



Henan Hongyu Supply Chain Co.,Ltd.

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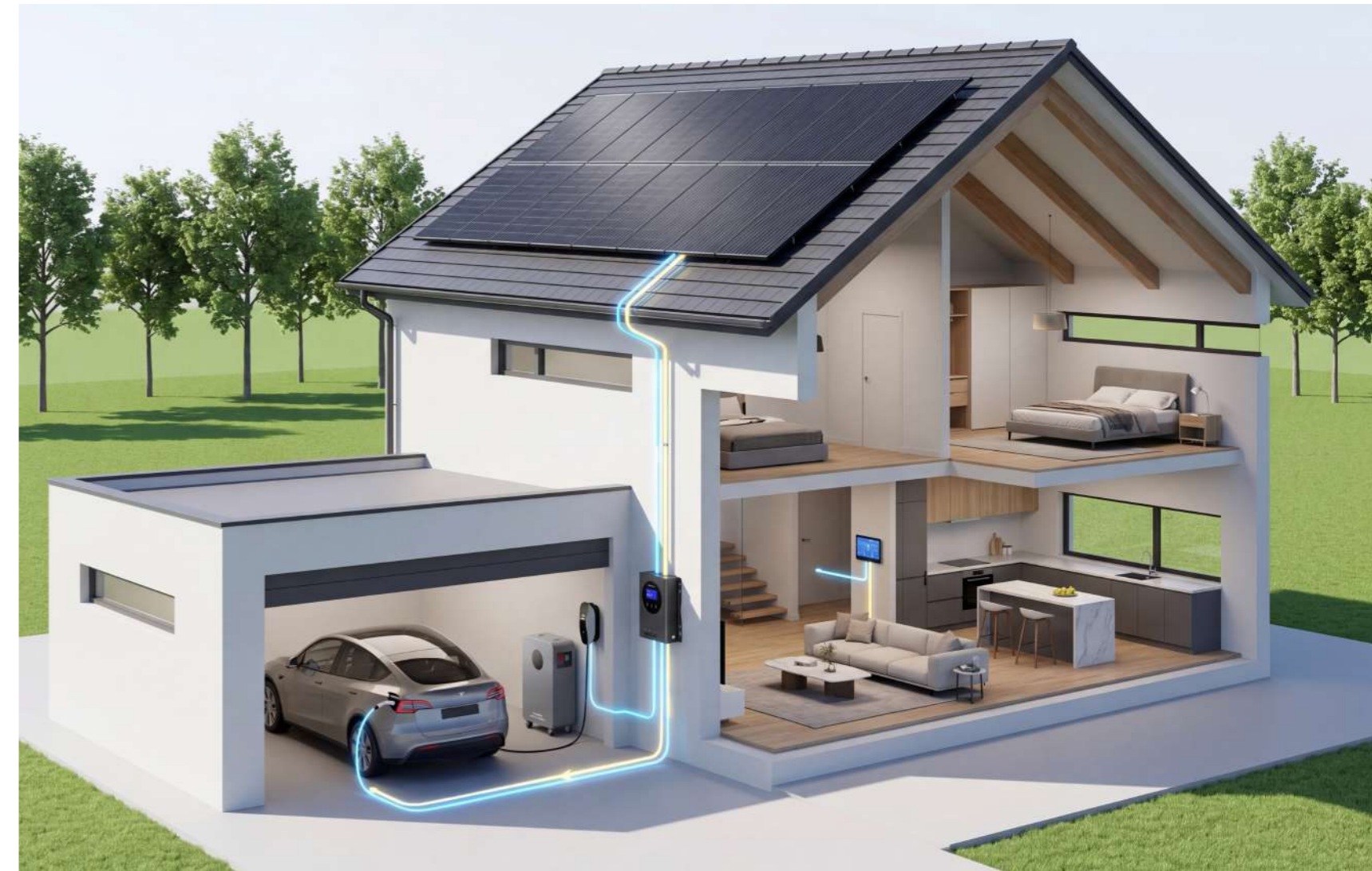


**GREEN FOR FUTURE  
SMART FOR VALUE**

Henan Hongyu Supply Chain Co.,Ltd.

