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让科技与生活共铭

LET TECHNOLOGY RESONATE WITH LIFE

创业 / 极致 / 务实 / 敏捷



东莞铭普光磁股份有限公司
Dongguan Mentech Optical & Magnetic Co., Ltd.

2024版 >>>

PRODUCTS CONTENT

让科技与生活共铭

LET TECHNOLOGY RESONATE WITH LIFE

能源产品线

Energy Product Line

09/14

通信电源

COMMUNICATIONS POWER

15/20

通信光伏储能

COMMUNICATION PHOTOVOLTAIC

ENERGY STORAGE

21/24

工商业光伏储能

INDUSTRIAL AND COMMERCIAL

PHOTOVOLTAIC ENERGY STORAGE

COMPANY PROFILE



公司简介

铭普是一家集研发、生产、销售、服务于一体的高新科技企业，品牌成立于2008年，多年以来，铭普在5G及网络数据通信、工业互联网、智慧家庭等应用场景领域为客户提供优质的产品和服务解决方案。现在，铭普又凭借多年基础科技产品的积淀，厚积薄发，走到了终端消费者面前，步入新领域，同时成为新的科技生活品牌。

Mentech, established in 2008, is a leading high-tech company with R&D, manufacturing, sales and service. Mentech has been providing customers with high-quality products, technical solutions for 5G, network data communications, industrial internet, and smart homes for many years. With years of accumulated basic scientific and technological product design and production experience, Mentech has come to the forefront of consumers, stepped into a new field, and become a scientific and technological life brand.

铭普以科技创新和智能制造的基因，坚持以用户需求为导向，提供有竞争力的高品质产品解决方案，实现价值分享、担当社会责任，凭借“共鸣普世”的品牌精髓和“创业、极致、务实、敏捷”的文化理念，为客户做极致，用科技赋能智慧生活。

With the genes of technological innovation and intelligent manufacturing, Mentech focuses on end users' needs, providing competitive high-quality product solutions, realizing shared value, and bearing social responsibility. Committed to the branding essence of "Resonance with the World" and the cultural concept of "Entrepreneurship, Perfection, Integrity, Agility", Mentech excels for customers and empowers smart life with technology.

314

授权专利
Authorized Patent

46

软件著作权
Copyrights

42

高新技术产品
New and high-tech product

39

起草标准
Drafting standards

截至2023年11月近三年数据
As of Nov, 2023, for recent three years

DEVELOPMENT HISTORY

发展历程



Energy Product Line

能源产品线



ENERGY PRODUCT LINE

能源产品线

能源产品线成立以来,一直致力于为客户提供零碳智慧能源解决方案,主要从事高效通信电源系统产品、光伏发电系统产品、电化学储能产品及绿色数据中心产品的开发、生产和销售。产品包括通信电源、配电设备、柜级小型数据中心、行级小型数据中心、混合能源供电系统、分布式光伏发电系统、通信用储能系统、通信用光储系统、户用储能系统及工商业储能系统等。

产品广泛应用于中国移动集团、中国电信集团、中国联通集团及中国铁塔集团,并已建立了长期战略合作关系。相关产品已多次入围国内三大电信运营商及中国铁塔的集团集中采购项目。产品在超过20万个基站\机房安全运行使用,深受用户的认可。

能源产品线具备通信电源模块、光伏变换模块、锂电池模块及相关电源、光伏及储能系统的生产制造能力,完善的质量控制体系、可靠的供应链体系及专业智能的制造平台确保了产品质量可靠性及交付及时性。

Energy product line was established in 2011. It focuses on providing zero carbon intelligence energy solution, and mainly engage in the development and production of high-efficient communication power supply system, photovoltaic (PV) system, electrochemical energy storage system and green data center. Products include communication power supply, cabinet data center, row data center, solar power supply system, hybrid energy power supply system, distributed photovoltaic system, communication energy storage system, communication solar power storage system, family storage system and business-use energy storage system and so on. Products are widely used at China-tower and three largest telecom operators in China. Mentech maintains long term cooperation relationships with them. Products are used at more than 200 thousand base stations and widely accepted. Energy BU has module to system production capability, complete quality management control system and reliable supply chain system to ensure the reliability of products.

