mm | 100m | 200m | 400m |
| AC disconnect switch | 1PCS | 1PCS | 1PCS |
| MC4 Connectors | 10Pairs | 10Pairs | 10Pairs |
| Installing the system | Customized products based on roof/ground installation | | |
| Photovoltaic installation tools | 1Set | | |

| Product Name | AV-15KW-HY | AV-20KW-HY | AV-30KW-HY |
|---|---|---|---|
| Solar panels550W | 30PCS | 42PCS | 63PCS |
| DC disconnect switch | 4PCS | 6PCS | 9PCS |
| Home inverter | AVC-5K-SG03LP1 | AVC-10K-SG03LP1 | AVC-10K-SG04LP3 |
| Wall-mounted lithium iron phosphate battery | 15kwh | 20kwh | 30kwh |
| DC Cable4mm | 600m | 800m | 1000m |
| AC disconnect switch | Customized products based on roof/ground installation | | |
| MC4 Connectors | 1Set | | |

## Packing List

Complete solar solutions ready for installation. Cost-effective and easy to distribute.

Hybird 3-30KW


| | | | |
|---|---|---|---|
| 30 Years | Photovoltaic panels | 15 Years | Installing the system |
| 10 Years | Inverters and Chargers | 10 Years | battery |

### Photovoltaic mounting system

Mounting rails and rail splicing kits: Al6005 & SUS304 bolts.
Mid-end clamps: 35, 40, 45, 50mmL foot pitch hangers & hangers
Bolts optional
Cable clamps and tie straps (optional) Ground clamps and bolts (optional)

### DC cable and MC4 connector

Cross section: 4 mm2, 6 mm2 optional
Rated voltage: 600VDC (UL)/1000VDC (TUV)
Rated current: 55A, 70A
Color: Black for STD, red optional. Service life: <25 years

### DC and AC circuit breaker

IP rating: IP66
Rated voltage: 1000VDC
Connection type: M20, M25, MC4
Rated current: 16A, 20A

### Photovoltaic tools

Wire and cable cutters and strippers,
MC3 MC4 compressors
MC4 connector assemblies
Removal tools

# Photovoltaic Integrated House

- Energy saving
- Environmental friendly
- Comfort
- Fast

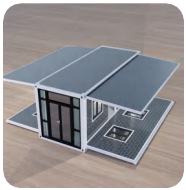
| name | 700 double-wing expandable house | 2200 double-wing expandable house |
|---|---|---|
| Dimensions (transportation) | 5900*70*2480mm | 5900*2250*2480mm |
| Size (extended) | 5900*4880*2480mm | 5900*6350*2480mm |
| Appearance | White/Gray/Black | White/Gray/Black |
| layout | 1 room and 0 living room | 2 bedrooms and 1 living room |
| bathroom | / | Include |
| kitchen | / | Include |
| Support facilities | Electrical systems, sockets, switches, lighting fixtures | |

**Rooftop solar photovoltaic**

| Module type | Flexible components | Glass components |
|---|---|---|
| Maximum power | 320W | 450W |
| Power tolerance | ±5 | ±3 |
| Open circuit voltage | 39.6VDC | 41 25VDC |
| Maximum operating voltage | 34.5VDC | 34.21VDC |
| Short circuit current | 10A | 1362A |
| Dimensions | 1790-890-1.8mm | 1736-1134-30mm |
| Operating temperature | -30°C-+85°C | -40°C-+85°C |
| Weight | 47kg | 23.5kg |
| STC: Light 1000w/m Module temperature 25*CAM=1.5 | | |