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# COMPANY PROFILE

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A Deep Cultivator and Innovator in the Cross-Border Track

## A GLOBAL INTEGRATED INTERNATIONAL TRADE SERVICE PROVIDER

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### COMPANY BASIC INFORMATION

Henan Hongyu Supply Chain Co.,Ltd. (here mentioned as “Hongyu” afterwards), was founded in 2024, is a core affiliated enterprise of Zhengtao Group - the company with a ten-year cross-border veteran. Hongyu inherits the Group’s profound industry heritage and core resources, and holds controlling stakes in leading new energy manufacturers of solar panels and energy storage batteries. With a solid industrial foundation and rich experience, it provides one-stop international trade solutions in the new energy field for overseas customers, and is a trusted professional partner globally.

Hongyu empowers overseas cooperation with the entire industrial chain, helping customers avoid risks and seize opportunities.

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### BUSINESS TRANSFORMATION PATH

Proficient in regional trade rules and customer needs, it provides customized one-stop one-on-one services, responding efficiently from demand docking to after-sales support to build long-term trusted partnerships.

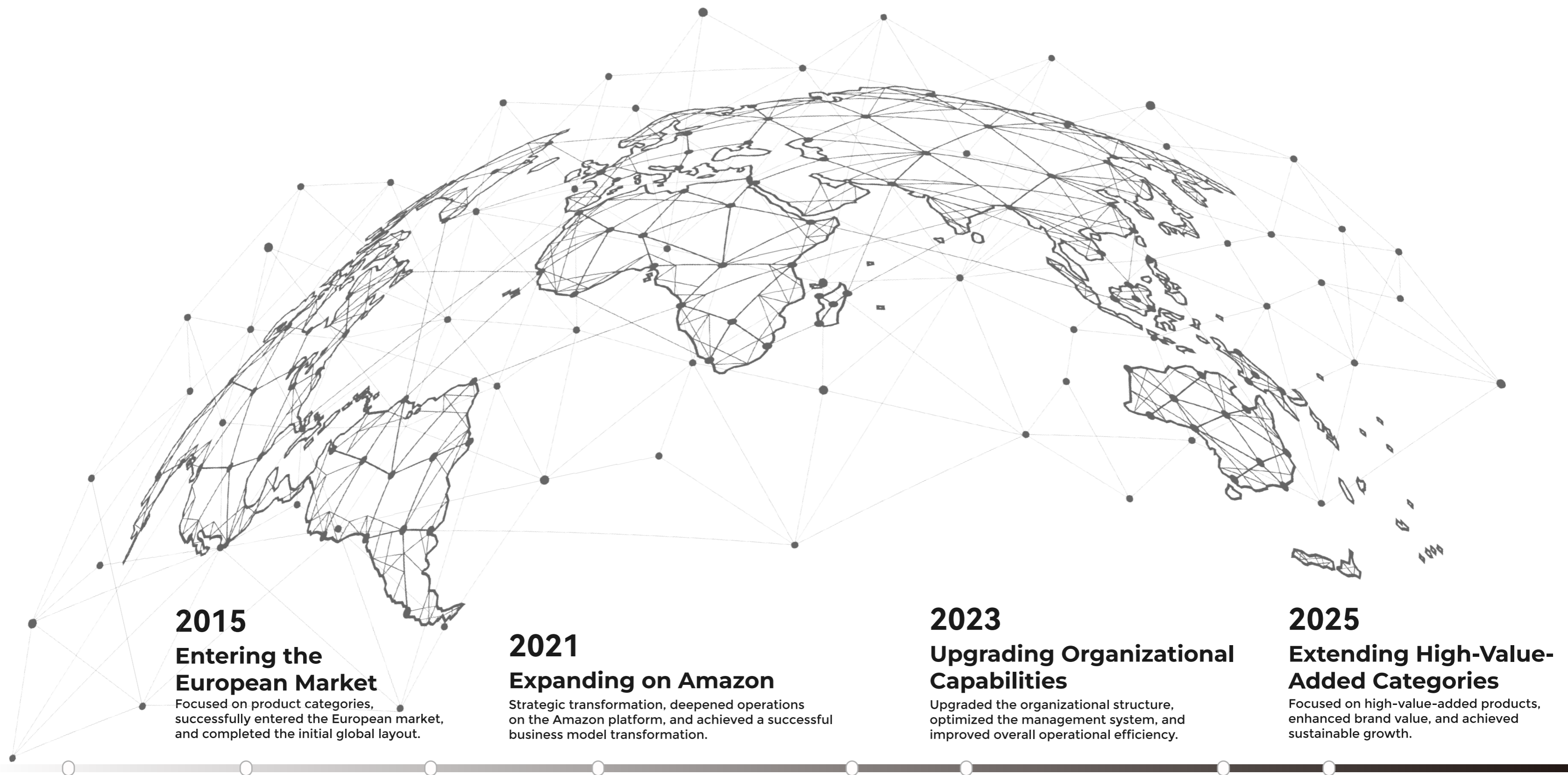
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### GLOBAL FOOTPRINT

Strong supply chain integration is Hongyu’s core competitiveness.

