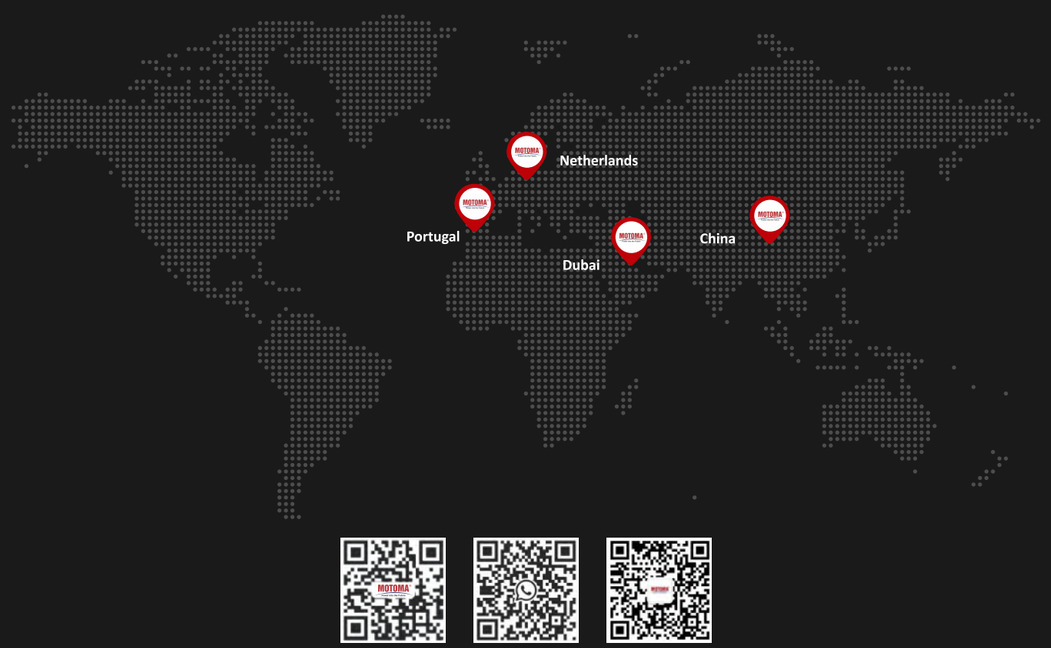
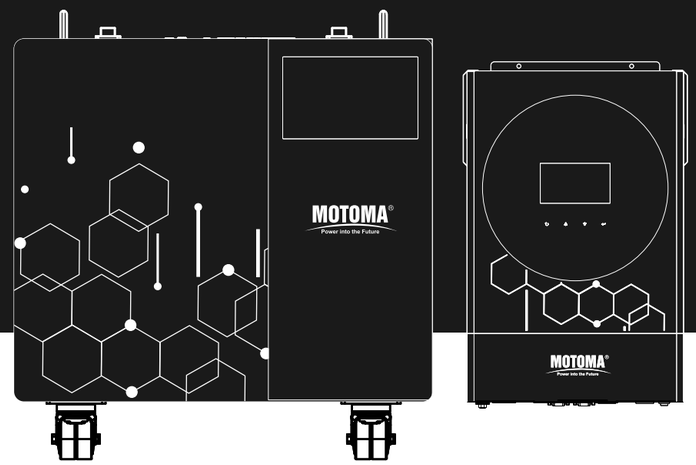


MOTOMA®

Power into the Future



MOTOMA CATALOGUE

Quality Creates Brand, Service Enchances Value

www.motoma.cn

SHENZHEN MOTOMA POWER CO.,LTD

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Showroom: Shop NO.15, City Stay Premium Hotel Apartments Building, Naif, Dubai, UAE.
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+971 58 911 9313
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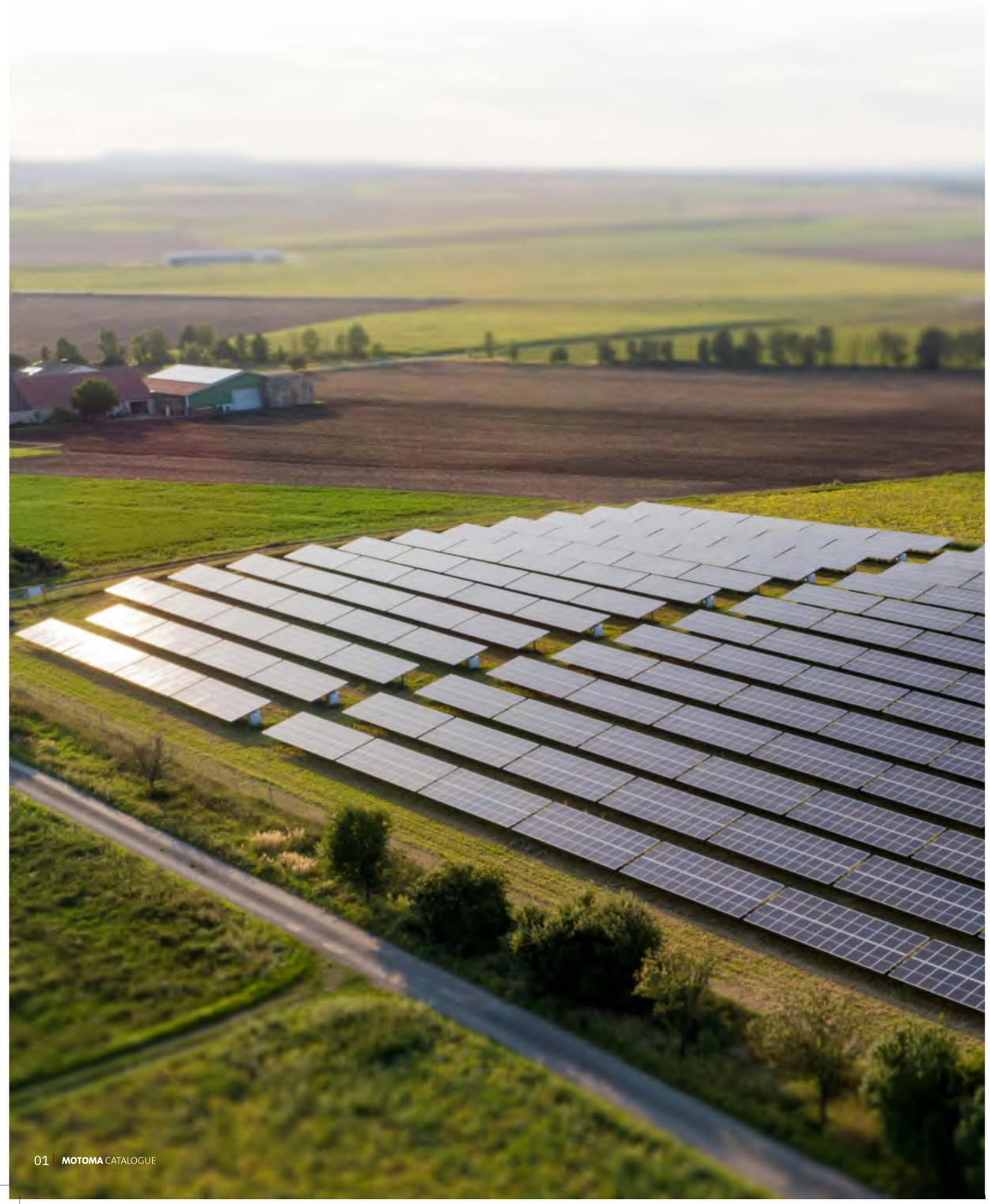


CATALOGUE INDEX

POWER UP THE WORLD ...
SINCE 1994

SHENZHEN MOTOMA POWER CO.,LTD is a Clean Energy Company , Founded in 1994 and **Specialized** in the Research and Manufacture of A Grade Dry Batteries , Lithium Polymer Batteries , Cylindrical Lithium Batteries , Lithium Iron Phosphate **(LiFePO4)** Batteries and Development of Solar Inverters .

As a Brand-Driven Company with Near 30 Years History , We Integrate a Powerful Team of R&D , Production and Sales, We Build an Over **20,000** Square Meters Production Plant and Employ **+ 400** Skillful Workers and **+20** Experienced In-House Engineers , Service Clients from Over **90** Countries , and have become One of The Most Innovative Battery Manufacturer in China.

Since 2020 , MOTOMA Has Intensified Its Product Innovation and Research and Development in The Direction of Multi-Form, Multiapplication Environment and Convenient Structure of Lithium Batteries. Until Now MOTOMA Has More Than 30 Patents and Intellectual Property Rights, And MOTOMA Trademark Has Applied for Registration and Intellectual Property Protection In 60 Countries and Has Established Sales Channels in More Than 130 Countries.

We Have Gained a High Reputation Among Our Customers in Both the Domestic and Overseas Market for Our Superior and Reliable Quality Products, While Offering Reasonable and Competitive Prices with Perfect After-Sale Service

FACTORY

20,000 Sqm AND EXPANDAING , CHINA

(DONGGUAN, ZHEJIANG,QINGDAO)

- **30** Nearly 30 years of Battery Industry
- **20,000** Square Meters Production Plant
- **+30** Patents and intellectual proper
- **+90** Countries Global Customers

MOTOMA
POWER COMPANY

is Established in Shenzhen City by Mr. Abell Lu , across the Border from HONG KONG.

(MOTOMA CEO:Mr. Abell Lu)

OUR VISION

Quality creates brand, service enhances value.

OUR MISSION

MOTOMA, power into the future!

For nearly three decades, **MOTOMA** has been delivering innovative and comprehensive energy solutions, leveraging its extensive expertise to create added value for its clients and partners. Our focus is on providing high-quality products powered by advanced technologies, enabling us to contribute to a brighter and more sustainable future.

Our strategy revolves around:

- Continuous Innovation ： Investing in research and development to ensure excellence in our solutions.
- Customer Engagement ： Understanding their needs and delivering solutions that exceed expectations.
- Commitment to Quality ： Applying stringent standards in production and services to achieve customer satisfaction worldwide.

Learning

We advocate a learning organization. Only by learning new knowledge and absorbing new thinking can we improve the connotation of the enterprise and promote innovation and development.

Innovation

We encourage innovation work methods. Innovation is the driving force for the development of the industry and the basic rule of a business survival and progress. Facing globalization and increasingly competition, only innovation can enhance the core competitiveness of the enterprise.

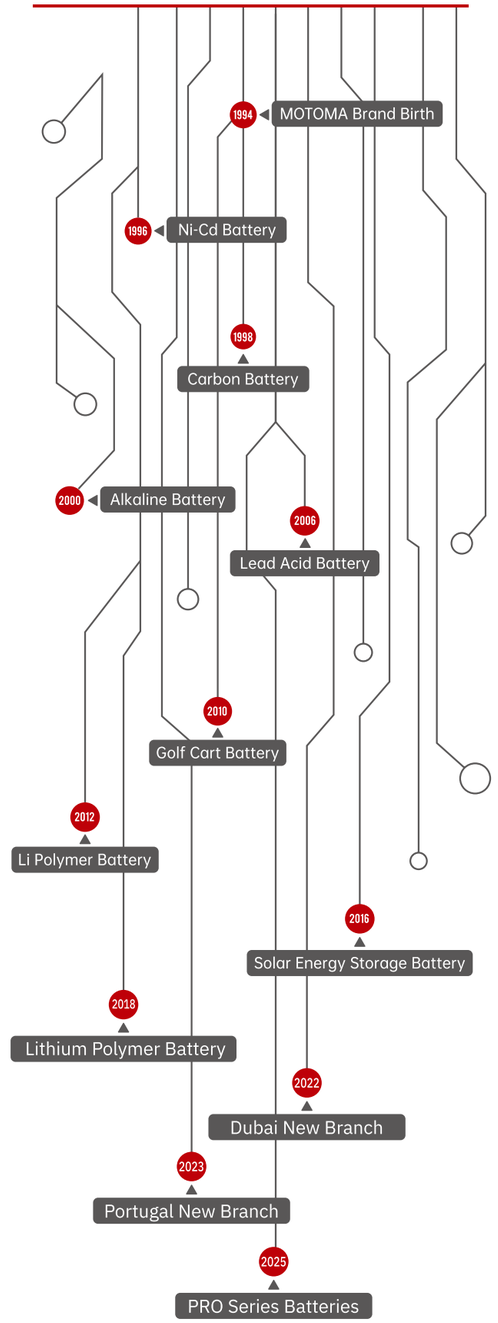
Communication

Communication is the principle. We attach importance to the ability and skills of communication, and the objects and occasions of communication. We firmly believe that problems that can be solved through communication.

Tolerance

We respect the tolerance attitude of life, experience the wonderful world with a tolerance and gratitude heart, and face people and things around us with sincere smiles.