Step 1

Step 2



Step 3

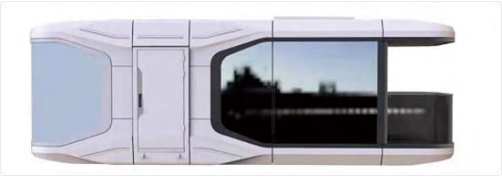
Step 4

Step 5

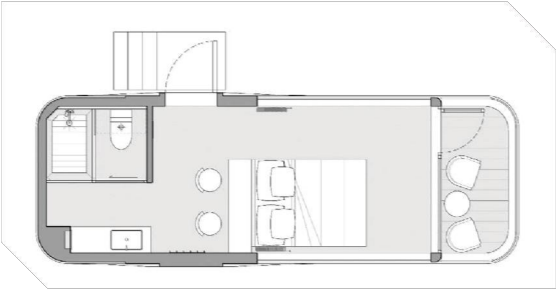
# Space Capsule

- Flexible deployment
- Environmental protection and energy saving
- Intelligent facilities
- Unique design and experience
- Emergency and temporary accommodation plans

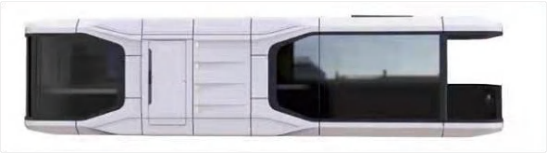
## Product Model: K2



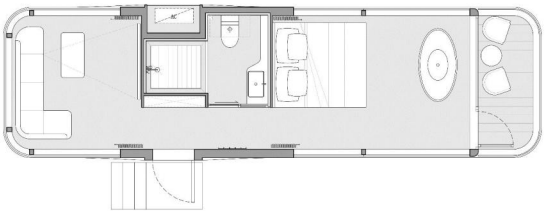
Product size: Length: 8.5M Width: 3.3M Height: 3.2M
Building area: 28.0㎡



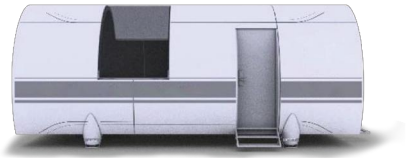
## Product Model: K3



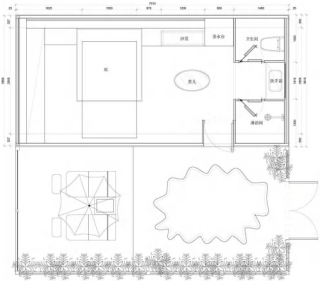
Product size: Length: 11.5M Width: 3.3M Height: 3.2M
Building area: 38.0㎡



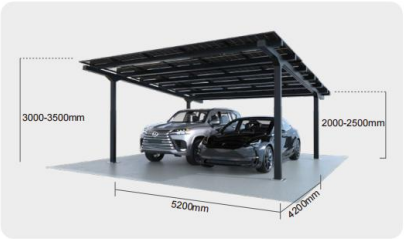
## Product Model: K5



Product size: length: 7.5M width: 3.6M height: 3.2M
Building area: 27.0㎡




Solar Parking Shed
Clean Energy
Save money
Stable structure
Flexible layout


| | Single | Double |
|---|---|---|
| Power Output | 4.815 kW | 8.025 kW |
| Carport Structure Length | 6500 mm | 6500 mm |
| Carport Structure Width | 3000 mm | 5200 mm |
| Carport Peak Height | 3000-3500 mm | 3000-3500 mm |
| Carport Clearance Height | 2000-2500 mm | 2000-2500 mm |
| Solar Panels | Polaris 535W x 9PCS | Polaris 535W x 15PCS |