With overseas warehouses in Europe, Australia, the UK and the US, it ensures rapid delivery and shorter lead times.





**2014**

**Forming the Core Team**

Established the core team and defined the company's development direction and strategy.

**2015**

**Entering the European Market**

Focused on product categories, successfully entered the European market, and completed the initial global layout.

**2020**

**Relocating to Zhengzhou**

Leveraged Zhengzhou's geographical advantages and logistics hub to achieve strategic upgrading.

**2021**

**Expanding on Amazon**

Strategic transformation, deepened operations on the Amazon platform, and achieved a successful business model transformation.

**2022**

**Building the Energy Storage Sector**

Entered the energy storage business, expanded the product line, and ventured into the new energy sector.

**2023**

**Upgrading Organizational Capabilities**

Upgraded the organizational structure, optimized the management system, and improved overall operational efficiency.

**2024**

**Expanding to Emerging Platforms**

Expanded to new e-commerce platforms, broadened market coverage, and expanded the team.

**2025**

**Extending High-Value-Added Categories**

Focused on high-value-added products, enhanced brand value, and achieved sustainable growth.

# TEAMS



# WORKSHOP

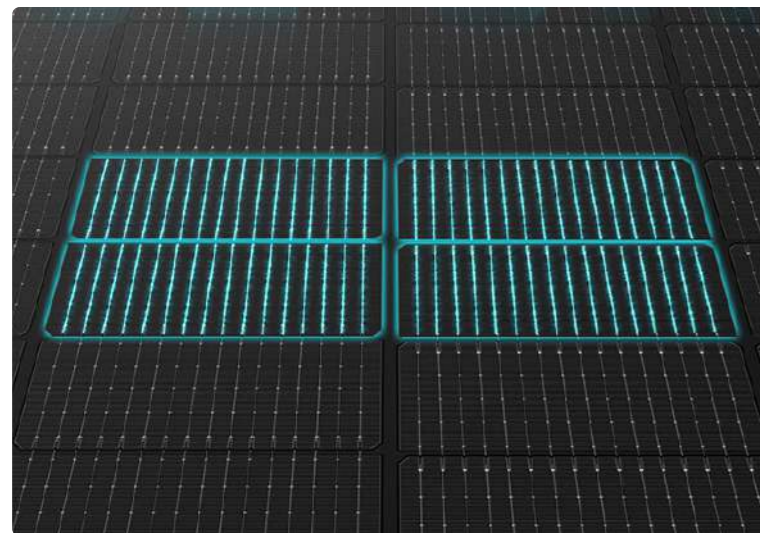


# CORE ADVANTAGES

Full Platform & Global Reach

## TECH-POWERED SOLAR SOLUTIONS

We combine in-house R&D and manufacturing to deliver efficient, green, smart energy solutions for every use case.



### N-Type TOPCon: Industry-Leading Tech

All panels use N-type TOPCon tech (25.8%+ efficiency, 90% bifacial), with no light-induced degradation—outperforming in heat/low light.



### Full Product Lineup

Our lineup includes foldable panels, flexible panels, glass panels, inverters, energy storage systems, and controllers, catering to all scenarios including portable, engineering, off-grid, and on-grid applications.



### Customized Solutions for Business

We build full custom power systems (modules to storage) — size, power, and plans all made to order.



### Efficient Cross-Border E-Commerce Fulfillment

With a mature cross-border system, we manage the entire process from order to production, logistics, and customs clearance, supporting customized delivery to help global customers launch quickly.

Green Future, Smart Value — Efficient, Clean, Sustainable Energy for All!

