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Lighting Towerts Hybrid Energy Solutions

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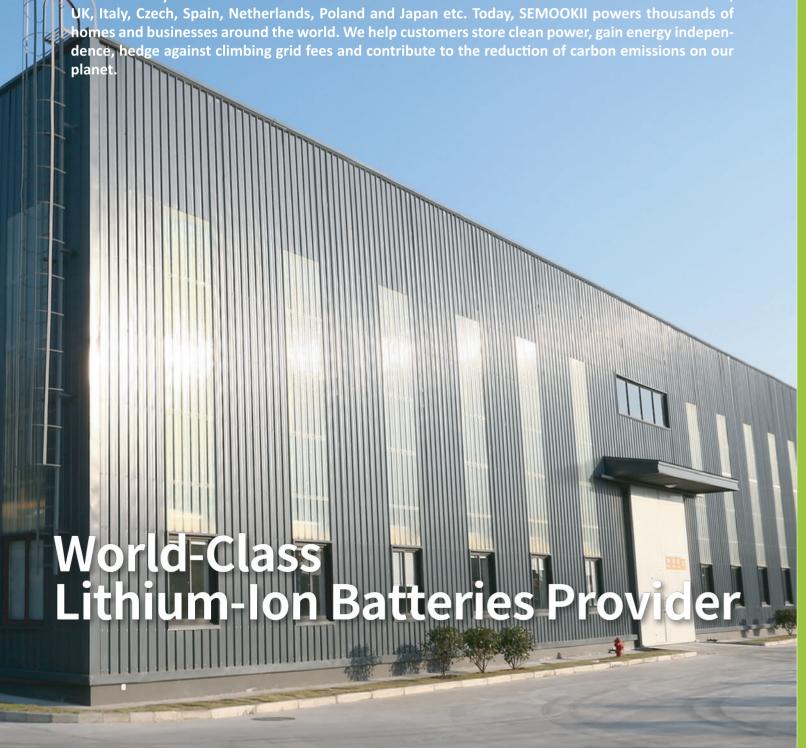


SEMOOKII BESS CO., LTD.

SEMOOKII® is powered by highly skilled technical experts who have rich experience in lithium battery energy storage systems for over 25 years. We design, engineer and manufacture state-of-the-art integrated/distributed energy solutions by optimizing solar power, wind turbines, diesel power, hydrogen fuel cells, lithium-ion batteries and energy storage systems. Our solutions cover a wide range of applications including residential BESS, commercial & industrial BESS, portable power stations and LiFePO4 battery packs of low-speed electric vehicles, utility electric vehicles, AGVs, electric boats and drones etc.

Owned by its parent company MPMC POWERTECH CORP. (Security Code 832266) is an international high-tech enterprise in Shanghai, a world-leading distributed hybrid energy solution provider. Through taking full advantages of its independent R&D, productive intellectual property, full-process manufacturing and global marketing & services. With products sold to more than 120 countries & regions, MPMC has established holding subsidiaries and offices in the USA and China, and have representatives in UK, South Africa and UAE.

SEMOOKII® inherited rigorous quality control system and production management system from MPMC, and is dedicated to providing power independence and real energy freedom to homes and businesses anywhere in the world! Our solutions are customized to the needs of each market in USA,



Applications

Height climbing vehicle & DiggerP3



UPSP7

Electric BoatsP9

AGVs

Power Tools

Drones

















The lithium-ion batteries independently developed by SEMOOKII LI-ION for two-wheel electric vehicles can meet the different needs of users. It adopts a full range of high-energy-density lithium iron phosphate batteries, which is smaller in size, lighter in weight, and safer to use. Good battery performance can ensure that even if it is not used for two months, its power can stay at not less than 80%, and the cycle life is up to 2000 times. MPMC LI-ION lithium-ion battery is equipped with an exclusive BMS to comprehensively protect the battery's charging, discharging and use safety, and ensure the safety of users' riding.