### Super fast charging

Fast charging: 5 minutes of charging, 120 kilometers of range

### Normal fast charging

Stable charging, fully charged in 30 minutes , easy cruising range

### AC slow charging

For home use, 7 hours charging, protect your car battery


Energy storage cabinet


Photovoltaic panels


Fast charging pile


Super charging pile


Battery detection


Car Wash


Lounge


Bathroom

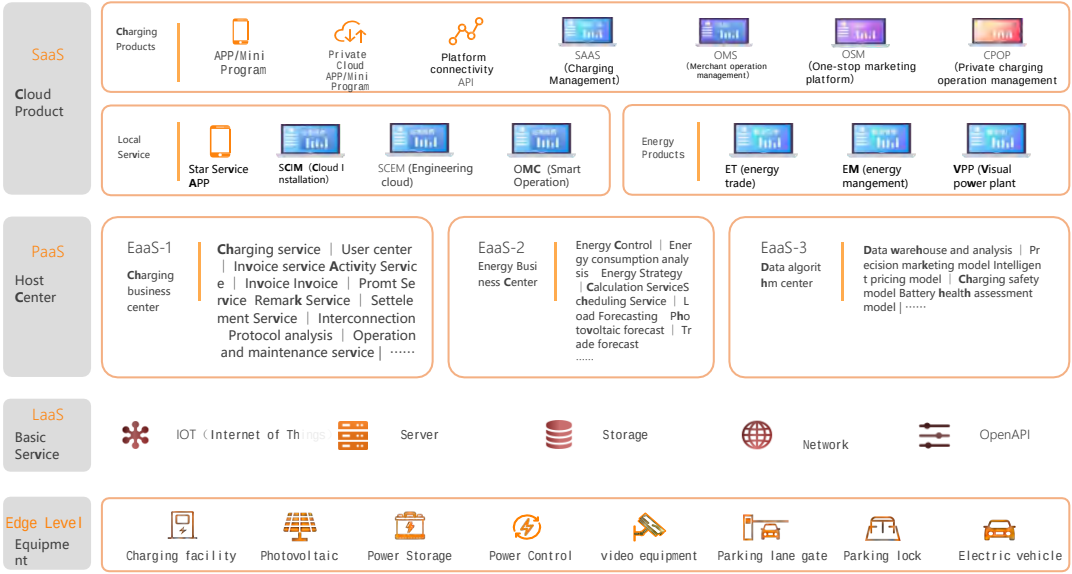

Massage Chair


Coffee machine


Unmanned vending machine


Boot screen


Welcome Light



SaaS
Cloud Product
Charging Products
APP/Mini Program
Private Cloud APP/Mini Program
Platform connectivity API
SAAS (Charging Management)
OMS (Merchant operation management)
OSM (One-stop marketing platform)
CPOP (Private charging operation management)
Local Service
Star Service APP
SCIM (Cloud Installation)
SCEM (Engineering cloud)
OMC (Smart Operation)
Energy Products
ET (energy trade)
EM (energy mangement)
VPP (Visual power plant
PaaS
Host Center
EaaS-1
Charging business center
Charging service | User center | Invoice service Activity Service | Invoice Invoice | Promt Service Remark Service | Settelement Service | Interconnection Protocol analysis | Operation and maintenance service | ……
EaaS-2
Energy Business Center
Energy Control | Energy consumption analysis Energy Strategy | Calculation ServiceS cheduling Service | Load Forecasting Photovoltaic forecast | Trade forecast ……
EaaS-3
Data algorithm center
Data warehouse and analysis | Precision marketing model Intelligent pricing model | Charging safety model Battery health assessment model | ……
LaaS
Basic Service
IOT（Internet of Things
Server
Storage
Network
OpenAPI
Edge Level
Equipment
Charging facility
Photovoltaic
Power Storage
Power Control
video equipment
Parking lane gate
Parking lock
Electric vehicle

# Heavy truck charging and swapping station

- Efficient energy replenishment
- Fast battery replacement
- Improve operational efficiency
- Extend battery life



| Emergency energy storage power station parameters | |
|---|---|
| Cell Type | LFP-3.2V-314Ah |
| Rated power[kw] | 100kw |
| Output Power(kw) | 120 (single shot), 480 (total) |
| Battery rated capacity | 1044kwh |
| Nominal voltage[V] | 665.6V |
| Voltage range[V] | 582.4~748.8V |
| Charge and discharge rate | ≤0.5CP |
| Weight of a single battery pack | ~330kg |
| Total battery pack weight | ~6600 kg |
| Charging temperature[℃] | 0~50 |
| Cycle life | ≥6000 Times |
| Number of charging guns | 4 (liquid cooling) |
| Voltage stabilization accuracy | ≤±0.5% |
| Steady flow accuracy | ≤±1% |
| Fire protection system | Support PACK-level, cluster-level, and box-level fire protection |
| System communication interface | CAN/Ethernet/RS485/4G |