# NEW ENERGY HOME SOLUTIONS

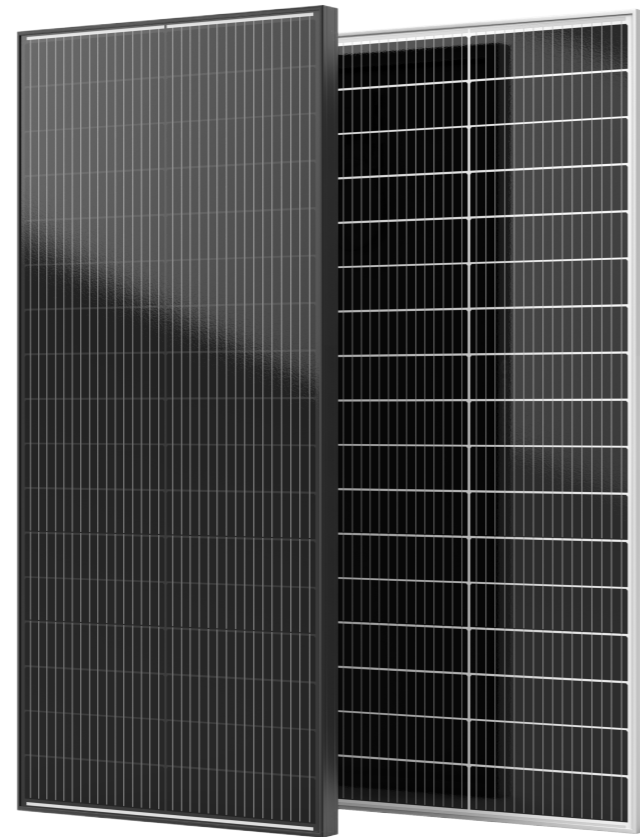
PRODUCT CATALOG

SUSTAINABLE LIVING | EFFICIENCY | DESIGN



# N-TOPcon MK01-55-75

High Efficiency Monocrystalline Solar Module



Higher output Power



Less shading and lower resistive loss



Low attenuation



Better mechanical loading tolerance

**34 Half Cell**

45.5\*182MM

**0~+5W**

Positive Power Tolerance

**22.2%**

maximum efficiency

**55W-75W**

Output Power Range

## Quality System Certifications

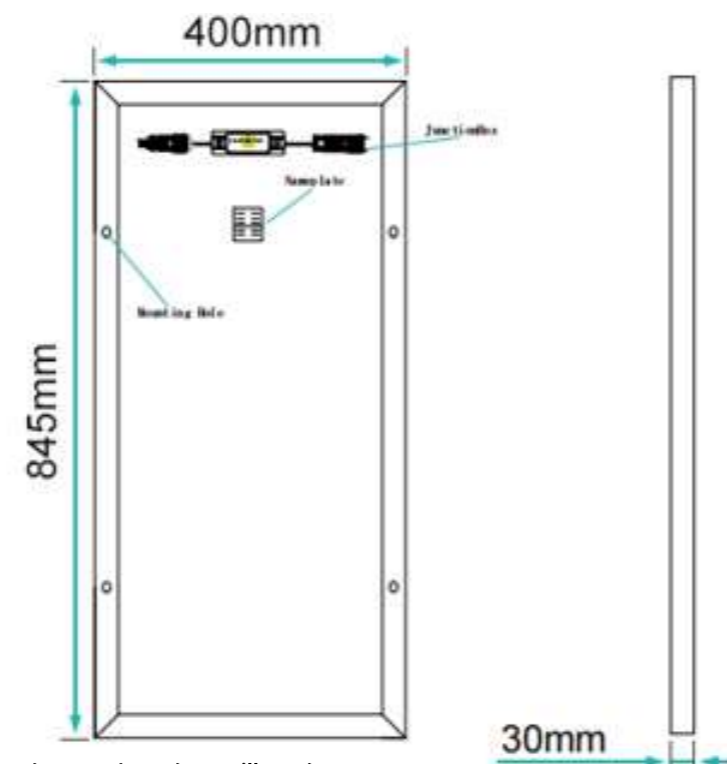
ISO9001: 2023/ ISO Quality Management System  
 ISO14001: 2024/ Environmental Management System  
 ISO45001: 2024/ Occupational Health and Safety Management System Certification

## Product Quality Certifications

IEC61215+IEC61730+CQC/CGC  
 IECTS63163+IP68+CE  
 IECTS62994



Note: Different regions have different certification requirements. Therefore, your ordered or used product will not have all the certifications listed in this specification sheet at the same time. If you want to know which specific certifications apply to your region, please contact our official sales team.