MOTOMA HISTORY



- **1994:** MOTOMA Power Company Is Established in Shenzhen City by Mr. Abell Lu , Across the Border from HONG KONG.
- **1996:** MOTOMA NiCd Battery is Launched, Becoming our Earliest Representative Product.
- **1998:** MOTOMA Carbon Battery is Launched, Used Widely in Various Electronic Products.
- **2000:** MOTOMA Alkaline Battery is Launched, Quickly Attractive Worldwide Clients' Attention due to its Excellent Performance and Competitive Price.

  - MOTOMA Lead Acid Battery is Launched, Quickly Occupy the Southeast Asian, African, and European Markets.
- **2006:** MOTOMA Lead Acid Battery Is Launched, Quickly Occupy the Southeast Asian, African, And European Markets.
- **2010:** MOTOMA Golf Cart Battery is Launched, and we become a Stable Battery Supplier of MISSION HILLS, The Biggest Golf Cart in Asian.
- **2012:** MOTOMA Lithium Polymer Battery is Launched, with Unique Cathode Materials to Achieve Max Power, Long Cycle Life and Excellent Safety, and we begin to Provide Lithium Polymer Batteries to Some Leading Breast Pump Manufacturers.
- **2016:** MOTOMA Home Use Storage LiFePo4 Battery is Launched, Win Good Reputation due to Good Battery Performance and Reliable After-Sales Service.
- **2018:** New Factory of Lithium Polymer Battery is Built and put into use, and the First Year's Production Capability Reaches 120,000Wh Per Day.
- **2022:** The Headquarter is Moved from Shenzhen City to Dongguan City, And We Opened our New Branch (MOTOMA SOLAR ENERGY) in Dubai, UAE.
- **2023:** We opened our new branch (MOTOMA SOLAR UNIPESSOAL) in Lisboa, Portugal.
- **2025:** MOTOMA launches the new PRO Series LiFePO4 Batteries to keep up with new technology and modern designs.

HONORS & QUALIFICATIONS

We have gained a high reputation among our customers in both domestic and overseas markets for our superior and reliable quality products while offering reasonable and competitive prices with perfect after-sale service.

GLOBALLY CERTIFIED

Certificate Authority :

Standards Compliant :

OUR MAIN CUSTOMER

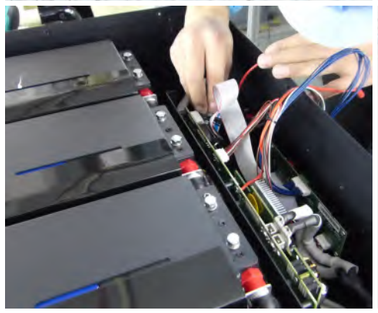
SUPERIOR TECHNOLOGY

- 30+ years professional battery experience;
- 12,000sqm factory backed by 400+ employees;
- Comply with ISO, CE, UL, ROHS certifications, etc.





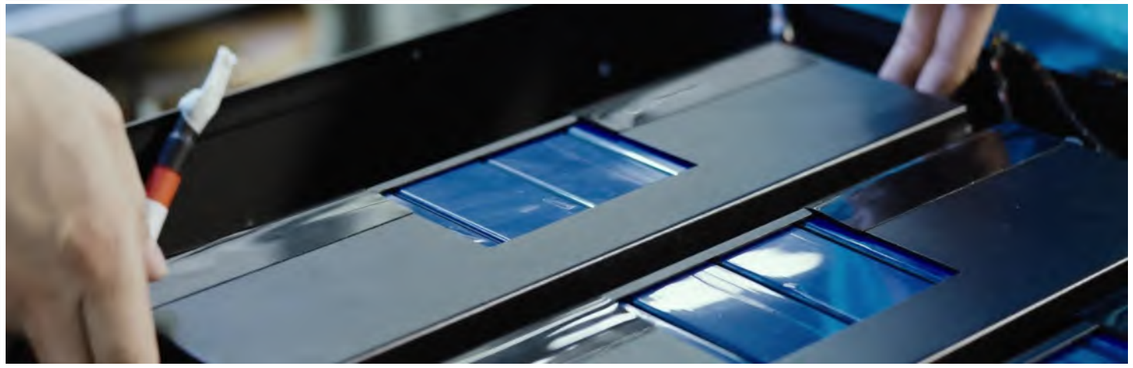










GLOBAL BUSINESS

Countless Satisfied Customers

+70

Sales Countries

United States	Canada	Mexico	Brazil	Chile	Argentina	Peru
Colombia	Ecuador	Bolivia	Paraguay	Uruguay	Venezuela	Costa Rica
Panama	Guatemala	Syria	Yemen	Iraq	Lebanon	Tunisia
El Salvador	Jamaica	Trinidad and Tobago	Algeria	Bahamas	Guyana	Suriname
Jordan	Australia	New Zealand	South Korea	Japan	Taiwan	Malaysia
Singapore	South Africa	Egypt	Morocco	Libya	Sudan	Ethiopia
Somalia	Uganda	Tanzania	Rwanda	Burundi	Zambia	Zimbabwe
Botswana	Namibia	Angola	Mozambique	DR Congo	Burkina Faso	Togo
Chad	Saudi Arabia	Oman	Turkey	Mali	Nepal	Sri Lanka
Portugal	Germany	Italy	Netherlands	France	Spain	Greece

Wherever You Go,Find us there ...

Proudly Serving in Multiple Locations

1

Factory & Headquarter

China

3

Branch Offices

UAE, Netherlands, Portugal

12

Warehouses & After Sales Centers :

UAE, Portugal, Iraq, Netherlands, Syria, Austria, Yemen, Guinea, Lebanon, Argentina, Sudan, Pakistan

LITHIUM IRON PHOSPHATE BATTERY

Residential Storage Battery (M PRO)

M68PW PRO	200Ah	25.6V
M69PW PRO	280Ah	25.6V
M87PW PRO	100Ah	51.2V
M88PW PRO	200Ah	51.2V
M90 PRO	320Ah	51.2V
M91 PRO	400Ah	51.2V

Introduction

The MOTOMA M PRO Series LFP battery is an advanced energy solution designed to deliver a service life of 15 years or more, providing exceptional performance for a wide range of applications. With a lifespan of up to 8000 cycles, it ensures reliable and efficient energy storage for many years.

Equipped with a multi-language and colored touch LCD screen, the M PRO Series allows users to monitor the battery status, access detailed reports, and fully control settings. Its intelligent BMS ensures safety, along with SOC design and a communication protocol compatible with various inverter brands.

Smart BMS Compatible with multiple inverter brands.

solis | Voltronic Power | Deye | Growatt | GOODWE

SOFAR | victron energy | SUNGROW | SOLAX POWER | SMA

Applications

- Power Generation System (Solar and Wind Power System,etc.)
- Household Energy Storage System
- Auto Control System &ATM Machine
- Electronic Apparatus and Equipment
- Emergency Light & Emergency Backup
- Power Supply & Alarm / Security System
- Communication Power & DC Power
- Electric Power System (EPS)
- Uninterruptable Power System (UPS)

Certificates

TÜVRheinland CERTIFIED | ISO 9001 | CE | UN38.3 PASSED

M68PW PRO

LITHIUM IRON PHOSPHATE BATTERY

200Ah
25.6V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
More than 6000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

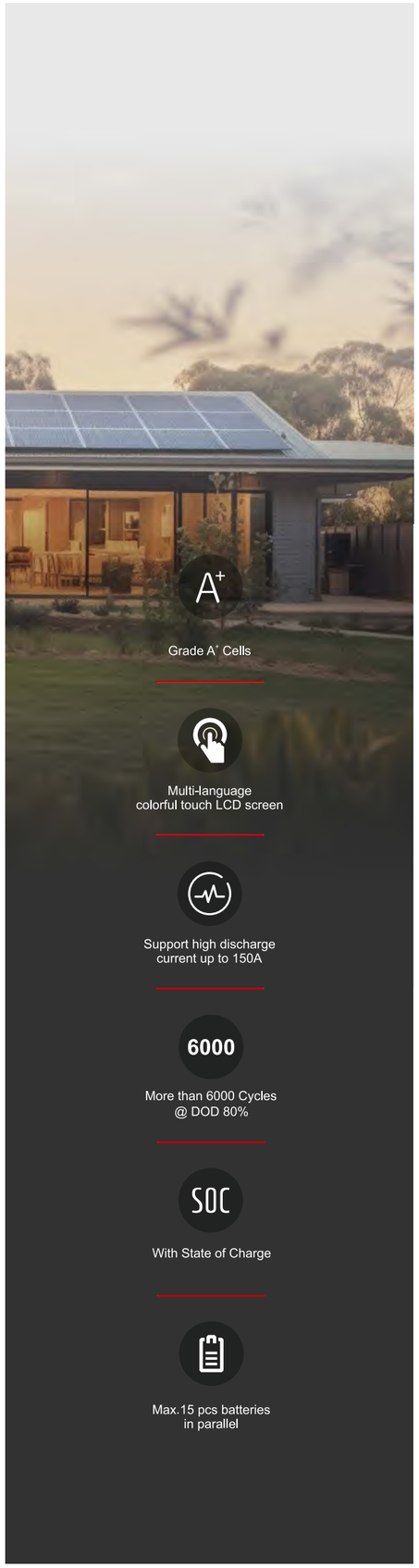
Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M68PW PRO
Nominal Voltage	25.6V
Capacity	200Ah
Nominal Capacity	5.12kWh
Operating Voltage Range	21.6V~29.2V
Maximum Charging Current	150A
Maximum Discharging Current	150A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	6000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	420*610*200 mm
Battery Weight (NW)	52 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	150A
Peak Charge Current	160A (1s)
Recommended Charge Voltage	28.8V
BMS Charge Cut-Off Voltage	29.2V (3.65V/Cell)
Reconnect Voltage	27.04V (3.38V/Cell)
Balancing Voltage	27.2V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	150A
Peak Discharge Current	160A (10s)
BMS Discharge Cut-Off Current	200A (500ms)
Recommended Low Voltage Disconnect	24V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	21.6V (2.7V/Cell)
Reconnect Voltage	24.8V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	6 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1268x734x1092 mm
Package Weight (GW)	399.9 KG

M69PW PRO

LITHIUM IRON PHOSPHATE BATTERY

280Ah
25.6V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
Up to 8000 Cycles @ DOD 80%, ensuring a cost-effective ownership experience.

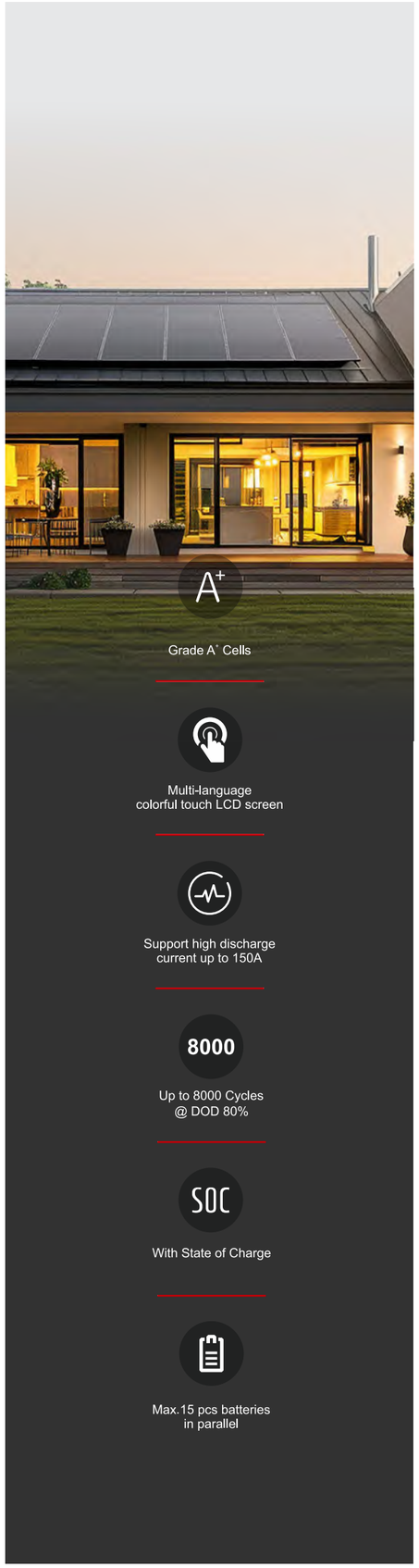
Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M69PW PRO
Nominal Voltage	25.6V
Capacity	280Ah
Nominal Capacity	7.168kWh
Operating Voltage Range	21.6V~29.2V
Maximum Charging Current	150A
Maximum Discharging Current	150A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	8000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	538*505*200 mm
Battery Weight (NW)	68.3 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	150A
Peak Charge Current	160A (1s)
Recommended Charge Voltage	28.8V
BMS Charge Cut-Off Voltage	29.2V (3.65V/Cell)
Reconnect Voltage	27.04V (3.38V/Cell)
Balancing Voltage	27.2V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	150A
Peak Discharge Current	160A (10s)
BMS Discharge Cut-Off Current	200A (500ms)
Recommended Low Voltage Disconnect	24V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	21.6V (2.7V/Cell)
Reconnect Voltage	24.8V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	6 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1268x734x1092 mm
Package Weight (GW)	498.9 KG