# Heavy truck charging and battery replacement

| Position | 3+1 | 4+1 | 5+1 | 7+1 | 11+1 | 12+2 |
|---|---|---|---|---|---|---|
| Maximum number of battery replacements per day | 96 | 120 | 144 | 180 | 220 | 330 |
| (units)Average daily power exchange (kWh ) | 28800 | 36000 | 43200 | 54000 | 66000 | 99000 |
| Daily maximum income (yuan)Application Scenarios | 12960 | 16200 | 19400 | 24300 | 29700 | 44550 |
| Application scenarios | MINI station limited by space | | | Conventional Station | Expansion Station | Dual channel station |
| Note: It takes 60 minutes to fully charge a 400KWh battery; 5-8 minutes to replace the battery; the battery replacement service fee is 0.45 yuan/KWh | | | | | | |

Automatic battery swap station power **240-320KW**

The roadbed must bear at least **60** tons of load

Automatic battery swap station power **240-320KW**

Charging area power **240-320KW**

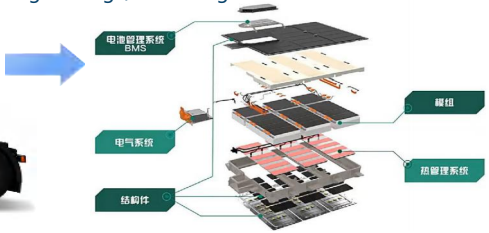
Power distribution control cabinet capacity **2000-2500KVA**

Transformer (converts **10KV DC** power from the grid to **280V DC** power)

Inverter for reverse power transmission

# Key battery pack components

Battery pack = battery module + cooling system + battery management system (BMS) + battery box shell and bracket + high voltage/low voltage interface




Lithium

cell

Modules

PACK

Electric heavy truck

Charging and swapping stations

## CTB Battery

In order to reduce power loss in winter, a thermal management system can be installed inside to maintain the battery temperature, but the loss is still slightly higher than under normal management. The system installation cost is about 3,000 yuan, and the system can save 3,000 yuan in electricity bills each year.

**Provide one-stop heavy truck battery replacement service, and realize asset monitoring, intelligent scheduling and route planning through the cloud platform**

## "People-vehicle-station-battery-grid" five-in-one smart service platform

**Battery Bank Cloud Platform**

- Full life cycle management
- Intelligent charging and discharging strategy
- Battery traceability

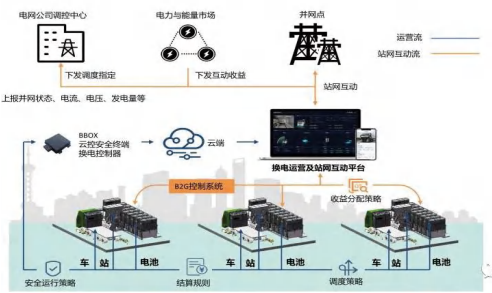
**Charging and swapping cloud platform**

- Charging and swapping operation
- Intelligent operation and maintenance
- Financial management
- Payment and clearing integration

**Vehicle Operation Cloud Platform**

- Vehicle-driver-fleet-settlement
- Energy consumption analysis
- Load rate analysis
- Visual management of operations