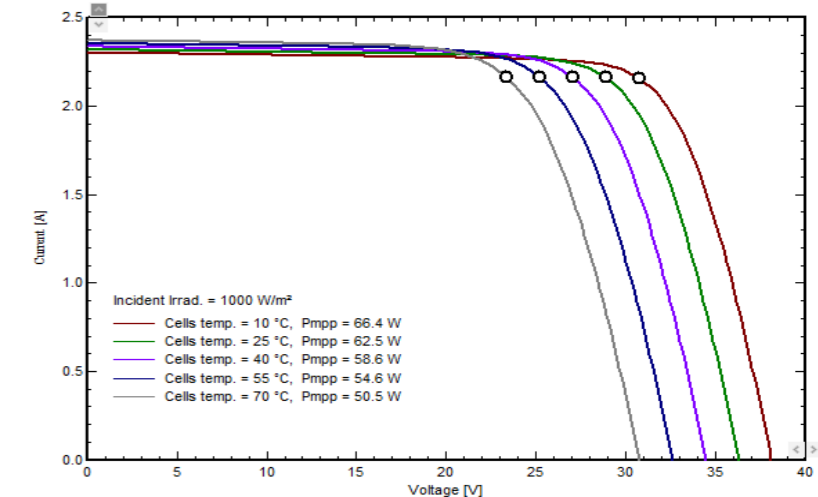


STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, wind speed 1m/s, AM1.5G

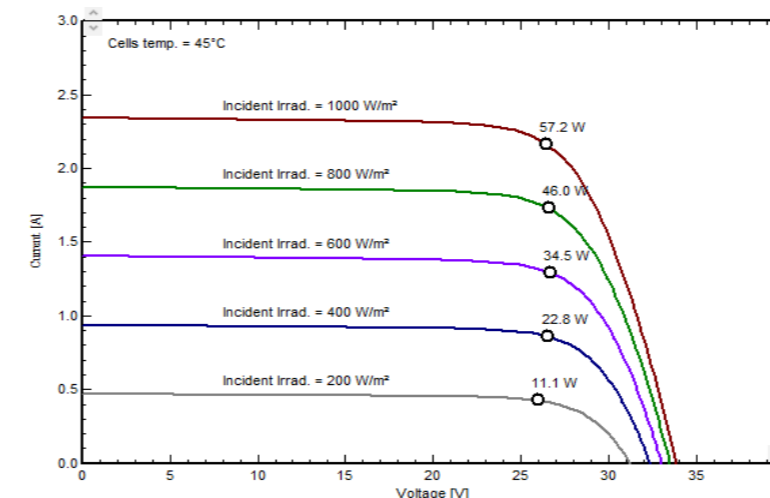
TYPE	MK01-55	MK01-60	MK01-65	MK01-70	MK01-75
Rated Maximum Power(Pmax) [W]	55W	60W	65W	70W	75W
Open Circuit Voltage(Voc) [V]	21.93V	22.1V	22.27V	22.44V	22.61V
Short Circuit Current(Isc) [A]	3.31A	3.36A	3.41A	3.46A	3.51A
MaximumPower Voltage(Vmp) [V]	19.38V	19.72V	19.76V	19.8V	19.84V
MaximumPower Current(Imp) [A]	2.8A	3.05A	3.29A	3.54A	3.79A
Pwoer Tolerance	0 ± 5W				
Maximum System Voltage	1500V				
Operating Temperature	-40°C~±85°C				
Safety Class	Class II				

## SPECIFICATIONS

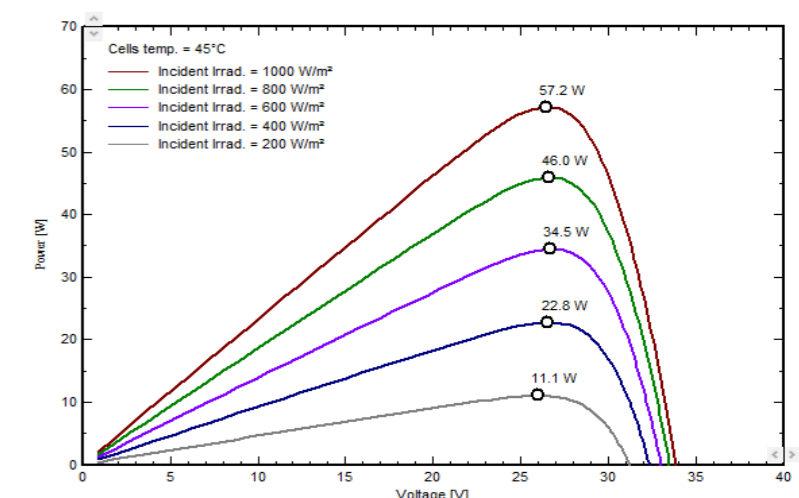
Cell	momo
Weight	3.6Kg
Cable Cross Section Size	845*400*30mm±2mm
No. of cells	34 (2*17)
Junction BoX	IP68, 1 diodes
Connector	MC4
Cable Length	900mm
Package size	905*460*60mm
Packed weight	4.0Kg