M87PW PRO

LITHIUM IRON PHOSPHATE BATTERY

100Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
More than 6000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

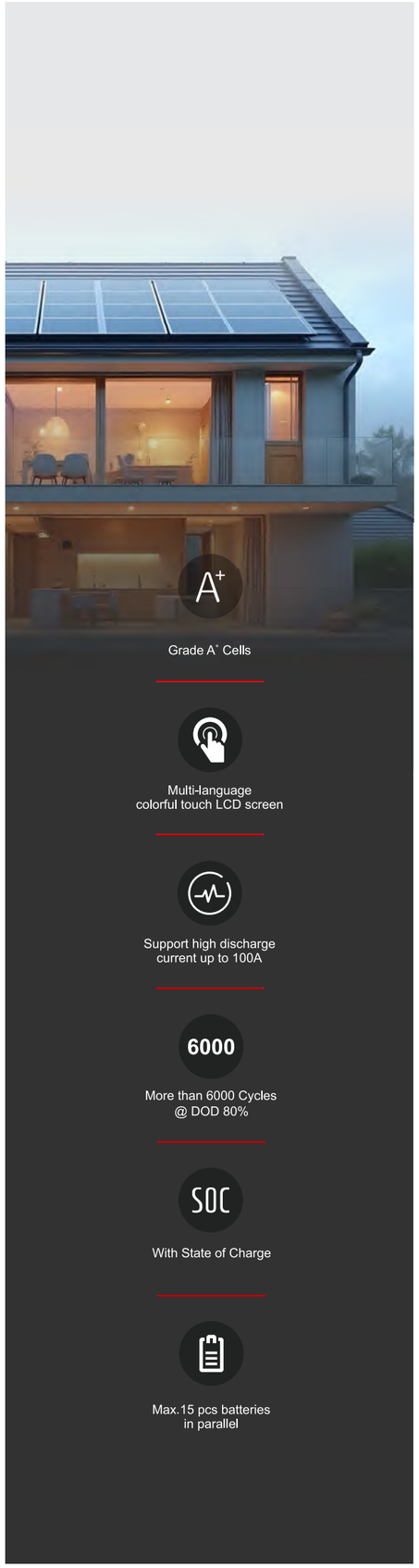
Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M87PW PRO
Nominal Voltage	51.2V
Capacity	100Ah
Nominal Capacity	5.12kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	100A
Maximum Discharging Current	100A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	6000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	420*610*200 mm
Battery Weight (NW)	52 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	100A
Peak Charge Current	112A (3s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	100A
Peak Discharge Current	120A (10s)
BMS Discharge Cut-Off Current	180A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	6 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1268x734x1092 mm
Package Weight (GW)	399.9 KG

M88PW PRO

LITHIUM IRON PHOSPHATE BATTERY

200Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
More than 6000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

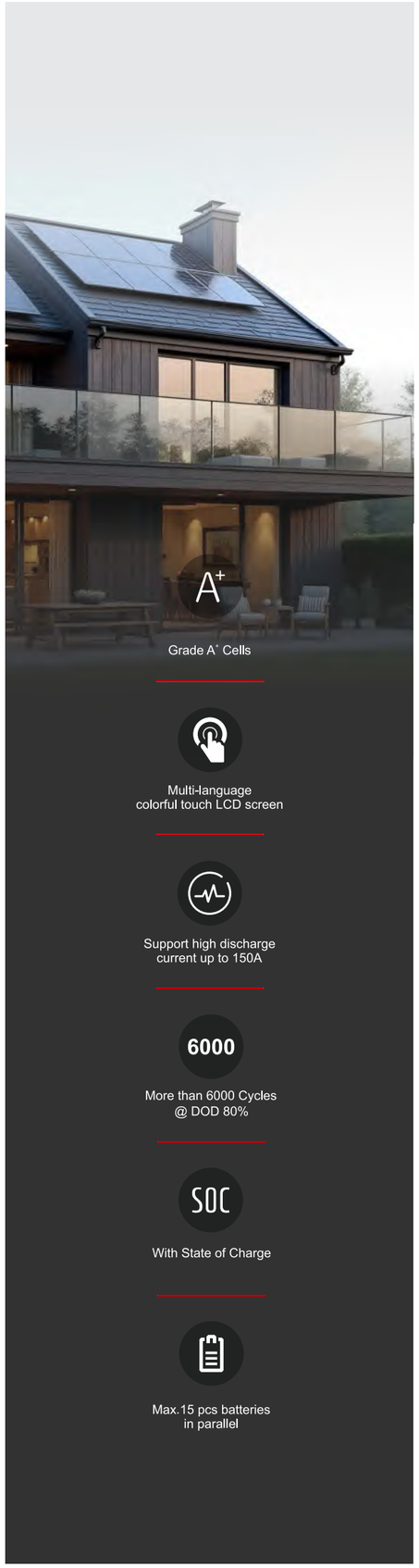
Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M88PW PRO
Nominal Voltage	51.2V
Capacity	200Ah
Nominal Capacity	10.24kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	150A
Maximum Discharging Current	150A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	6000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	650*610*200 mm
Battery Weight (NW)	92.4 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	150A
Peak Charge Current	160A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	150A
Peak Discharge Current	160A (10s)
BMS Discharge Cut-Off Current	200A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	1 Battery / UN Wooden Box
Package Dimension (LxWxH)	888x674x412 mm
Package Weight (GW)	120.9 KG

M90 PRO

LITHIUM IRON PHOSPHATE BATTERY

320Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
Up to 8000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

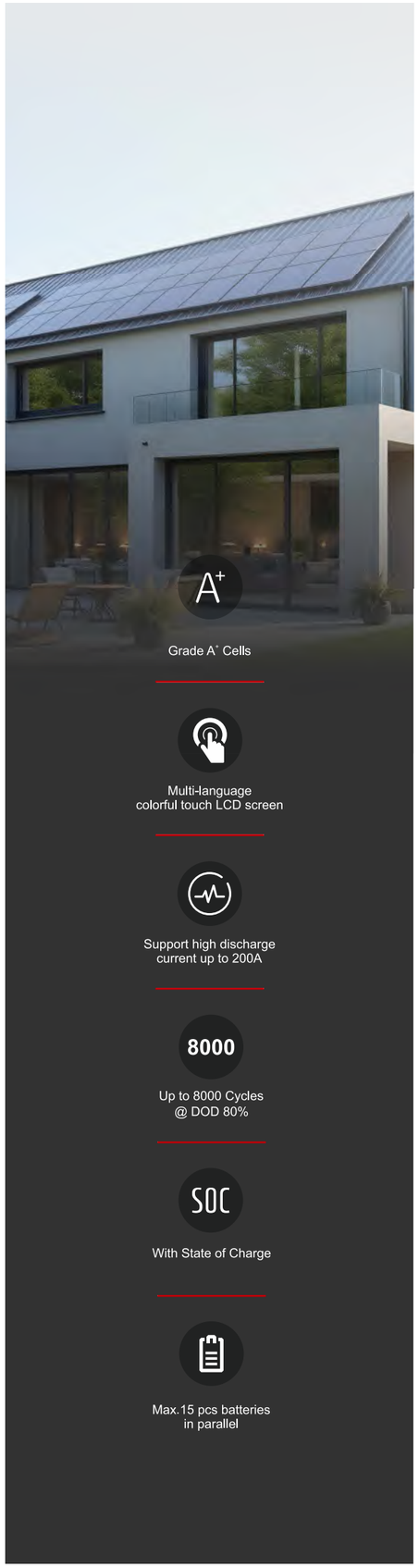
Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M90 PRO
Nominal Voltage	51.2V
Capacity	320Ah
Nominal Capacity	16.384kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	200A
Maximum Discharging Current	200A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	8000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	990*505*200 mm
Battery Weight (NW)	126.6 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	200A
Peak Charge Current	210A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	200A
Peak Discharge Current	210A (10s)
BMS Discharge Cut-Off Current	250A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	1 Battery / UN Wooden Box
Package Dimension (LxWxH)	1248x609x372 mm
Package Weight (GW)	156.6 KG

M91 PRO

LITHIUM IRON PHOSPHATE BATTERY

400Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
Up to 8000 Cycles @ DOD 80%, ensuring a cost-effective ownership experience.

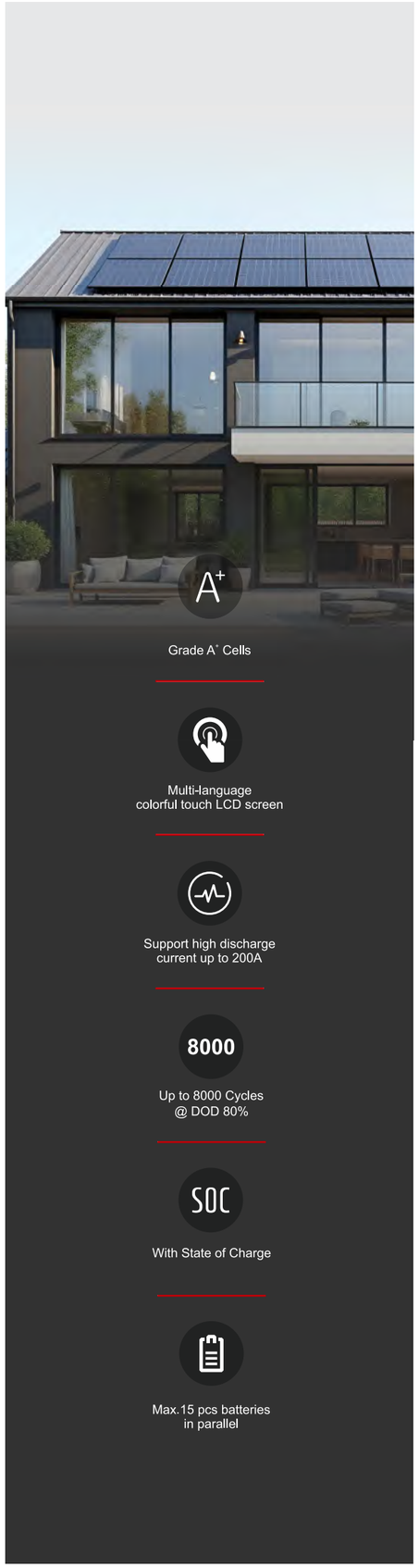
Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M91 PRO
Nominal Voltage	51.2V
Capacity	400Ah
Nominal Capacity	20.48kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	200A
Maximum Discharging Current	200A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	8000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	615*720*435 mm
Battery Weight (NW)	184.2 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	200A
Peak Charge Current	210A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	200A
Peak Discharge Current	210A (10s)
BMS Discharge Cut-Off Current	250A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	1 Battery / UN Wooden Box
Package Dimension (LxWxH)	808x519x883 mm
Package Weight (GW)	224.2 KG

LITHIUM IRON PHOSPHATE BATTERY

Residential Storage Battery (M)

M89S	280Ah	51.2V
M88PW	200Ah	51.2V
M87UC	100Ah	51.2V
M68UC	200Ah	25.6V

Introduction

MOTOMA M series LFP battery designed with 15 years or more service life for general purpose, which designed with advanced technology, built in intelligent BMS for more safe, with SOC design and communication protocol to match up with different brand inverters.

Also motoma can supply customized upper computer software for BMS communica tion via RS232 to set parameters or read monitoring data.