**Supporting efficient vertical linkage between vehicle, station, battery and power grid**




**Improve operational efficiency by approximately 15%**

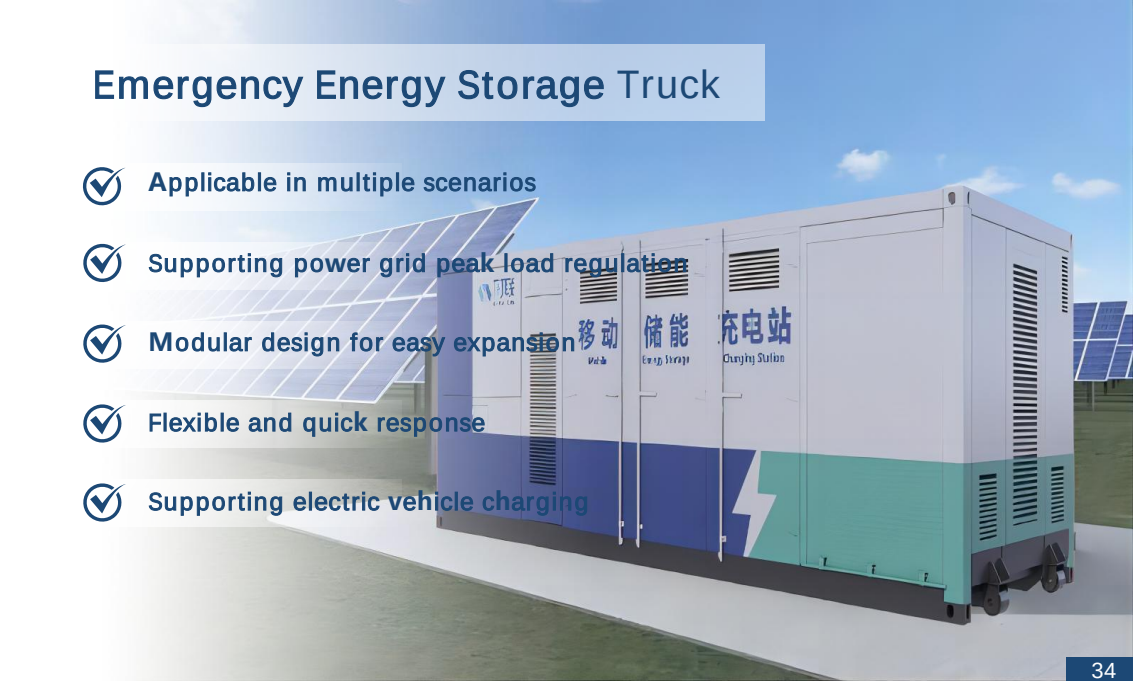

移动储能充电站


智能充换电站


电动重卡充电站

# Emergency Energy Storage Truck

- Applicable in multiple scenarios
- Supporting power grid peak load regulation
- Modular design for easy expansion
- Flexible and quick response
- Supporting electric vehicle charging





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| Voltage Range[V] | 582.4~748.8V |
| Charge and Discharge rate | ≤0.5CP |
| Weight of single battery pack | ~330kg（1P52S） |
| Weight of all battery clusters | ~6600 kg（5P208S） |
| Charging Temperature[℃] | 0~50℃ |
| Cycle Life | ≥6000 Times |
| No. of Charging Guns | 4 (liquid cooling) |
| Volatage regulation Accuracy | ≤±0.5% |
| Current Regulation Accuracy | ≤±1% |
| Fire Protectiion System | Support PACK-level, cluster-level, and box-level fire protection |
| System Communication interface | CAN/Ethernet/RS485/4G |
| Protection Level | IP55 |
| Size | 6800*2550*2410mm |
| Weight | ~20T |

# Mining Energy Solutions

- Improve energy efficiency
- Reduce energy consumption
- Environmental protection and emission reduction
- Optimizing energy

# Integrated Energy Management Platform

Access wind power, photovoltaic, energy storage, charging piles, and transformer data to monitor the operating status of all equipment in real time

Realize the regulation of energy storage, charging piles, and other loads in various scenarios, increase the proportion of clean energy, and reduce energy consumption and energy costs

On the basis of reducing its own carbon emissions and energy costs, it interacts with the large power grid, participates in green power trading and demand-side response, and obtains additional income