Curves under different temperature conditions



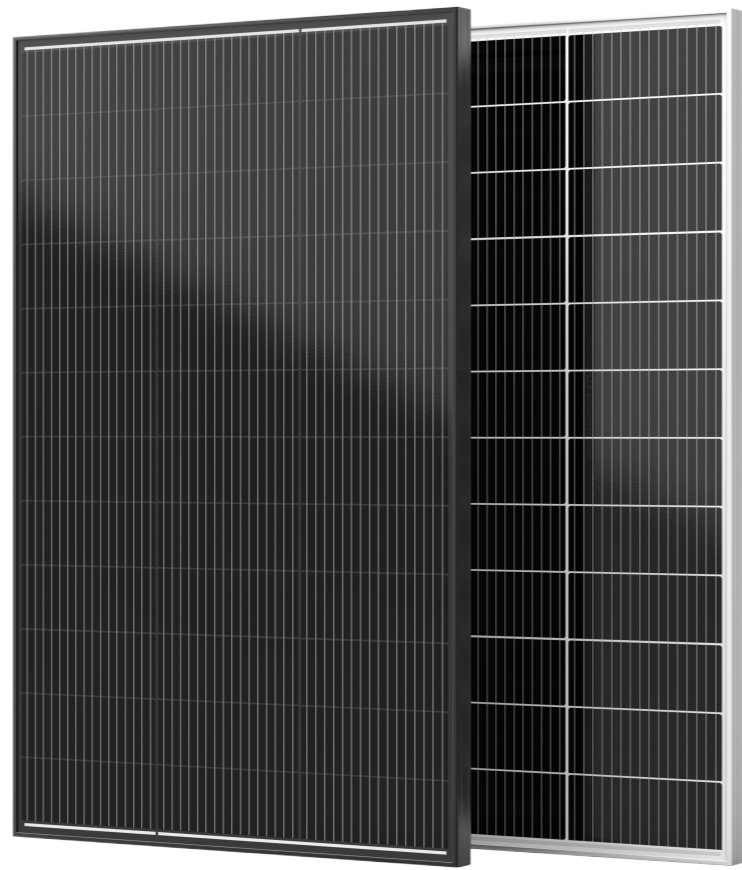
Curves under different irradiation intensities