Smart BMS Compatible with multiple inverter brands.

solis | Voltronic Power | Deye | Growatt | GOODWE
SOFAR | victron energy | SUNGROW | SOLAX POWER | SMA

Applications

- Power Generation System (Solar and Wind Power System,etc.)
- Household Energy Storage System
- Auto Control System &ATM Machine
- Electronic Apparatus and Equipment
- Emergency Light & Emergency Backup
- Power Supply & Alarm / Security System
- Communication Power & DC Power
- Electric Power System (EPS)
- Uninterruptable Power System (UPS)

Certificates

TÜVRheinland CERTIFIED | ISO 9001:2015 | CE | UN38.3 PASSED

M89S

LITHIUM IRON PHOSPHATE BATTERY

280Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

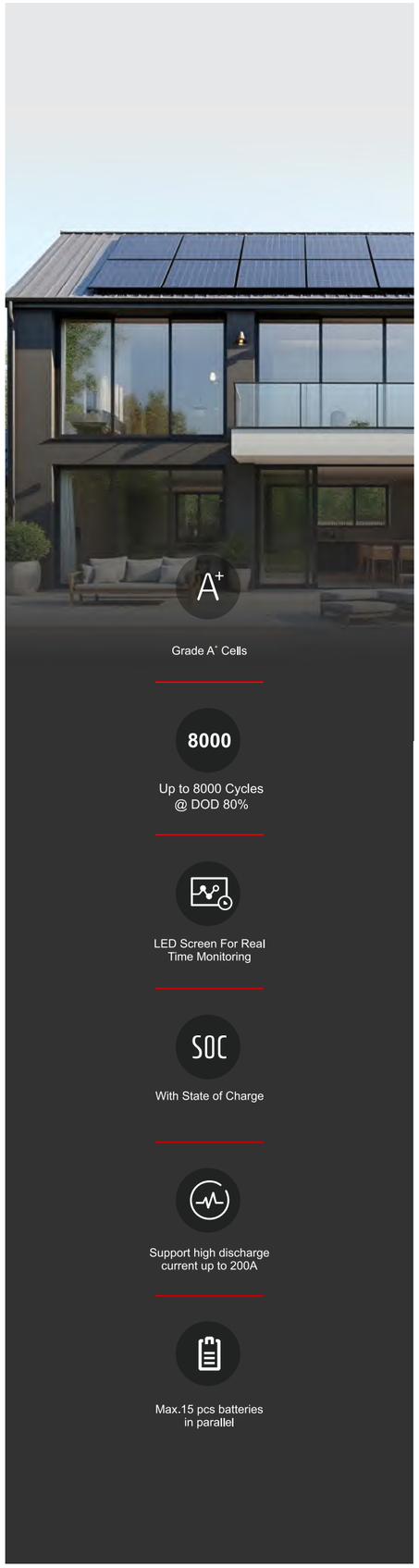
Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

High Cycle Efficiency
Up to 8000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

LED Screen For Battery's parameters monitoring
Multi-language colorful screen for clear monitoring of battery parameters, with easy control over settings.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M89S
Nominal Voltage	51.2V
Capacity	280Ah
Nominal Capacity	14.33kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	200A
Maximum Discharging Current	200A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	8000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	770*540*200mm
Battery Weight (NW)	120.1 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	200A
Peak Charge Current	210A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	200A
Peak Discharge Current	210A (10s)
BMS Discharge Cut-Off Current	250A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	1 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1008*629*372 mm
Package Weight (GW)	149 KG

M88PW

LITHIUM IRON PHOSPHATE BATTERY

200Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

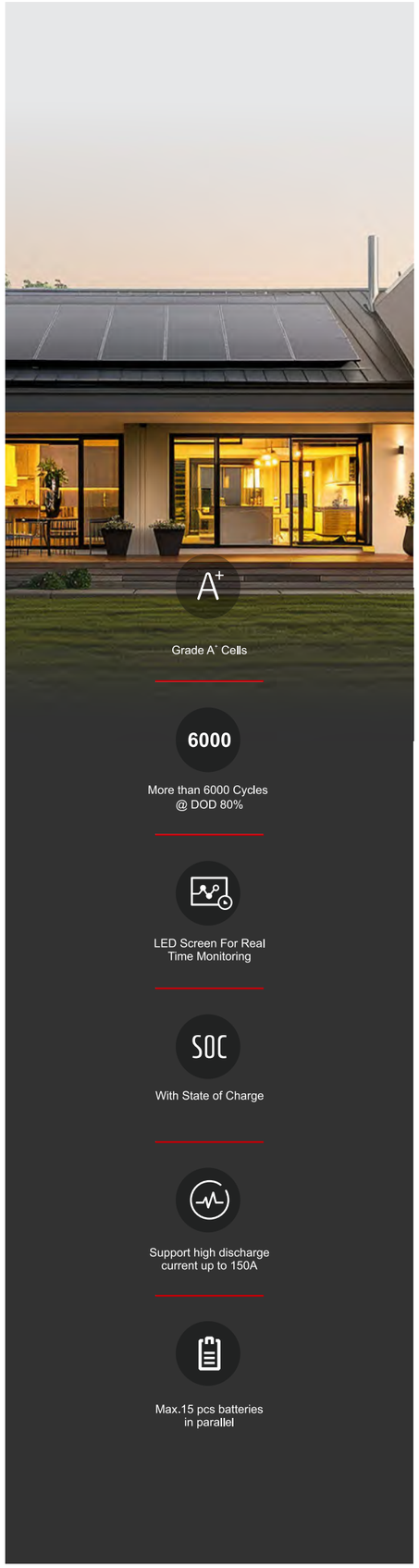
Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

High Cycle Efficiency
More than 6000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

LED Screen For Battery's parameters monitoring
Multi-language colorful screen for clear monitoring of battery parameters, with easy control over settings.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M88PW
Nominal Voltage	51.2V
Capacity	200Ah
Nominal Capacity	10.24kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	150A
Maximum Discharging Current	150A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	6000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	680*510*195mm
Battery Weight (NW)	97.5 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	150A
Peak Charge Current	160A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	57.6V (3.6V/Cell)
Balancing Voltage	54.08V (3.38V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	150A
Peak Discharge Current	160A (10s)
BMS Discharge Cut-Off Current	200A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (1s) (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	1 Batteries / UN Wooden Box
Package Dimension (LxWxH)	970*800*460 mm
Package Weight (GW)	127 KG

M87UC

LITHIUM IRON PHOSPHATE BATTERY

100Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

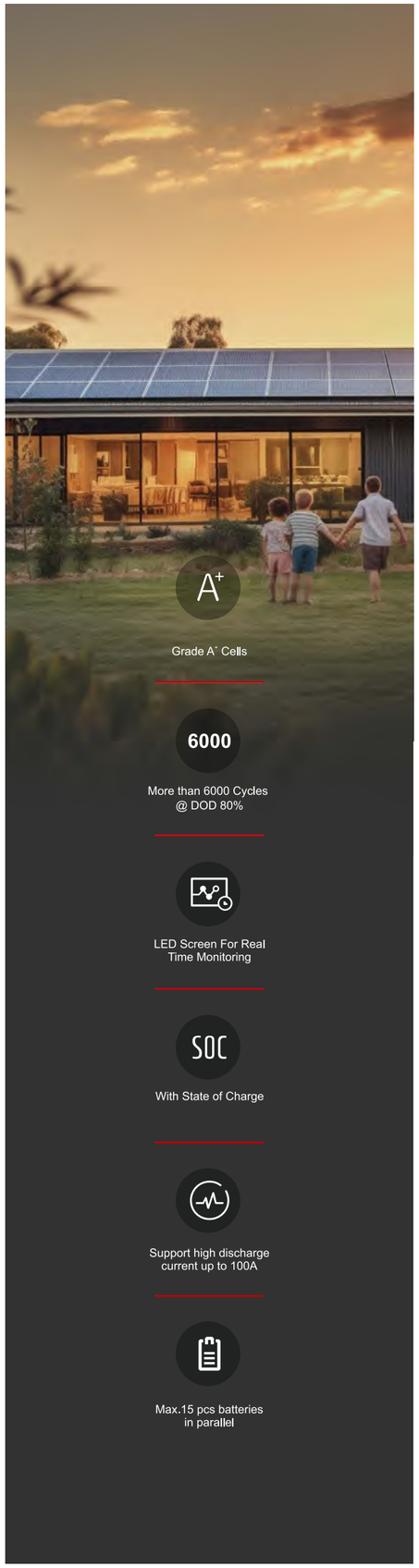
Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

High Cycle Efficiency
More than 6000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

LED Screen For Battery's parameters monitoring
Multi-language colorful screen for clear monitoring of battery parameters, with easy control over settings.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M87UC
Nominal Voltage	51.2V
Capacity	100Ah
Nominal Capacity	5.12kWh
Operating Voltage Range	43.6V~58.4V
Maximum Charging Current	100A
Maximum Discharging Current	100A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	6000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	530*440*134.5 mm
Battery Weight (NW)	41.3 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	100A
Peak Charge Current	112A (3s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	>58.4V (3.65V/Cell)
Reconnect Voltage	<57.6V (3.6V/Cell)
Balancing Voltage	>54.08V (3.38V/Cell)
Balancing Current	100mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	100A
Peak Discharge Current	110A (1s)
BMS Discharge Cut-Off Current	150A (100ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (1s)(2.7V/Cell)
Reconnect Voltage	<49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	8 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1078*708*1096 mm
Package Weight (GW)	369.6 KG

M68UC

LITHIUM IRON PHOSPHATE BATTERY

200Ah
25.6V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

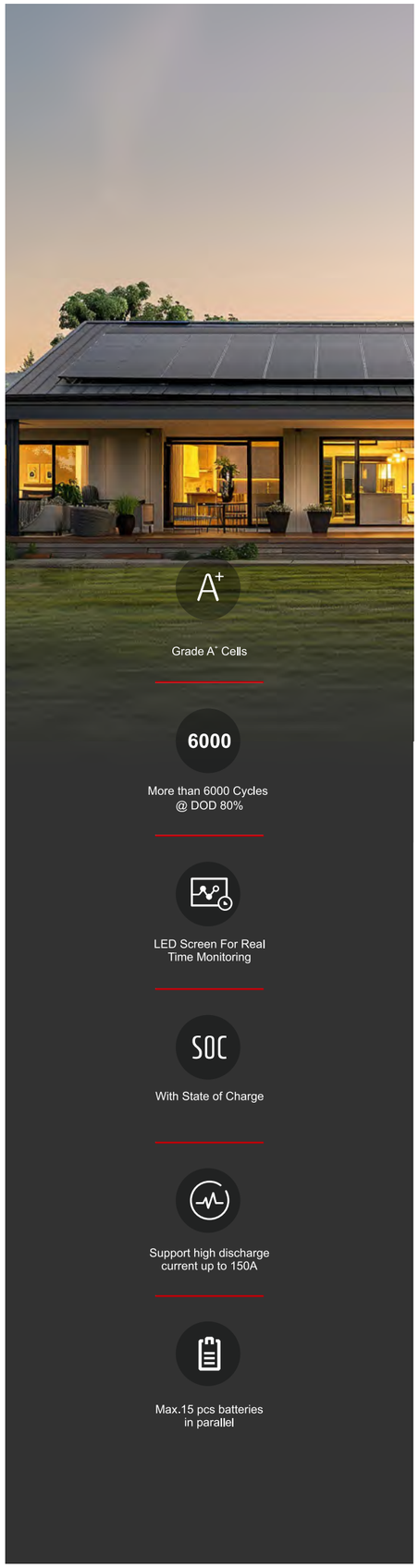
Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

High Cycle Efficiency
More than 6000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

LED Screen For Battery's parameters monitoring
Multi-language colorful screen for clear monitoring of battery parameters, with easy control over settings.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.



Technical Parameter

Battery Model	M68UC
Nominal Voltage	25.6V
Capacity	200Ah
Nominal Capacity	5.12kWh
Operating Voltage Range	21.6V~29.2V
Maximum Charging Current	150A
Maximum Discharging Current	150A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25°C)	6000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	530*440*134.5 mm
Battery Weight (NW)	41.3 kg

Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	150A
Peak Charge Current	162A (3s)
Recommended Charge Voltage	28.8V
BMS Charge Cut-Off Voltage	29.2V (3.65V/Cell)
Reconnect Voltage	27.04V (3.38V/Cell)
Balancing Voltage	27.2V (3.4V/Cell)
Balancing Current	100mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	150A
Peak Discharge Current	155A (30s)
BMS Discharge Cut-Off Current	172A (3s)
Recommended Low Voltage Disconnect	24V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	21.6V (2.7V/Cell)
Reconnect Voltage	24.8V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	8 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1078*708*1096 mm
Package Weight (GW)	363.6 KG

LITHIUM IRON PHOSPHATE BATTERY

High Voltage Battery DSE-LFP 614.4V

100 AH | 150 AH | 200 AH

Introducing the MOTOMA High Voltage Battery 614.4V, the epitome of safety and reliability in the world of energy storage. This cutting-edge lithium iron phosphate battery system is specifically designed to cater to the demanding needs of UPS, home storage, and industrial as well as commercial energy storage fields. Offering high performance, exceptional stability, and unparalleled efficiency, the MOTOMA High Voltage Battery ensures seamless operation across a wide range of applications. Whether you're looking to secure uninterrupted power supply, optimize home energy consumption, or enhance industrial energy capabilities, this 614.4V system delivers the solution you need with unmatched versatility and reliability.

Commercial Premises | Industrial Park | Mine | Petrol Station | Pastoral | Data center | Island

Features

- **Safe, Reliable, and Long Life :**

  Built with safety at its forefront, our battery system offers unmatched reliability and longevity, ensuring peace of mind for all users.

- **Standardized Module Design:**

  The system's modular design promotes ease of installation and scalability, allowing for straightforward integration into various energy storage applications.

- **Discharge and Charge Control :**

  Enhanced control mechanisms allow for efficient management of both charging and discharging processes, optimizing performance and extending battery life.

- **No-Gap Power Supply :**

  Engineered to provide a continuous power supply, ensuring that your energy needs are met without interruption.

- **Communication Ports (CAN/RS485/LAN) :**

  Offers versatile connectivity options, facilitating seamless communication with energy management systems for real-time monitoring and control.

- **LED Display:**

  A user-friendly LED display provides essential information at a glance, allowing for easy monitoring of the battery's status and performance.