通信电源
Communications Power

- 240V转48V电源
240V to 48V power supply
- 组合式电源
Combination power supply
- 模块化电源
Modular power supply
- 一体化自冷型电源
Integrated self cooling power supply
- 一体化电池
Integrated battery

通信光伏储能
Communication photovoltaic energy storage

- 基站/机房储能
Base station/computer room energy storage
- 数据中心储能系统
Data center energy storage system
- 智能锂电模块
Intelligent lithium battery module
- 叠光系统
Stacked light system
- 太阳能系统
Solar system

工商业光伏储能
Industrial and commercial photovoltaic energy storage

- 工业储能柜
Industrial energy storage cabinet
- 屋顶光伏
Roof photovoltaic
- 光储充系统
Optical storage and charging system

01

通信电源

Telecom Power Supply Equipments



通信用48V直流电源系统

48V DC Power Supply System for Telecom

产品具有很宽的输入电压范围和工作温度范围,配置多个热插拔整流模块实现N+1冗余。产品内置智能监控模块,可在本地LCD显示工作参数和告警状态,并可通过RS485/LAN接口对外传输电源工作参数和告警信息。

The product has a wide input voltage range and operating temperature range, and is equipped with multiple hot plug rectifier modules to achieve N+1 redundancy. The product has a built-in intelligent monitoring module, which can display working parameters and alert status on the local LCD, and can transmit power supply working parameters and alarm information through the RS485/LAN interface.

嵌入式开关电源

Embedded Switch Mode Power Supply

产品采用19英寸插箱结构,可以方便嵌入各种标准通信设备机柜。

The product adopts a 19-inch box structure, which can easily embed various standard communication equipment cabinets.



1U100A 嵌入式电源系统 (50A)
1U100A Embedded Power System (50A)



4U200A 模块化电源 (50A)
4U200A Modular Power Supply (50A)



5U300A 嵌入式电源系统 (50A)
5U300A Embedded Power System (50A)



7U300A 嵌入式电源系统 (50A)
7U300A Embedded Power System (50A)



8U300A 嵌入式电源插框 (50A)
8U300A Embedded Power Socket (50A)



8U450A 嵌入式电源插框 (75A)
8U450A Embedded Power Socket (75A)

壁挂式开关电源

Wall Mounted Switch Mode Power Supply

系统结构紧凑,可集成铁锂电池或铅酸电池。

The system is compact and can integrate Li-Fe batteries or lead-acid batteries.

室内型
Indoor



60A 壁挂电源
60A Wall Mounted Power Supply



150A/300A 壁挂电源
150A/300A Wall Mounted Power Supply

室外型
Outdoor Type



60A 壁挂电源
60A Wall Mounted Power Supply



150A/300A 壁挂电源
150A/300A Wall Mounted Power Supply

组合式开关电源

Combined Switch Mode Power Supply Cabinet

产品采用48V/50A或48V/75A整流模块,组成300A~1800A电源系统,适用于各种类型移动通信基站、中小容量交换局、卫星通信、数据通信等场合使用。

The product adopts the 48V/50A or 48V/75A rectifier module, constitute 300A~1800A power supply system which is suitable for use in various types of mobile communication base stations, small and medium-sized capacity exchanges, satellite communications, and data communications.



MER048R-300A
380Vac/48Vdc/300A



MER048R-600A
380Vac/48Vdc/600A



MER048R-1000A (50A)
MER048R-1800A (75A)
380Vac/48Vdc/1000

室外开关电源

Outdoor Switch Mode Power Supply

室外电源系统由开关电源、铅酸/铁锂电池组、风扇/TEC空调/热交换散热系统和防水防尘机柜(IP55)组成,广泛应用于户外环境下的通信宏/微基站、接入网、传输设备、卫星地面站和微波通信设备等领域。

The outdoor power supply system consists of a switch mode power supply, a lead-acid/iron lithium battery bank, a fan/TEC air-conditioning/heat exchange heat dissipation system, and a waterproof dust control cabinet (IP55), widely used in outdoor communication macro/micro base stations, access networks, transmission equipment, satellite ground stations and microwave communication equipment and other fields.



三柜/Three cabinets
380Vac/48Vdc/600A/400Ah
Three Cabinets



双柜/Double cabinet
380Vac/48Vdc/600A/400Ah
Double Cabinets



单柜/Single cabinet
380Vac/48Vdc/300A/200Ah
Single Cabinet



智能微站电源
 Intelligent microsite power supply
 MER048X-8K
 220Vac/48Vdc/8kW/100AH

一体化自冷型电源
 Integrated self cooling power supply
 MER048X-1K/2K/3K
 220Vac/48Vdc/1kw/2kw/3kw

一体化自冷型电源
 Integrated self cooling power supply
 MER048X-6K
 220Vac/48Vdc/6kw

一体化电池
 Integrated battery
 MBB048-500MO
 48V/50AH



逆变器
 Inverter
 48Vdc/220Vac/2KVA



混合电池切换单元
 Hybrid Battery Switch Unit
 48V/200A



直流远供电源(局端机)
 DC remote feeding power supply (Local Equipment)
 48Vdc/380Vdc/5000W