Key Features

- 1. ≥ 2000 cycle life
- 2. Good low-temperature performance
- 3. Capacity Attenuation is below 20% after 2 months
- 4. Quick-charging time only takes 2-3 hours
- 5. Light in weight and long in service time
- 6. Environment friendly



Specification

Customization Available



| Cell Chemistry | LiFePO4 | | |
|-------------------------|--|---------|--------|
| System Capacity | 614.4Wh | 921.6Wh | 1536Wh |
| Rated Voltage | 51.2V | | |
| Rated Capacity | 12Ah | 18Ah | 30Ah |
| Charging Current | 5A | | |
| Operating Temperature | -10°C∼+50°C | | |
| Humidity | 10%~90% | | |
| Altitude | ≤2000m | | |
| IP Protection | IP65 | | |
| Cycle Life | ≥2000 | | |
| BMS protection function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance | | |
| Weight | 7kg | 10kg | 15kg |



Electric Motorcycle Battery

| Cell Chemistry | LiFe PO4 | | | |
|-----------------------|---|--------|----------|--------|
| System Capacity | 1152Wh | 1536Wh | 1843.2Wh | 2304Wh |
| Norminal Voltage | 64V | | 76.8V | |
| Norminal Capacity | 18Ah | 24Ah | 24Ah | 30Ah |
| Charging Current | 10A | | | |
| Operating Temperature | -10°C∼+50°C | | | |
| Humidity | 10%~90% | | | |
| Altitude | ≤2000m | | | |
| IP Protection | IP65 | | | |
| Cycle Life | ≥2000 | | | |
| BMS | Overcharge protection, over discharge protection, over voltage protection, | | | |
| Protection Function | over temperature protection, over current protection, short circuit protection, balance | | | |
| Weight | 12kg | 15kg | 20kg | 23kg |



In order to meet various applications, MPMC LI-ION independently put out lithium-ion battery packs for light electric vehicles, various electric special vehicles, including electric tricycles, electric low-speed vehicles, electric utility vehicles and electric forklifts. Its adopts the safer and smaller lithium iron phosphate batteries with high energy density, which have a longer cycle life and provide users with more and safer power.













Key Features

- 1. ≥ 2000 cycle life
- 2. Good low-temperature performance
- 3. Capacity Attenuation is below 20% in 2 months
- 4. Quick-charging time only takes 2-3 hours
- 5. Light in weight and long in service time
- 6. Environment-friendly

Specification

Customization Available



Light Electric Vehicles Battery

| Cell Chemistry | LiFePO4 | | | | |
|----------------------------|--|--------|--------|--------|----------|
| System Capacity | 1440Wh | 2880Wh | 2304Wh | 4608Wh | 11.52kWh |
| Norminal Voltage | 48 | BV | | 76.8V | |
| Norminal Capacity | 30Ah | 60Ah | 30Ah | 60Ah | 150Ah |
| Charging Current | 10A | 20A | 10A | 20A | 50A |
| Operating Temperature | -10°C∼+50°C | | | | |
| Humidity | 10%~90% | | | | |
| Altitude | ≤2000m | | | | |
| IP Protection | IP65 IP67 | | | | |
| Cycle Life | ≥2000 | | | | |
| BMS Protection Function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance | | | | |
| Weight | 15kg | 30kg | 23kg | 45kg | 120kg |



Electric Forklifts Battery

| Cell Chemistry | LiFePO4 | | |
|-------------------------|--|--|--|
| System Capacity | 14.4kWh 24kWh | | |
| Norminal Voltage | 48V 80V | | |
| Norminal Capacity | 300Ah | | |
| charging current | 150A | | |
| Discharge current | 200A | | |
| Operating Temperature | -10°C∼+50°C | | |
| Humidity | 10%~90% | | |
| Altitude | ≤2000m | | |
| IP Protection | IP54 | | |
| Cycle Life | ≥2000 | | |
| BMS protection function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance | | |

UPS Backup Power

LiFePO4













Every year it costs \$1.25 to \$2.5 billion dollars on an average on unplanned downtime caused by power outages for Fortune 1000 companies. A recent study initiated by Ponemon Institute indicated that average costs of data center downtime alone can reach an alarming \$5,600 per minute or \$336,000 per hour.It also indicated 29% of the root causes are UPS system Failure.

SEMOOKII LI-ION Batteries solution for UPS system maintains steady performance with high density batteries, improving space utilization for concatenating lesser series batteries. Sophisticated solutions ensure MPMC UPS back-up power to provide reliability, resiliency and security of data to a wide range of applications.



Key Features

- 1. Stable uninterrupted power supply responding to unplanned power outages.
- 2. Cabinet with mesh to ensure good heat dissipation and safety.
- 3. Aluminium made, light in weight. Easy to move and operate.
- 4.Smart touch screen to monitor operation status, including system voltage, system current, cell voltage and temperature.
- 5. Long lifespan.