- **Flexible Capacity :**

  The system's design supports capacity expansion, enabling customization to meet specific energy requirements, providing a tailored solution for every user.

- **Efficient Operation and Maintenance:**

  Designed with efficiency in mind, the battery system ensures straightforward operation and minimal maintenance, reducing downtime and operational costs.

Technical Parameter

BATTERY MODEL	DSE-LFP614.4V100A	DSE-LFP614.4V150A	DSE-LFP614.4V200A
Module Capacity	100Ah	150Ah	200Ah
Module Nominal Voltage	51.2V		
Module Energy	5.12kWh	7.68kWh	10.24kWh
Module Voltage Range	43.2 ~ 58.4V		
Module Dimension (W × D × H)	580×440×178mm		760×440×135mm
Module Weight Approximate	45Kg	60Kg	78Kg
Battery Module Qty In Series	12		
System Nominal Voltage	614.4V		
System Energy	61.44kWh	92.16kWh	122.88kWh
System Voltage Range	518.4~700.8V		
System Dimension (W × D × H)	1800×1100×600mm		1600×1200×800mm
System Weight Approximate	720Kg	950Kg	1160Kg
Max. Charging Current	100A		
Max. Discharging Current	100A		
Charging Temperature Range	0°C ~ 45°C		
Discharging Temperature Range	-20°C ~ 60°C		
Humidity	5% ~ 85%RH		
Altitude	≤3000m		
IP Rating of Enclosure	IP20		
Recommend Depth of Discharge	90%		
Installation Location	Rack-Mounted		
Storage Temperature	0°C ~ 35°C		
Cycle Life	6000		
Communication Port	RS485/CAN		
Warranty	10 years		
Certification	UN38.3		

All-in-One Smart ESS

M50-100

Introduction

Smart Ess Unit - M50-100 All-in-one Cabinet consists of powerbattery cluster, hybrid inverter, variable frequency temperaturecontrol system, BMS, EMS, combined precision suppressionand burst suppression fire protection system, electrical auxiliaryequipment and weather-resistant sheet metal cabinet, and the capacity of the ESS is 50kW/103.68kWh.

Features

1. Safe: Multi-dimensional protection with internal integration of PV/ESS/PCS, early fire detection, combustible gas detection, explosion relief, and a smart temperature control system that increases battery cycle life by 12%.

2. Simple: All-in-one modular design covering just 1.21m², easy grid connection, anti-short circuit installation, and expandable capacity from 50kW to 300kW.

3. Smart: Remote cloud operation and monitoring, AI-based battery balancing, black start function for micro-grid/off grid mode, and multiple operation modes (VPP, grid-connected, off-grid) to enhance revenue.

Commercial Premises | Industrial Park | Mine | Petrol Station | Pastoral | Data center | Island

MODEL	Smart Ess Unit - M50-100
PV Parameters	
Max. Input Power	50kW
Start-Up Voltage	200V
PV Rated Voltage	620Vdc
MPPT Operating Voltage Range	200 ~ 850Vdc
MPPT Qty.	4
Qty. Of Single MPPT Input Channels	2
Max.Input Current	30A*4
Max.Short Circuit Current	40A*4
ESS Parameters	
Rated Power	103.68kWh
Rated Capacity	150Ah
Rated Voltage	691.2Vdc
Battery Voltage Range	605 ~ 777 Vdc
Rated Charge / Discharge Current	75A
Max.Charge / Discharge Current	90A
AC Parameters	
Rated Output Power	50kW
Max. Output Power	55kW
Rated Input Power	50kW
Max. Input Power	55kW
Off-grid Switching Time	<20ms
Rated Output Current	75A
Max.Output Current	83A
Rated Voltage (Input & Output)	3L/N/PE; 400V
Grid Frequency	50HZ / 60HZ
THDU	<3%@ Rated Power & Linear Load
Maximum Photovoltaic Conversion Efficiency	98.80%
General Parameter	
Weight	1350kg (NW), 1400kg (GW)
Boundary Dimension	960*1665*2245 (W*D*Hmm)
Packaging Dimension	1030*1720*2400 (W*D*Hmm)
Communication Mode	RS485, Ethernet, 4G
Operating Temperature	-20°C~50°C (45°C Derating)
Storage Temperature	-20°C~45°C
Humidity	5~95%, No Condensing
Altitude	2000m (2000m Derating)
Cooling Mode	Smart Air Conditioner, Smart Fan
Ingress Protection	IP54
Certification	IEC62619, IEC60730, IEC61000, IEC62477, EN50549, UN38.3

Product continues to iterate, specifications may be updated without prior notice.

Liquid-cooling Container ESS

M2500-5015

Features

1. Safe :

- PACK level + cantainer-level millisecond level sensing to achieve targeted fire extinguishing; gas firefighting.
- water firefighting to prevent re-ignition; active exhaust + third-level explosion venting to prevent secondary damage.
- Three-level thermal insulation for cells, PACK, and clusters, with fire resistance time more than 2 hours.
- PACK, cluster, heap and system four-level fuse protection mechanism, reducing security risks by 30%.
- 5VA-level new flame-retardant insulation material, flame-retardant capability increased by 25%.

2. Simple :

- 314 AH battery, extremely narrow cold plate, standard 20-foot HQ container nominal energy 5.015MWh, covered area <15m², better EPC cost.
- String architecture, AC side coupling, avoids inter-cluster circulation, and increases available power by 9%.
- The entire container is factory prefabricated, installed, and debugged, and the project delivery time is shortened by 50%.

3. Intelligent :

- Battery core temperature difference is less than 2.5°C, AI model predicts remaining life and battery core safety risks, guides preventive maintenance, and increases battery life by 12%.
- Active lossless equalization, self-healing and self-balancing, single-cluster automatic switching control, eliminating the need for expert on-site maintenance.
- Intelligent debug detection system to predict error early.

Introduction

MOTOMA 5015 ESS is composed of 314Ah battery, liquid-cooling battery pack, battery cluster, power distribution system, liquid-cooling temperature control system, fire protection system, BMS, etc. The rated capacity of the system is 5015.96kkWh. Each cluster is equipped with a sub-controller for single-cluster charging and discharging management. Each cluster consists of eight 1P52S battery packs in series. 314Ah high energy density battery cells are used, which is output to the external interface of the container after passing through the sub-controller, and the overall container adopts non-walk-in external maintenance design. It is recommended to be applied to ESS in multiple application scenarios such as peak frequency regulation, output smoothing, power grid support, peak shaving and valley filling in new energy generation side, power grid side and user side.

Technical Parameter

Type	Name		Parameters	Remarks
Battery Parameters	Cell type		LFP-3.2V-314Ah	
	Rated capacity[kWh]		5015.96	P2, @25°C±3°C
	Nominal voltage[V]		1331.2	
	Voltage range[v]		1164.8~1497.6	
	Charge and discharge ratio		⩽0.5CP	
	Max. charging and discharging power[kW]		2500	215kW Modular PCS
	Operating temperature	Charging[°C]	0~50	
		Discharging[°C]	-20~55	
	Recommended ambient temperature[°C]		25±10	
	Cycle life		⩾6000times	25±10°C, 90%DOD,80%EOL
	Cooling method		Liquid cooling	Liquid cooling medium: water + glycol
System Parameters	BMS		Level 3	
	Auxiliary electrical parameter		~40kW-400V/50Hz	~3N+PE
	Fire protection system		Perfluorohexanone + water fire protection	Type S aerosol/HFC-227ea optional
	Anticorrosive level		C4	C5 optional
	Lightning protection level		Level II	
	Ingress protection		IP55	
	Operating temperature range [°C]		-20 ~+50	>45°C derating
	Storage temperature[°C]		-20 ~+55	<6months
	Operating humidity range		0~95%RH	No condensation
	Installation mode		Installation mode	
	Working condition		Max. 2 charge and 2 discharge per day	
	System communication interface		CAN/Ethernet/RS485	
	External system communication protocol		Modbus TCP	
	Altitude[m]		⩽3000	
	Dimension[W*D*H mm]		6058*2438*2896	20 feet
	Weight[T]		~41	
Certificate	GB/T 36276、GB/T 34131			

■ Product continues to iterate, specifications may be updated without prior notice.

Centralized Medium-Voltage Converter System

FT25-690V3450KW

Features

1. Capable of PQ, VF, SVG, VSG functions, and supports high/low voltage ride-through.
2. Fast power dispatch, off-grid operation, and "black start" capabilities, with strong grid adaptability.
3. Supports two battery groups with independent charge/discharge management, which is more battery-friendly.
4. Rational and efficient layout to maximize space utilization.
5. Integrated secondary circuit with unified measurement, protection, and communication.
6. Integrated “transformation” and “step-up” design for one-stop product delivery.
7. More convenient and efficient transportation, lifting, installation, and maintenance.
8. Suitable for harsh environments, including high temperature, high humidity, high altitude, and high salinity.
9. Intelligent multi-stage fan speed control, wide-temperature operation capability, stable at 50°C without derating, and high system stability.
10. Three-level topology with up to 99% conversion efficiency for superior power quality.

Product Functional Feature

The M1800 - 3450 Centralized Medium-Voltage Converter System is an integrated device that combines the following components into a single container :

- One Power Conversion System (PCS)
- One high-voltage ring main unit
- One lighting system
- One double-wound dry-type transformer
- One fire Supression system
- Grounding system

This design is highly integrated, space-efficient, and easy to transport, install, and maintain. The container is divided into three sections: the high-voltage compartment, the transformer compartment, and the PCS side. It is suitable for various application scenarios, including renewable energy generation, grid-side, and user-side applications.

Product Specification Parameters

Category	Name	Parameter	Note
DC Parameters	Maximum Input Voltage	1500V	
	Maximum DC Current	3872A	
	Battery Group Voltage Range	1000～1500V	
	Maximum Battery Groups	2	
AC Parameters (Grid Connection)	Rated AC Power	3450kW	
	Maximum AC Power	3795kW	
	AC Voltage	690V	
	Rated Grid Voltage	10kV/20kV/35kV	
	Rated Grid Frequency	50/60Hz	
	THD (at rated power)	<1.5%	
	Power Factor	>0.99 (at rated power)	
	Power Factor Adjustment Range	-1 (leading) to 1 (lagging)	
System Parameters	System Maximum Efficiency	98.31%	
	Operating Temperature Range	-30℃～+60℃	
	Humidity Range	0～100%RH	No condensation
	Maximum Operating Altitude	5000m	
	System Communication Interfaces	RS485/Ethernet/CAN	
	External System Communication Protocols	Modbus TCP/Modbus RTU	
Mechanical Parameters	Dimensions (D×W×H)	7620×2438×2896mm	
	Weight	14500kg	Dry-type transformer
	Protection Level	IP54	
	Corrosion Protection Level	C3	C4 and C5 are optional
Certifications	GB/T 34120、GB/T 34133		

LITHIUM IRON PHOSPHATE BATTERY

Telecom Station Battery

BMS

Built-in intelligent BMS for battery protection

Max.16pcs batteries in parallel

Equipment with RS232/RS485 communication

Efficient & long-lasting service life

M77U 48V 100AH

M72U 48V 150AH

M78U 48V 200AH

Application:

Backup Power for Access network equipment, remote switch, mobile communications, transmission equipment and other systems.

Technical Parameter

Battery Model	M77U	M72U	M78U
Nominal voltage	48V	48V	48V
Capacity	100Ah	150Ah	200Ah
Nominal capacity	4.8KWh	7.2KWh	9.6KWh
Operating voltage range	40.5V~54.75V	40.5V~54.75V	40.5V~54.75V
Maximum charging current	100A	100A	100A
Maximum discharging current	100A	100A	100A
Charging temperature range	0°C~45°C	0°C~45°C	0°C~45°C
Discharging temperature range	-20°C~60°C	-20°C~55°C	-20°C~55°C
Dimension	530*440*132 mm	530*442*132 mm	530*442*177 mm
Weight	40 kg	53 kg	82 kg
IP level	IP20		
Cycle life	4000 Cycles @ DOD 80%		
Communication mode	RS232 / RS485		

LITHIUM IRON PHOSPHATE BATTERY

UPS Battery

M47 100Ah 12V

M48 200Ah 12V

Application:

For Solar Storage / RV / Marine / UPS / Solar Street Light / Telecom etc.

Technical Parameter

Battery Model	M47	M48
Nominal voltage	12.8V	12.8V
Capacity	100Ah	200Ah
Nominal capacity	1.28kWh	2.56kWh
Operating voltage range	10V~14.6V	10V~14.6V
Maximum charging current	100A	100A
Maximum discharging current	100A	100A
Charging temperature range	0°C~45°C	0°C~45°C
Discharging temperature range	-20°C~60°C	-20°C~60°C
Dimension	330x172x215mm	522x240x218mm
Weight	12Kg	23Kg
IP level	IP67	IP67
Cycle life @ DOD 80%	4000 times	4000 times
Terminal type	F12/F14	F23

LITHIUM IRON PHOSPHATE BATTERY

Golf Cart Batteries

- Good electrical performance.
- Long cycle life, high safety.
- Support fast charging.
- The BMS can be customized.
- No need maintenance.