通信电源模块 Power Converter Module for Telecom

整流模块 Rectifier Module



MER048-15A
220Vac/48Vdc/15A 1U



MER048-30A
220Vac/48Vdc/30A 1U



MER048-50A
220Vac/48Vdc/50A 1U



MER048-75A
220Vac/48Vdc/75A 1U

直流-直流变换模块 DC-DC Converter Module



D4250
48Vdc/24Vdc



D4540
48Vdc/57Vdc/40A



D45120
双向DCDC 48/100A



D4125
48Vdc/12Vdc/300W

逆变模块 Inverter Module



MEU220-2k
48Vdc/220Vac/2kw



MEU220-3k
48Vdc/220Vac/3kw

应急电源 Power Bank

电信应急电源由内置蓄电池组和控制/变换电路组成,可以延长基站的后备运行时间。便携式或可移动产品用于解决临时应对基站超计划停电问题,固定式的产品用于针对性地延长部分关键负载的后备运行时间。

Power bank for telecommunication consists of built-in battery and control/conversion circuit, which can prolong the backup operation time of the base station. Portable or mobile products are used to temporarily deal with over-scheduled mains blackouts in base stations, and fixed products are used to prolong backup operation time of some critical loads.



拉杆箱式交直流应急电源
 Trailing box type AC & DC
 Emergency Power Bank
 220Vac&48Vdc/50Ah



移动应急电源
 Emergency Power Bank
 48Vdc/200Ah



基站延时电源
 Standby time expander for Basestation
 48Vdc/50Ah



车载储能电源
 Vehicle mounted energy storage power supply
 48Vdc/400AH

通信用电源转换设备 Power Converter Equipment for Telecom



嵌入式直流-直流变换器
 Embedded DC-DC Converter
 24Vdc/48Vdc/100A
 240Vdc(336Vdc)/48Vdc/150A



57V升压电源
 Embedded DC-DC Boost Converter
 48Vdc/57Vdc/120A



通信光伏储能

Communication Photovoltaic
Energy Storage



光伏电源

Pv Power Supply

独立光伏系统

Independent photovoltaic system

MEP048系列光伏电源管理系统,是针对通信行业要求专门设计制造的电源设备产品,全面满足通信行业的高规格要求,产品具有高效MPPT跟踪功能,1U模块化设计,功率密度高,向通信基站设备提供稳定、高效清洁能源。

MEP048 series photovoltaic power management system is specially designed and manufactured for the requirements of the communication industry, which can fully meet the high specification requirements of the communication industry. The products have efficient MPPT tracking function, 1U modular design, high power density, and provide stable, efficient and clean energy to the communication base station equipment.



户外柜式光伏电源
Outdoor PV power supply cabinet



壁挂式光伏电源
Wall-mounted PV power supply



光伏接线盒
PV junction box

混合能源管理系统

Hybrid Energy Management System

MEH048系列混合能源管理系统,可同时管理太阳能、风能、市电、柴油机发电,向通信设备提供稳定、可靠、清洁、高品质能源,起到节能减排作用。产品采用模块化设计,根据配置不同种类、不同数量的模块,可以选择使用这四种能源中的两到四种来组成不同类型、不同容量的供电系统,方便了系统的维护及扩容。系统优先使用绿色能源太阳能、风能输出,减少市电供电。

MEH048 series hybrid energy management system can simultaneously manage solar, wind, mains and diesel power generation, providing stable, reliable, clean and high-quality energy to communication equipment, and playing a role in energy saving and emission reduction. The product adopts modular design, according to the configuration of different types, different number of modules, you can choose to use two to four of the four kinds of energy to form different types of power supply system, different capacity, convenient system maintenance and expansion. The system gives priority to the use of green energy solar energy, wind power output, reduce the mains power supply.



户外型光柴互补电源系统
Outdoor PV-DG Hybrid Power Management System
48Vdc/500A



户外型光电互补电源系统(多用户)
Outdoor PV-Mains Hybrid Power Management System (Multi-user)
48Vdc/600A



室内型风光互补电源系统
Wind-PV Hybrid Power Management System
48Vdc/600A

通信叠光系统

Adding PV system to the existing power

通信叠光系统,是在通信基站/机房原有的供电系统上叠加光伏电源供电系统,光伏供电系统接入原供电系统直流侧,通过光伏控制系统控制输出电压,优先使用光伏发电为基站供电。

This is adding a PV system to the original power supply system of the communication base station or communication room. The PV system is connected to the DC side of the original power supply system, and the output voltage is controlled by the PV controller. The photovoltaic power generation is preferentially used to supply power to the base station.