- Server Room
- Network Closets
- Data Centers
- Telecommunication Utilities
- Industrial Power Solutions

Specification

Customization Available

| Cell Chemistry | Lithium-ion | |
|----------------------------|--|--|
| System Capacity | 14.4kWh | |
| Charging Current | 100A | |
| Output Power | 15kW | |
| Operating Temperature | -10°C~+50°C | |
| Humidity | 10%~90% | |
| Altitude | ≤2000m | |
| IP Protection | IP54 | |
| Cycle Life | 10 years | |
| BMS Protection Function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance | |



At present, lead-acid batteries are still mainly used on electric ships such as tourist ships and small sightseeing ships. However, due to their poor safety performance, low capacity density, and short life, it is easy to cause explosions and other safety accidents. Compared with lead-acid batteries, lithium iron phosphate batteries not only have the advantages of zero emission, high safety, but also have small size, fast charging speed, and can adjust the capacity freely, and have high use value.



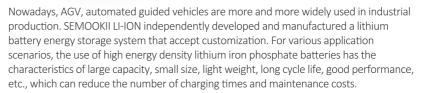






















Specification

| Cell Chemistry | LiFePO4 |
|-------------------------|--|
| System Capacity | 9.2kWh |
| Norminal Voltage | 76.8V |
| Norminal Capacity | 120Ah |
| Charging Current | 50A |
| Discharge Current | 60A |
| Operating Temperature | -10°C~+50°C |
| Humidity | 10%~90% |
| Altitude | ≤2000m |
| IP Protection | IP67 |
| Cycle Life | ≥2000 |
| BMS protection function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance |

Specification

| Call Chamistry | LiFe | DO4 | |
|-------------------------|--|--------|--|
| Cell Chemistry | LiFePO4 | | |
| System Capacity | 512Wh | 1536Wh | |
| Norminal Voltage | 25.6V | 51.2V | |
| Norminal Capacity | 20Ah | 30Ah | |
| charging current | 10A | | |
| Discharge current | 15A | 20A | |
| Operating Temperature | -10°C∼+50°C | | |
| Humidity | 10%~90% | | |
| Altitude | ≤2000m | | |
| IP Protection | IP54 | | |
| Cycle Life | ≥2000 | | |
| BMS protection function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance | | |



Batteries for Drones

Lithium-ion



Regarding the power consumption characteristics of power tools, SEMOOKII LI-ION put out a specific lithium-ion battery that can discharge quickly and has a long service life. It's also featured by excellent performance in extreme hot or cold weather and multiple protection of the BMS. We not only select well-known battery cells, but also accept customization according to customers' requirement.













Specification

| Cell Chemistry | Ternary lithium |
|-------------------------|--|
| System Capacity | 72Wh |
| Norminal Voltage | 12V |
| Norminal Capacity | 6Ah |
| charging current | 3A |
| Discharge current | 10C |
| Operating Temperature | -10°C∼+50°C |
| Humidity | 10%~90% |
| Altitude | ≤2000m |
| IP Protection | IP54 |
| Cycle Life | ≥2000 |
| BMS protection function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance |

The drone needs to overcome its own weight to fly, which has high requirements on the weight of the battery, as well as battery capacity. The battery power will increase rapidly when the drone is rapidly rising from the hovering state to the maximum speed. SEMOOKII LI-ION lithium battery uses a high-energy density ternary lithium-ion battery to provide sufficient power while having a smaller size and lighter weight, and can meet several times of power changes in a short period of time.











Specification

| Cell Chemistry | Ternary lithium | | |
|-------------------------|--|-------|--|
| System Capacity | 37Wh 220Wh | | |
| Norminal Voltage | 7.4V | 22.2V | |
| Norminal Capacity | 5Ah | 10Ah | |
| charging current | 2A | 5A | |
| Discharge current | 5A | 10A | |
| Operating Temperature | -10°C∼+50°C | | |
| Humidity | 10%~90% | | |
| Altitude | ≤2000m | | |
| IP Protection | IP54 | | |
| Cycle Life | ≥2000 | | |
| BMS protection function | Overcharge protection, over discharge protection, over voltage protection, over temperature protection, over current protection, short circuit protection, balance | | |

To become

a world-class batteries solutions provider