105Ah 38.4V

105Ah 51.2V

Advanced BMS
Integrated advanced BMS with smart user friendly features.

Zero maintenance
No need for maintenance, saves OPEX for user.

Fast charging
Super fast charging capability (90% in 1hour)

Easy Implementation
No need to assign extra man-power to install.

Lighter battery weight
Far more lighter than equivalent lead acid batteries.

Low self-discharge
Self-discharge is less than half that of nickel-based batteries.

Technical Parameter

Battery Model	51.2V105AH	38.4V105AH
Nominal voltage	51.2V	38.4V
Capacity	105Ah	105Ah
Nominal capacity	105Ah	105Ah
Operating voltage range	40V~58.4V	30V~43.8V
Maximum charging current	105A	105A
Maximum discharging current	200A	200A
Charging temperature range	0°C~45°C	0°C~45°C
Discharging temperature range	-20°C~60°C	-20°C~60°C
Dimension	508*388*220 mm	400*400*220 mm
Weight	50kg	38kg
IP level	IP 65	IP65
Cycle life @ DOD 80%	2000 times	2000 times
Terminal type	M8	M8
Communication	CAN	CAN

SPECIAL APPLICATION
BATTERY

■ Lithium Polymer Battery

■ Cylindrical Lithium Battery

■ Super Alkaline Battery

■ Super Heavy Duty Battery

SOLAR INVERTER

Axpert VM II	1.5KW
Axpert VM II Premium	3KW
Axpert VM III TWIN	4KW , 6KW
Axpert VM IV TWIN	4KW , 6KW
Axpert King II TWIN	6KW
Axpert King IV TWIN	6KW

Axpert MAX TWIN	8KW , 11KW
Axpert Ultra TWIN	8KW , 11KW
InfiniSolar V IV TWIN	6KW
Infini V4 WP	6KW
InfiniSolar WP TWIN HMI	15KW
InfiniSolar WP TWIN HMI	30KW , 50KW

Axpert VM II

OFF-GRID INVERTER

- Economical solar inverter with affordable price
- Easy install, one battery 12vdc
- Wide PV input voltage range starts from 30VDC
- Battery independent design
- Built-in 80A MPPT solar charger
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dust kit

Axpert VM II Off-Grid Inverter Specification

MODEL	Axpert VM II 1.5K
Rated Power	1500VA/1500W
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers); 90-280 VAC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%
Output Power	1500W with PV & battery; 1200W with battery only
Surge Power	2400VA
Efficiency (Peak)	93%
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)
Waveform	Pure sine wave
BATTERY	
Battery Voltage	12 VDC
Floating Charge Voltage	13.5 VDC
Overcharge Protection	16 VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Maximum PV Array Open Circuit Voltage	350 VDC
Maximum PV Array Power	2000W
MPP Range @ Operating Voltage	30-300 VDC(30V-60V with battery)
Maximum Solar Charge Current	80 A
Maximum AC Charge Current	80 A
Maximum Charge Current	80 A
PHYSICAL	
Dimension, D x W x H (mm)	90 x 288 x 357
Net Weight (kgs)	6.5
Communication Interface	RS232
ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C

Product specifications are subject to change without further notice.

Axpert VM II Premium

OFF-GRID INVERTER

- Pure sine wave solar inverter
- Reserved communication port for BMS
- Wide PV input range
- Battery independent design
- Maximum charging current 100A
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dust kit

Axpert VM II Premium Off-Grid Inverter Selection Guide

MODEL	Axpert VM II Premium 3K
Rated Power	3000VA/3000W
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers); 90-280 VAC (For Home Appliances)
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%
Surge Power	6000VA
Efficiency (Peak)	93%
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)
Waveform	Pure sine wave
BATTERY	
Battery Voltage	24 VDC
Floating Charge Voltage	27 VDC
Overcharge Protection	32 VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	MPPT
Maximum PV Array Open Circuit Voltage	450 VDC
Maximum PV Array Power	3000W
MPP Range @ Operating Voltage	30～400 VDC (30～60VDC with battery connected) 60 - 400 VDC
Maximum Solar Charge Current	100 A
Maximum AC Charge Current	80 A
Maximum Charge Current	100 A
PHYSICAL	
Dimension, D x W x H (mm)	110 x 288 x 390
Net Weight (kgs)	7.2
Communication Interface	RS232/RS485 For Lithium Battery BMS communication
ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C

Product specifications are subject to change without further notice.

Axpert VM III TWIN

OFF-GRID INVERTER

- Dual output for smart load management
- Wide PV input voltage range 60VDC~450VDC
- Customizable status LED ring with RGB lights
- Detachable LCD control module with various communications
- Reserved communication port (RS485, CAN-BUS or RS232) for BMS
- Built-in Wifi for mobile monitoring (Android/iOS App available)
- Supports USB On-the-Go function
- Data log event stored in the inverter
- Maximum PV input current 27A
- Battery independent design
- Battery equalization extends lifecycle
- Enhanced charging power
- Built-in anti-dust kit

Axpert VM III TWIN Off-Grid Inverter Selection Guide

MODEL	Axpert VM III TWIN 4K	Axpert VM III TWIN 6K
Rated Power	4000VA/4000W	6000VA/6000W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt. Mode)	230VAC ± 10%	
Surge Power	8000VA	12000VA
Efficiency (Peak)	90% ~ 93%	
Transfer Time	15 ms (For Personal Computers) 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger type	MPPT	
Maximum PV Array Power	5000W	6000W
MPP Range @ Operating Voltage	60 ~ 450 VDC	60 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC	500 VDC
Maximum PV Input Current	27A	
Maximum Solar Charge Current	120A	120A
Maximum AC Charge Current	100A	100A
Maximum Charge Current	120A	120A
PHYSICAL		
Dimension, D x W x H (mm)	115 x 300 x 435	
Net Weight (kgs)	9	10
Communication Interface	USB, RS232, RS485, WiFi, Dry-contact	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	

Product specifications are subject to change without further notice.

Axpert VM IV TWIN

OFF-GRID INVERTER

- Dual output for smart load management
- Wide PV input voltage range 60VDC~450VDC
- Customizable status LED ring with RGB lights
- Touchable button with large 4.3" colored LCD
- Reserved communication port (RS485, CAN-BUS or RS232) for BMS
- Built-in Wifi for mobile monitoring (Android/iOS App available)
- Supports USB On-the-Go function
- Data log event stored in the inverter
- Maximum PV input current 27A
- Battery independent design
- Battery equalization extends lifecycle
- Enhanced charging power
- Built-in anti-dust kit

Axpert VM IV TWIN Off-Grid Inverter Selection Guide

MODEL	Axpert VM IV TWIN 4K	Axpert VM IV TWIN 6K
Rated Power	4000VA/4000W	6000VA/6000W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt. Mode)	230VAC ± 10%	
Surge Power	8000VA	12000VA
Efficiency (Peak)	90% ~ 93%	
Transfer Time	15 ms (For Personal Computers) 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger type	MPPT	
Maximum PV Array Power	5000W	6000W
MPP Range @ Operating Voltage	60 ~ 450 VDC	60 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC	500 VDC
Maximum PV Input Current	27A	
Maximum Solar Charge Current	120A	120A
Maximum AC Charge Current	100A	100A
Maximum Charge Current	120A	120A
PHYSICAL		
Dimension, D x W x H (mm)	119 x 313.6 x 457.5	
Net Weight (kgs)	10	12
Communication Interface	USB, RS232, RS485, WiFi, Dry-contact	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	

Product specifications are subject to change without further notice.

Axpert King II TWIN

OFF-GRID INVERTER

- Dual outputs, for smart load management
- Maximum PV input current increases to 27A
- Zero (0ms) transfer time to protect mission-critical loads such as servers and ATMs
- Detachable LCD control module with multiple communications
- Built-in Wi-Fi for mobile monitoring (App is available)
- Configurable AC/Solar input priority via LCD setting
- Reserved communication port for BMS (RS485 or CAN-BUS)
- High PV input voltage range
- Selectable high power charging current
- USB On-the-Go function
- Parallel operation up to 9 units

Axpert King II TWIN Off-Grid Inverter Selection Guide

MODEL		Axpert King II TWIN 6K
Rated Power		6000VA/6000W
Parallel Capability		Up to 9 units
GRID INPUT		
Voltage		230 VAC
Voltage Range		110-280 VAC
Frequency Range		50 Hz/60 Hz (Auto sensing) ± 4Hz
Power Factor		≧ 0.98 @ Nominal Voltage (100% Load)
THDi		≦ 10%
OUTPUT		
AC Voltage Regulation (Line&Batt. Mode)		230VAC ± 5%
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz
Harmonic Distortion		≦ 3 % THD (Linear Load); ≦ 5 % THD (Non-linear Load)
Transfer Time	Transfer	0 ms
	Time	4 ms (Typical)
Waveform		Pure sine wave
EFFICIENCY		
Line Mode		94%
ECO Mode		98%
Battery Mode		92%
BATTERY		
Battery Voltage		40~66 VDC
Floating Charge Voltage		54 VDC
Overcharge Protection		66 VDC
SOLAR INPUT		
Solar Charger type		MPPT
Maximum PV Array Power		6000 W
MPPT Range @ Operating Voltage		120 ~ 430 VDC
Maximum PV Array Open Circuit Voltage		500 VDC
Maxmum Solar Charge Current		120A
Maximum AC Charge Current		120A
PHYSICAL		
Dimension, D x W x H (mm)		140 x 295 x 468
Net Weight (kgs)		12
Communication Interface		RS232, USB, Dry contact, WI-FI, RS485
ENVIRONMENT		
Humidity		5% to 95% Relative Humidity(Non-condensing)
Operating Temperature		-10°C to 50°C
Storage Temperature		-15°C to 60°C

Product specifications are subject to change without further notice.

Axpert King IV TWIN

OFF-GRID INVERTER

- Dual outputs, for smart load management
- Maximum PV input current increases to 27A
- Zero (0ms) transfer time to protect mission-critical loads such as servers and ATMs
- Customizable status LED ring with RGB lights
- Touchable button with 4.3" colored LCD
- Built-in Wi-Fi for mobile monitoring (App is available)
- Configurable AC/Solar input priority via LCD setting
- Reserved communication port for BMS (RS485 or CAN-BUS)
- High PV input voltage range
- Selectable high power charging current
- USB On-the-Go function
- Parallel operation up to 9 units

Axpert King IV TWIN Off-Grid Inberter Selection Guide

MODEL		Axpert King IV TWIN 6K
Rated Power		6000VA/6000W
Parallel Capability		Up to 9 units
GRID INPUT		
Voltage		230 VAC
Voltage Range		110-280 VAC
Frequency Range		50 Hz/60 Hz (Auto sensing) ± 4Hz
Power Factor		≧ 0.98 @ Nominal Voltage (100% Load)
THDi		≦ 10%
OUTPUT		
AC Voltage Regulation (Line&Batt. Mode)		230VAC ± 5%
Frequency Range (Synchronized Range)		46~54 Hz or 56~64 Hz
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz
Harmonic Distortion		≦ 3 % THD (Linear Load); ≦ 5 % THD (Non-linear Load)
Transfer Time	Transfer	0 ms
	Time	4 ms (Typical)
Waveform		Pure sine wave
EFFICIENCY		
Line Mode		94%
ECO Mode		98%
Battery Mode		92%
BATTERY		
Battery Voltage		40~66 VDC
Floating Charge Voltage		54 VDC
Overcharge Protection		66 VDC
SOLAR INPUT		
Solar Charger type		MPPT
Maximum PV Array Power		6000 W
MPPT Range @ Operating Voltage		120 ~ 430 VDC
Maximum PV Array Open Circuit Voltage		500 VDC
Maxmum Solar Charge Current		120A
Maximum AC Charge Current		120A
PHYSICAL		
Dimension, D x W x H (mm)		140 x 295 x 468
Net Weight (kgs)		12
Communication Interface		RS232, USB, Dry contact, WI-FI, RS485
ENVIRONMENT		
Humidity		5% to 95% Relative Humidity(Non-condensing)
Operating Temperature		-10°C to 50°C
Storage Temperature		-15°C to 60°C

Product specifications are subject to change without further notice.