叠光系统
Stacked light system
48V/150A/2U



光伏优化器
PV optimizer
(input 10Vdc-60Vdc)/ output (40Vdc-60Vdc) /550W



光伏汇流箱
PV combiner box
Input 8*16A or 16*16A

数据中心光伏系统

PV system for data center

MEP240系列数据中心叠光系统,是针对数据中心原有的供电系统上叠加光伏电源供电系统,光伏供电系统接入原供电系统直流侧,通过光伏控制系统控制输出电压,优先使用光伏发电为基站供电。

MEP240 is aimed at superimposing photovoltaic power supply system on the original power supply system of data center. The PV power supply system is connected to the DC side of the original power supply system and the output voltage is controlled by the PV controller. The photovoltaic power generation is preferentially used to supply power to the base station.



数据中心光伏系统
PV system for data center

储能系统

Energy storage system

数据中心光、储系统

PV & energy storage system for data center

MEB240系列数据中心光、储系统由光伏发电设备与储能设备组成，储能供电设备也可以独立使用；产品与240V直流负载端直接连接，通过智能控制实现“负荷调节、存储电量、新能源接入、削峰填谷”等功能，减少用户电费支出，降低数据中心的能耗，起到节能减排效果，广泛应用于数据中心机房。

MEB240 series consists of photovoltaic power generation equipment and energy storage equipment. The energy storage equipment can also be used independently; The product is directly connected with the 240V DC bus, The system have the functions of "load adjustment, power storage, new energy access, peak load shedding and valley filling", which reduces the user's electricity bill and energy consumption of the data center, plays an energy-saving and emission-reducing role, and is widely used in the data center computer room.



240Vdc/200Ah



240Vdc/400Ah

机房储能系统

Computer room energy storage system

MEB048系列光储能源管理系统由光伏发电设备与储能设备组成，储能供电设备也可以独立使用；产品与-48V开关电源电池端直接连接，通过智能控制实现“负荷调节、存储电量、新能源接入、削峰填谷”等功能，减少用户电费支出，起到节能减排效果，广泛应用于通信宏基站、通信节点机房。

MEB048 series consists of photovoltaic power generation equipment and energy storage equipment. The energy storage equipment can also be used independently; The product is directly connected with the 48V DC bus, The system have the functions of "load adjustment, power storage, new energy access, peak load shedding and valley filling", which reduces the user's electricity bill and energy consumption of the base station, plays an energy-saving and emission-reducing role, and is widely used in the communications industry.



单柜光储系统

Single cabinet optical storage system
(8KW/40KWh)



双柜光储系统

Dual cabinet optical storage system
(16KW/80KWh)



多柜光储系统

Multi cabinet optical storage system
(32KW/160KWh)

模块及监控平台

Modules and monitoring platform

监控及监控平台

Controller and monitoring platform

监控平台通过网关与监控模块通信，实现集中监控。

The monitoring platform communicates with the controller module through a gateway to achieve centralized monitoring.



监控模块
Controller module



监控管理平台
Monitoring platform

光伏模块

PV module

光伏模块用于光伏方阵的功率变换，实现稳压输出的功能，模块具有转换效率高，MPPT跟踪效率高，功率密度高等特点。目前主要有输入输出并联和独立输入，输出并联两款产品。

Photovoltaic modules are used for power conversion of photovoltaic arrays to achieve stable output. The modules have the characteristics of high conversion efficiency, high MPPT tracking efficiency, and high power density. At present, there are mainly two products: input parallel & output parallel; independent input and output parallel.



100Vdc/48Vdc/50A/MPPT



100Vdc/48Vdc/75A/MPPT



272Vdc/48Vdc/50A/MPPT



272Vdc/48Vdc/75A/MPPT

智能锂电模块

Intelligent lithium battery module

MBB048系列智能锂电模块，主要应用于5G/4G基站、48V UPS系统等领域，实现锂电池充放电电流和电压自主控制功能，解决锂电池并联使用时的偏流和环流问题，提升锂电池并联系统的容量使用率。产品适合锂电池扩功率并联，锂电与铅酸混用、通信基站、机房储能等场景。

The MBB048 series intelligent lithium battery module is mainly used in fields such as 5G/4G base stations, 48V UPS systems, etc., to achieve autonomous control of lithium battery charging and discharging current and voltage, solve the bias and circulating current problems when using lithium batteries in parallel, and improve the capacity utilization rate of lithium battery parallel systems. The product is suitable for scenarios such as parallel expansion of lithium batteries, mixed use of lithium batteries and lead-acid, energy storage.



48V/100Ah/3U
气溶胶消防
Aerosol fire protection



48V/100Ah/4U
液体消防
Using liquids to prevent fires



NR

工商业光伏储能

Industrial And Commercial
Photovoltaic Energy Storage

风冷一体化储能柜

Air-cooled integrated energy storage cabinet

MGB系列风冷型一体化储能系统采用风冷方案,冷热通道完全物理隔离结构方式,该系统由光伏发电设备与储能设备组成,储能供电设备也可以独立使用;广泛应用于用户侧(工业园区、商业中心、数据中心、医院)利用峰谷差价进行削峰填谷及,也可以作为应急备用电源使用。

The MGB series air-cooled integrated energy storage system adopts an air-cooled scheme, with completely physically isolated cold and hot channels. The system consists of photovoltaic power generation equipment and energy storage equipment, and the energy storage power supply equipment can also be used independently; Widely used in industrial parks, commercial centers, data centers, hospitals, etc., utilizing peak valley price differences for peak shaving and valley filling, it can also be used as an emergency backup power source.



100KW/200KWh

冷板液冷一体化储能柜

Cold plate liquid cooling integrated energy storage cabinet

MGB系列冷板液冷型一体化储能系统采用新一代液冷方案,电池系统采用无水化直冷方案,最大程度保证电芯同一面温度的一致性,从而提升电芯运行时电压、电流一致性,该系统由光伏发电设备与储能设备组成,储能供电设备也可以独立使用;广泛应用于工业园区、商业中心、数据中心、医院等利用峰谷差价进行削峰填谷,也可以作为应急备用电源使用。

The MGB series cold plate liquid cooled integrated energy storage system adopts a new generation liquid cooling scheme, and the battery system adopts an anhydrous direct cooling scheme to ensure the consistency of the same section temperature of the battery cells to the greatest extent, thereby improving the consistency of voltage and current during cell operation. This system is composed of photovoltaic power generation equipment and energy storage equipment, and the energy storage power supply equipment can also be used independently; Widely used in industrial parks, commercial centers, data centers, hospitals, etc., utilizing peak valley price differences for peak shaving and valley filling, it can also be used as an emergency backup power source.



100KW/200KWh

浸没液冷一体化储能柜

Immersion liquid cooling integrated energy storage cabinet

MGB系列浸没型一体化储能系统采用新一代浸没液冷方案,电池系统采用无水化液体全浸没冷却方式,能最大程度保证电芯运行时的一致性、安全性,从而降低电芯的热失控的风险及提升整体系统的运行效率,该系统由光伏发电设备与储能设备组成,储能供电设备也可以独立使用;广泛应用于工业园区、商业中心、数据中心、医院等利用峰谷差价进行削峰填谷,也可以作为应急备用电源使用。

The MGB series immersive integrated energy storage system adopts a new generation immersive liquid cooling scheme, and the battery system adopts an anhydrous liquid fully immersive cooling method, which can ensure the consistency and safety of the battery cell operation to the greatest extent, thereby reducing the risk of thermal runaway of the battery cell and improving the overall operational efficiency of the system. The system is composed of photovoltaic power generation equipment and energy storage equipment, and the energy storage power supply equipment can also be used independently; Widely used in industrial parks, commercial centers, data centers, hospitals, etc., utilizing peak valley price differences for peak shaving and valley filling, it can also be used as an emergency backup power source.



186KW/372KWh

电动自行车光储充驿站

Electric bicycle optical storage and charging station

太阳能电动自行车充电站由太阳能光伏系统、储能系统、充电桩管理系统组成,为电动自行车提供便利的充电和停放场所,太阳能电池方阵直接作为驿站的遮阳棚,既能发电,又可遮阳挡雨,光伏系统发电直接给电动自行车充电,如有多余电量则对储能电池进行充电,当太阳不足时利用储能电池放电。在用电低谷时段利用电网直接给电动自行车充电并给电池充电。

The charging station of solar electric bicycle is consists of a PV system, an energy storage system, and a charging pile management system, providing convenient charging and parking spaces for electric bicycles. The solar cell array directly serves as the sunshade of the station, which can generate electricity and provide shade and rain protection. The photovoltaic system generates electricity directly to charge the electric bicycle, and if there is excess electricity, the energy storage battery is charged, When the sun is low, use energy storage batteries to discharge. During low electricity consumption periods, use the power grid to directly charge electric bicycles and batteries.