Axpert MAX TWIN

OFF-GRID INVERTER

- Dual outputs, for smart load management
- Maximum PV input current increases to 27A
- Wide PV input voltage range 90VDC ~ 450VDC
- Replaceable fan design for ease of maintenance
- Built-in Wi-Fi for mobile monitoring (Android/iOS App is available)
- Compatible to Utility Mains or generator input
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Status indication with RGB lights
- Battery independent design
- Selectable high power charging current
- Supports USB On-the-Go function
- Built-in anti-dust kit
- Parallel operation with 6 units

Axpert MAX TWIN Off-Grid Inverter Selection Guide

MODEL	Axpert MAX TWIN 8K	Axpert MAX TWIN 11K
Rated Power	8000VA/8000W	11000VA/11000W
Parallel Capability	YES, 6 units	
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	230VAC ± 5%
Surge Power	16000VA	22000VA
Efficiency (Peak)	93%	
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
DC Voltage	12 VDC ± 5%, 100W	N/A
BATTERY		
Battery Voltage	48 VDC	48 VDC
Floating Charge Voltage	54 VDC	54 VDC
Overcharge Protection	66 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger Type	MPPT	
Maximum PV Array Power	8000W (4000W x 2)	11000W (5500W x 2)
MPPT Range @ Operating Voltage	90 ~ 450 VDC	90 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500 VDC	500 VDC
Maximum PV Input Current	27A x 2 (MAX 40A)	
Maxmum Solar Charge Current	120A	150A
Maximum AC Charge Current	120A	150A
Maximum Charge Current	120A	150A
PHYSICAL		
Dimension, D x W x H (mm)	147.4 x 432.5 x 553.6	
Net Weight (kgs)	18.4	
Communication Interface	USB, RS232, RS485, WiFi, Dry-contact	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	
STANDARD		
Compliance Safety	CE	

Product specifications are subject to change without further notice.

Axpert Ultra TWIN

OFF-GRID INVERTER

- Dual outputs for smart load management
- Two independent AC power sources connected and switched automatically
- Built-in current transformer sensor to meet self-consumption application
- Support external BTS (Battery Temperature Sensor) detection
- Built-in power status lighting indicators
- Built-in 2.8" colored LCD with slide operation
- Built-in Wi-Fi for mobile monitoring and OTA firmware upgrade
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Support optional GFCI, Rapid shutdown, AFCI detections
- Supports USB On-the-Go function
- Parallel operation with 6 units

Axpert Ultra Off-Grid Inverter Selection Guide

MODEL	Axpert Ultra TWIN 8K	Axpert Ultra TWIN 11K
Rated Power	8000VA/8000W	11000VA/11000W
Parallel Capability	YES, 6 units	
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	
Surge Power	16000VA	22000VA
Efficiency (Peak)	93%	
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
BATTERY		
Battery Voltage	48 VDC	
Floating Charge Voltage	54 VDC	
Overcharge Protection	63 VDC	
SOLAR CHARGER & AC CHARGER		
Solar Charger Type	MPPT	
Maximum PV Array Power	10000W (5000W × 2)	12000W (6000W × 2)
MPPT Range @ Operating Voltage	90 ~ 450 VDC	
Maximum PV Array Open Circuit Voltage	500 VDC	
Maximum PV Input Current	27A × 2 (MAX 40A)	
Maxmum Solar Charge Current	150A	150A
Maximum AC Charge Current	120A	150A
Maximum Charge Current	150A	150A
PHYSICAL		
Dimension, D x W x H (mm)	145 × 438 × 553.6	
Net Weight (kgs)	18.4	
Communication Interface	USB, RS232, RS485, WiFi, Dry-contact, BTS, Support optional GFCI, Rapid shutdown, AFCI detection	
External Current Sensor Port	Yes, built-in current transformer sensor	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	
STANDARD		
Compliance Safety	CE	

Product specifications are subject to change without further notice.

InfiniSolar V IV TWIN

ON-GRID INVERTER WITH ENERGY STORAGE

- Maximum PV input current 27A
- Dual outputs for smart load management
- Touchable button with 4.3" colored LCD
- Self-consumption and Feed-in to the grid
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in Wi-Fi for mobile monitoring (App is available)
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Reserved communication port for BMS
- Parallel operation up to 9 units

InfiniSolar V IV TWIN On-Grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar V IV TWIN 6KW
Phase	1-phase in / 1-phase out
Maximum PV Input Power	6000W
Rated Output Power	6000W
Maximum Charging Power	6000W
GRID-TIE OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
Power Factor	> 0.9
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	95%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC
Maximum AC Input Current	40A
PV INPUT (DC)	
Maximum DC Voltage	500 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Waveform	Pure sinewave
Efficiency (DC to AC)	93%
HYBRID OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27A
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC
Maximum AC Input Current	40A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Efficiency (DC to AC)	93%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Solar Charging Current	120A
Maximum AC Charging Current	120A
Maximum Charging Current	120A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	140 x 295 x 468
Net Weight (kgs)	12
INTERACE	
Parallel Function	Yes, 9 units
Communication Port	USB, RS232, RS485, Wifi, Dry-contact
ENVIRONMENT	
Humidity	0 ~ 90% RH (Non-condensing)
Operating Temperature	-10 to 50ºC

Product specifications are subject to change without further notice.

Infini V4 WP

ON-GRID INVERTER WITH ENERGY STORAGE

- Dual outputs for smart load management
- IP65 waterproof and dustproof makes the inverter available for various working conditions
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Programmable supply priority for PV, Battery or Grid
- Built-in communication port for BMS (RS485), Wi-Fi
- Self-consumption and Feed-in to the grid
- User-adjustable charging current and voltage
- Parallel operation up to 9 units

Infini V4 WP On-Grid Inverter with Energy Storage Selection Guide

MODEL	Infini V4 WP 6kw
Phase	1-phase in / 1-phase out
Maximum PV Input Power	7000W
Rated Output Power	6000VA / 6000W
Maximum Charging Power	6000W
GRID-TIE OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	550 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 30A
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264,5 VAC or 195,5 - 253 VAC or 184 - 264,4 VAC (Selectable)
Nominal Output Current	26A
Power Factor	> 0,9
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	97%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC
Frequency Range	50 Hz/60 Hz (Auto sensing)
Maximum AC Input Current	40A
PV INPUT (DC)	
Maximum DC Voltage	500 VDC
MPP Voltage Range	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 30A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Waveform	Pure sinewave
Efficiency (DC to AC)	93%
HYBRID OPERATION	
PV INPUT (DC)	
Maximum DC Voltage	550 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	1 / 30A
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264,5 VAC or 195,5 - 253 VAC or 184 - 264,4 VAC (Selectable)
Nominal Output Current	26A
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC
Maximum AC Input Current	40A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Efficiency (DC to AC)	93%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Solar Charging Current	120A
Maximum AC Charging Current	120A
Maximum Charging Current	120A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	192 x 360 x 665
Net Weight (kgs)	22,5
INTERACE	
Parallel Function	Yes, 9 units
Communication Port	USB or RS-232/Dry Contact/RS485/Wi-Fi
ENVIRONMENT	
Humidity	0 ~ 95% RH (No condensing)
IP degree	IP65
Operating Temperature	-25 to 50ºC

InfiniSolar WP TWIN HMI

HYBRID INVERTER

- IP66 certified enclosure
- User-friendly HMI LCD design for easy configuration
- Built-in WiFi for mobile monitoring (App is available)
- Reserved communication port for BMS (RS485)
- 150% unbalanced load support
- 26A maximum PV input current
- Dual outputs for smart load management
- User-adjustable charging current
- Parallel operation up to 6 units

InfiniSolar WP TWIN HMI Three Phase Hybrid Inverter Selection Guide

MODEL	InfiniSolar WP TWIN HMI 15kw
Maximum PV Input Power	22500 W
Rated Output Power	15000 W
Maximum Charging Power	15000 W
GRID-TIE OPERATION	
PV INPUT (DC)	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 1000 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range	350 VDC ~ 950 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
Number of Strings Per MPP Tracker	A: 2, B: 2
GRID OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC per phase
Nominal Output Current	21.7 A per phase
Power Factor Range	0.9 lag ~ 0.9 lead
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	> 96%
European Efficiency@ Vnominal	> 95%
OFF-GRID OPERATION	
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	170 - 290 VAC per phase
Maximum AC Input Current	40 A
PV INPUT (DC)	
Maximum DC Power	22500 W
Maximum DC Voltage	1000 VDC
MPP Voltage Range	350 VDC ~ 950 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
Number of Strings Per MPP Tracker	A: 2, B: 2
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure sinewave
Efficiency (DC to AC)	91%
HYBRID OPERATION	
PV INPUT (DC)	
Maximum DC Voltage	1000 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range	350 VDC ~ 950 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 26A, B: 26A
Number of Strings Per MPP Tracker	A: 2, B: 2
GRID OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC per phase
Nominal Output Current	21.7 A Per phase
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	170 - 290 VAC per phase
Maximum AC Input Current	40 A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	91%
BATTERY & CHARGER	
Battery Voltage Range	40 ~ 62 VDC
Maximum Charging Current	300 A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	255 x 660 x 750
Net Weight (kgs)	78
INTERACE	
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi
Intelligent Slot	Intelligent Slot Optional for SNMP and Modbus cards
ENVIRONMENT	
Humidity	0 ~ 100% RH (Non-condensing)
Operating Temperature	-25 to 60°C, >45°C power derating
Altitude	0 ~ 1000 m**
PROTECTION & CERTIFICATE	
Safety	IEC 62109, IEC 62116, IEC 61727, IEC 61683
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105, G99

*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.
** Power derating 1% every 100m when altitude is over 1000m. Product specifications are subject to change without further notice.

InfiniSolar WP 30KW - 50KW

HYBRID INVERTER

- IP65 waterproof and dustproof design
- Wide battery input range 200~900 VDCC
- 200A AC passthrough capability only for 50kw
- Parallel operation up to 4 units with common battery
- Built-in WiFi for mobile monitoring (App is available)
- Two independent AC power sources connected and switched automatically
- User-adjustable charging current up to 50A or 100A based on model
- User-friendly HMI LCD design and easy configuration
- Built-in communication port for BMS (CAN and RS485)

InfiniSolar WP Three Phase Hybrid Inverter Selection Guide

MODEL	InfiniSolar WP 30kw	InfiniSolar WP 50kw
MAXIMUM PV INPUT POWER	48,000 W	65000 W
RATED OUTPUT POWER	30,000 W	50000 W
MAXIMUM CHARGING POWER	30,000 W	50000 W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 1000 VDC	
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	3 / A: 36A, B: 36A, C: 36A	4/ A: 36A, B: 36A, C: 36A, D:36A
Number of Strings Per MPP Tracker	A: 2, B: 2, C: 2	A: 2, B: 2, C: 2, D:2
GRID/UTILITY OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	
Nominal Output Current	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Power Factor	0.9 lag to 0.9 lead	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	96.5%	
European Efficiency@ Vnominal	96%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	50A	83 A
PV INPUT (DC)		
Maximum DC Voltage	1000 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	3 / A: 36A, B: 36A, C: 36A	4/ A: 36A, B: 36A, C: 36A, D:36A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	97%	
HYBRID OPERATION		
PV INPUT (DC)		
Maximum DC Voltage	1000 VDC	
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	3 / A: 36A, B: 36A, C: 36A	4/ A: 36A, B: 36A, C: 36A, D:36A
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	
Nominal Output Current	43.5 A per phase	73 A per phase
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	50 A	83 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Efficiency (DC to AC)	97%	
BATTERY & CHARGER		
Battery Voltage Range	200 ~ 900 VDC	200 ~ 900 VDC
Maximum Charging/Discharging Current	50 A	100 A
GENERAL		
PHYSICAL		
Dimension, D x W x H (mm)	290 x 580 x 900	290 x 580 x 900
Net Weight (kgs)	85	90
INTERFACE		
Communication Port	RS-232, USB, dry contact, RS-485, CAN, Wi-Fi	
Intelligent Slot	Optional SNMP or MODBUS	
ENVIRONMENT		
Humidity	0 ~ 100% RH	
Operating Temperature	-25°C to 60°C (>45°C De-rating)	
Altitude	0 ~ 1000 m**	
PROTECTION & CERTIFICATE		
EMI/Safety	IEC/EN 61000, IEC/EN 62920, EN 62477	
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105, G99, IEC 61683, IEC 61727, IEC 62116	

*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.
** Power derating 1% every 100 m when altitude is over 1000m

560-585 W

N-type Bifacial TOPCon

Double-Glass Mono Crystalline

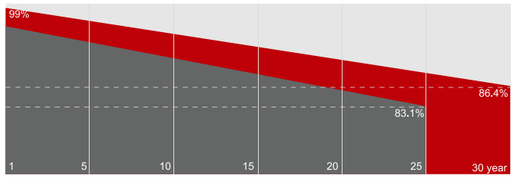
N type / 144 Half-Cut

Superiror Warranty

- 12-year product warranty
- 30-year linear power output warranty

The power attenuation of the modules in the first year shall not exceed 2.0%, and the power attenuation shall not exceed 0.4% every year thereafter. At the end of the 30-year guarantee period, the power of the modules shall not be lower than 86.4% of the nominal power;

*The above power test is carried out under standard test conditions



■ N-type Bifacial Double Glass Module Linear Performance Warranty ■ Standard Module Linear Performance Warranty

Comprehensive Certificates

- IEC 61215, IEC 61730
- TUV, CE
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems

Features

N-type (TOPCon Technology)
With lower (LID) ,"Light Induced Degradation"

Double Glass Structure (Bifacial)
Minimize (PID) effect ," Potential Induced Degradation"

Dual-Side Power Generation
Increased power generation gain

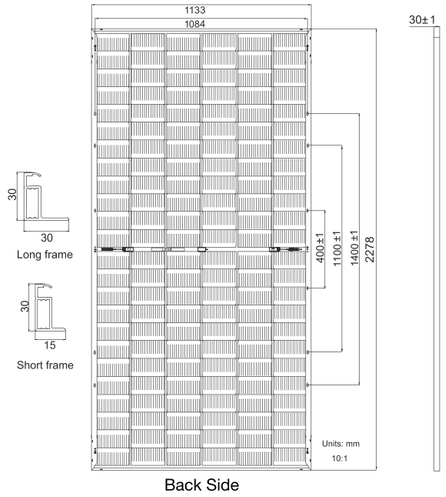
16 BB & Half Cut Cell Technology
Increased Efficiency & Reliability

Lower temperature coefficient
Increases energy yield in hot climate

Lower power attenuation
Higher generation returns

Mechanical Specifications

Cell Type :	144 pcs (6x24) , N-type Mono - 16 BB
Dimension :	2278×1134×30mm
Weight :	33 kg
Front Glass :	2 mm heat strengthened glass + anti-reflective coating
Rear Glass :	2 mm heat strengthened glass
Snow/Wind :	5400/2400 Pa dual
Junction Box :	3 Diodes , IP68
Connector :	Compatible MC4-EVO 2A , IP68
Cable :	Diameter 4 mm² / Lenght 300mm+/-5mm or Customized Length



Back Side

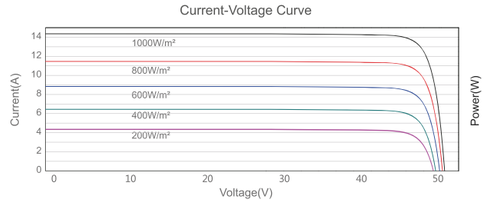
Electrical Specifications

Max Power - Pmax [0-+5W] (W)	560	565	570	575	580	585
Max Power Voltage - Vmp (V)	41.95	42.14	42.29	42.44	42.59	42.74
Max Power Current - Imp (A)	13.35	13.41	13.48	13.55	13.62	13.69
Open Circuit Voltage - Voc [±3%](V)	50.67	50.78	51.07	51.27	51.47	51.67
Short Circuit Current - Isc [±3%] (A)	14.13	14.19	14.25	14.31	14.37	14.43
Module Efficiency (%)	21.68	21.87	22.07	22.26	22.45	22.64
Bifacial Gain 10% (W)	616	622	627	633	638	644
Bifacial Gain 20% (W)	672	678	684	690	696	702
Bifacial Gain 30% (W)	728	735	741	748	754	761
Max System Voltage (V)	1500					
Max Series Fuse (A)	30					

Temperature Parameter

Temperature Cycling Range:	-40℃ ~ +85℃
Norminal Module Operating Temp:	45±2 ℃
Temperature Coefficient of Isc:	0.050% / ℃
Temperature Coefficient of Voc :	- 0.284% / ℃
Temperature Coefficient of Pmax :	- 0.350% / ℃

I-V Curve 570W



Packaging Configuration

Pieces per pallet : 36 pcs (Pallet : 2310x1140x1257 mm)

Pieces per Container 40' HQ : 720 pcs

Guarantee

12-year warranty on materials & workmanship

30-year linear power output warranty

※ Specifications subject to technical changes and tests, Linuo Power reserves the right of final interpretation.

605-630 W

N-type Bifacial TOPCon

Double-Glass Mono Crystalline

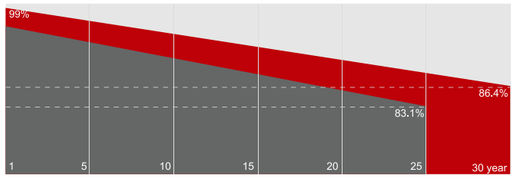
N type / 132 Half-Cut

Superiror Warranty

- 12-year product warranty
- 30-year linear power output warranty

The power attenuation of the modules in the first year shall not exceed 2.0%, and the power attenuation shall not exceed 0.4% every year thereafter. At the end of the 30-year guarantee period, the power of the modules shall not be lower than 86.4% of the nominal power;

*The above power test is carried out under standard test conditions



■ N-type Bifacial Double Glass Module Linear Performance Warranty ■ Standard Module Linear Performance Warranty

Comprehensive Certificates

- IEC 61215, IEC 61730
- TUV, CE
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems

Features

N-type (TOPCon Technology)
With lower (LID) ,"Light Induced Degradation"

Double Glass Structure (Bifacial)
Minimize (PID) effect ," Potential Induced Degradation"

Dual-Side Power Generation
Increased power generation gain

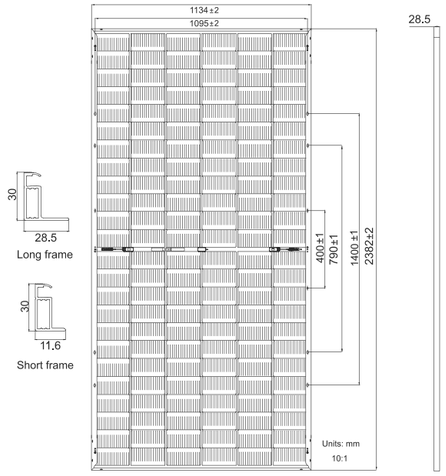
16 BB & Half Cut Cell Technology
Increased Efficiency & Reliability

Lower temperature coefficient
Increases energy yield in hot climate

Lower power attenuation
Higher generation returns

Mechanical Specifications

Cell Type :	132 pcs (2x66) , N-type Mono - 16 BB
Dimension :	2382x1134x30mm
Weight :	32.4 kg
Front Glass :	2 mm heat strengthened glass + anti-reflective coating
Rear Glass :	2 mm heat strengthened glass
Snow/Wind :	5400/2400 Pa dual
Junction Box :	3 Diodes , IP68
Connector :	Compatible MC4-EVO 2A , IP68
Cable :	Diameter 4 mm² / Lenght 300mm+/-5mm or Customized Length



Back Side

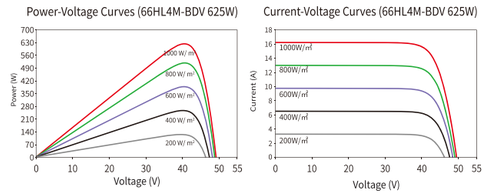
Electrical Specifications

Max Power - Pmax [0~+5W] (W)	605	610	615	620	625	630
Max Power Voltage - Vmp (V)	40.31	40.46	40.60	40.74	40.88	41.02
Max Power Current - Imp (A)	15.01	15.08	15.15	15.22	15.29	15.36
Open Circuit Voltage - Voc [±3%](V)	48.48	48.68	48.88	49.08	49.28	49.48
Short Circuit Current - Isc [±3%] (A)	15.90	15.96	16.02	16.08	16.14	16.20
Module Efficiency (%)	22.40	22.58	22.77	22.95	23.14	23.32
Bifacial Gain 10% (W)	665	671	676	682	687	693
Bifacial Gain 20% (W)	726	732	738	744	750	756
Bifacial Gain 30% (W)	786	793	799	806	812	819
Max System Voltage (V)	1500					
Max Series Fuse (A)	35					

Temperature Parameter

Temperature Cycling Range:	-40℃ ~ +85℃
Norminal Module Operating Temp:	45±2 ℃
Temperature Coefficient of Isc:	0.045 % / ℃
Temperature Coefficient of Voc :	-0.25 % / ℃
Temperature Coefficient of Pmax :	-0.29 % / ℃

Electrical Performance



Packaging Configuration

Pieces per pallet : 36 pcs (Pallet : 2396x1110x1251mm)

Pieces per Container 40' HQ : 720 pcs

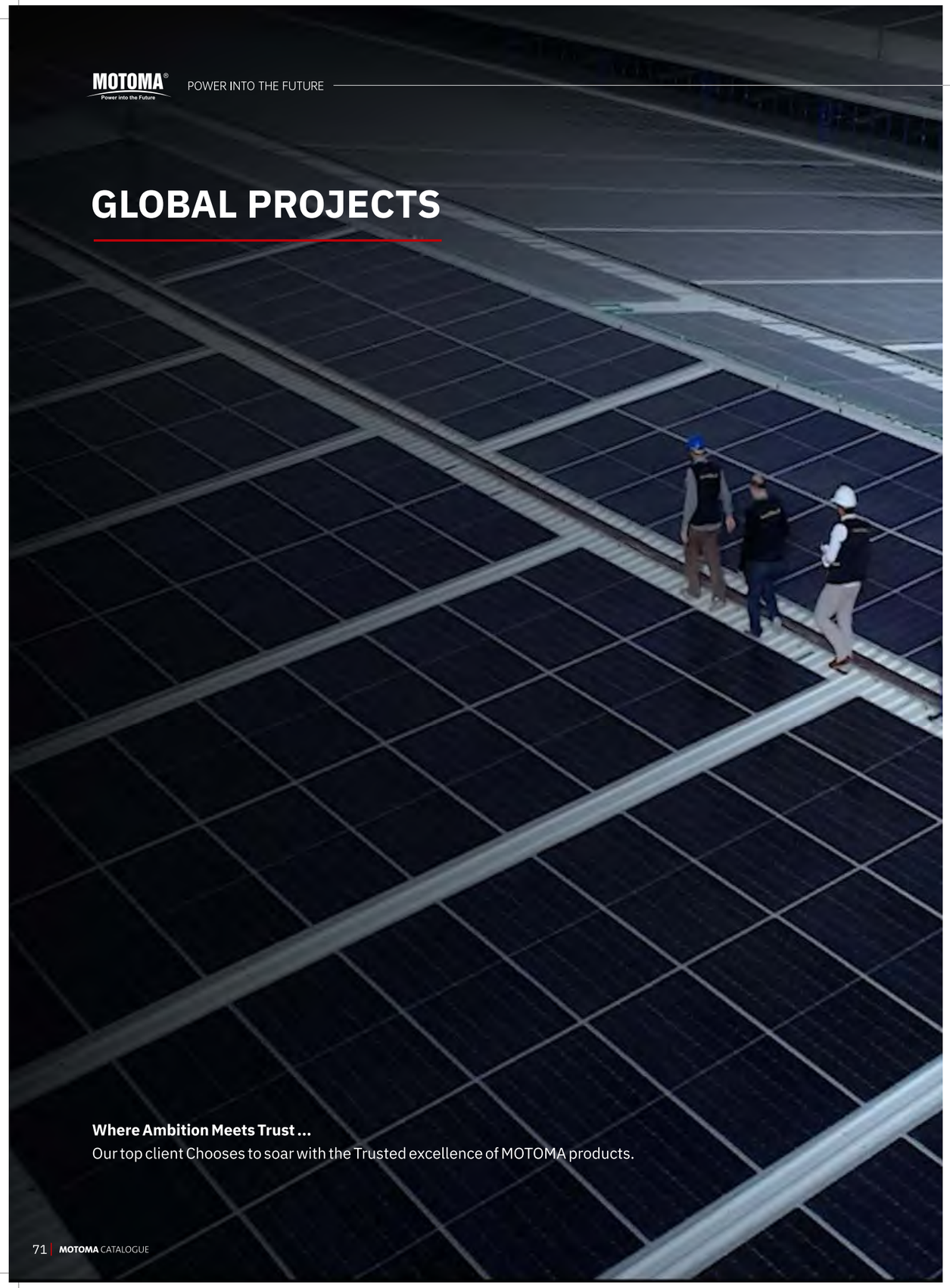
Guarantee

12-year warranty on materials & workmanship

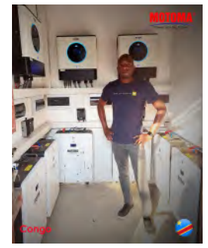
30-year linear power output warranty

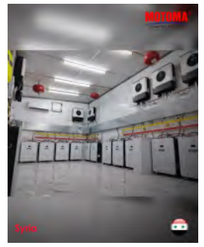
※ Specifications subject to technical changes and tests, Linuo Power reserves the right of final interpretation.

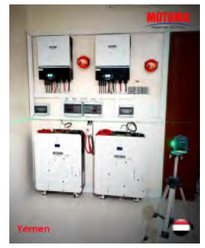
GLOBAL PROJECTS



Where Ambition Meets Trust ...
Our top client Chooses to soar with the Trusted excellence of MOTOMA products.







EXHIBITION & EVENTS

Leading the Solar Revolution ...
We proudly represent at various solar energy global exhibitions every year.