Power under different irradiation conditions

# N-TOPcon MK02-95-115

High Efficiency Monocrystalline Solar Module



Higher output Power



Less shading and lower resistive loss



Low attenuation



Better mechanical loading tolerance

**36 Half Cell**

45.5\*182MM

**0~+5W**

Positive Power Tolerance

**22.0%**

maximum efficiency

**95W-115W**

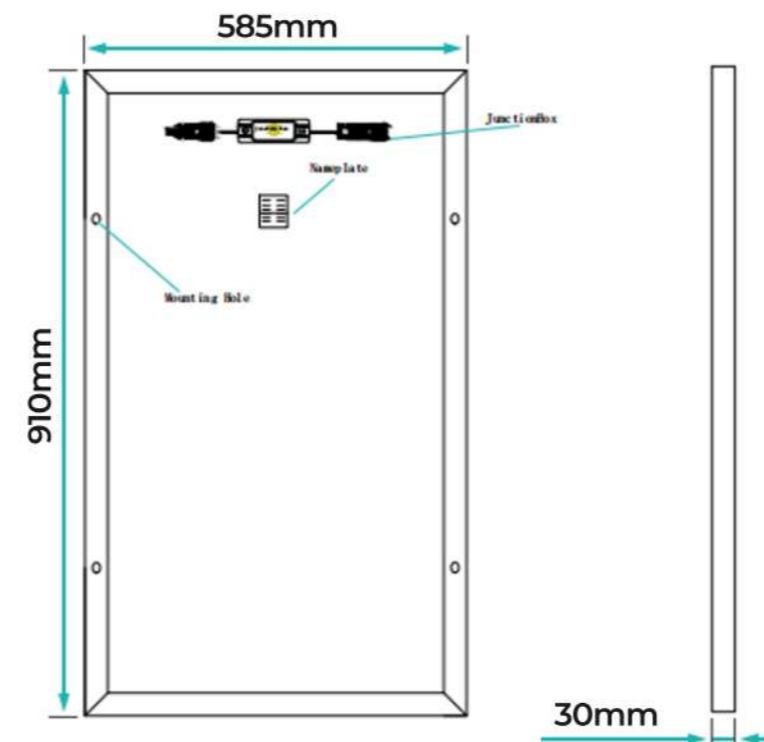
Output Power Range

## Quality System Certifications

ISO9001: 2023/ ISO Quality Management System  
 ISO14001: 2024/ Environmental Management System  
 ISO45001: 2024/ Occupational Health and Safety Management System Certification

## Product Quality Certifications

IEC61215+IEC61730+CQC/CGC  
 IECTS63163+IP68+CE  
 IECTS62994

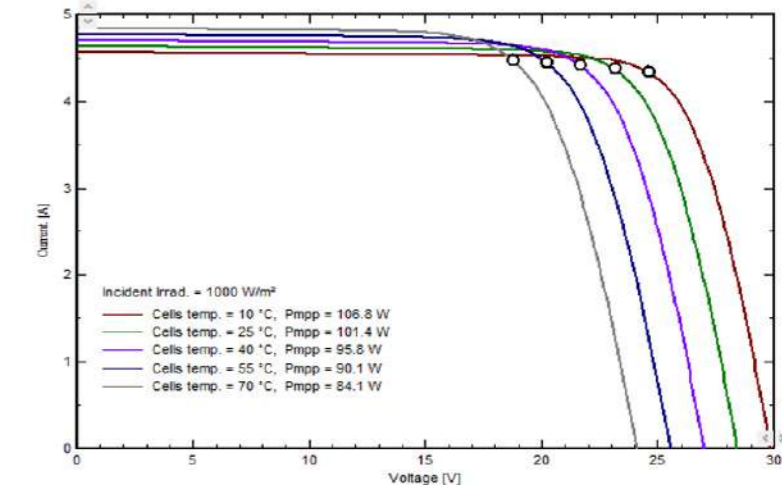


STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, wind speed 1m/s, AM1.5G

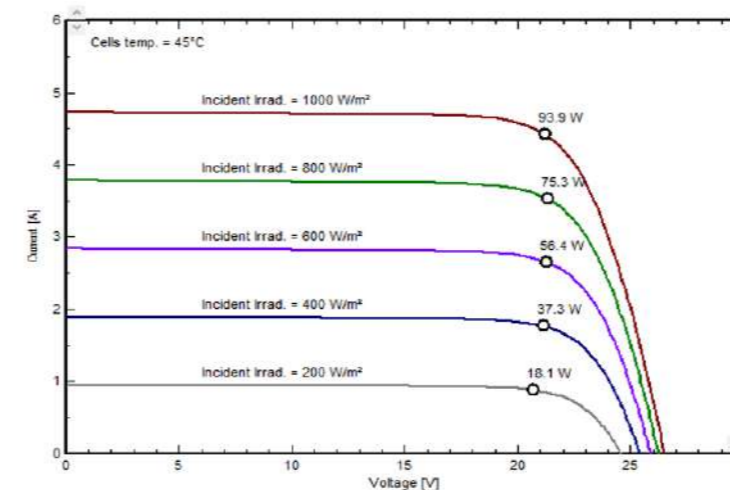
TYPE	MK02-95	MK02-100	MK02-105	MK02-110	MK02-115
Rated Maximum Power(Pmax) [W]	95W	100W	105W	110W	115W
Open Circuit Voltage(Voc) [V]	22.93V	23.1V	23.27V	23.44V	23.61V
Short Circuit Current(Isc) [A]	6.00A	6.05A	6.10A	6.15A	6.20A
MaximumPower Voltage(Vmp) [V]	20.84V	20.88V	20.92V	20.96V	21.00V
MaximumPower Current(Imp) [A]	4.56A	4.79A	5.05A	5.25A	5.48A
Pwoer Tolerance	0 ± 5W				
Maximum System Voltage	1500V				
Operating Temperature	-40°C~±85°C				
Safety Class	Class II				

## SPECIFICATIONS

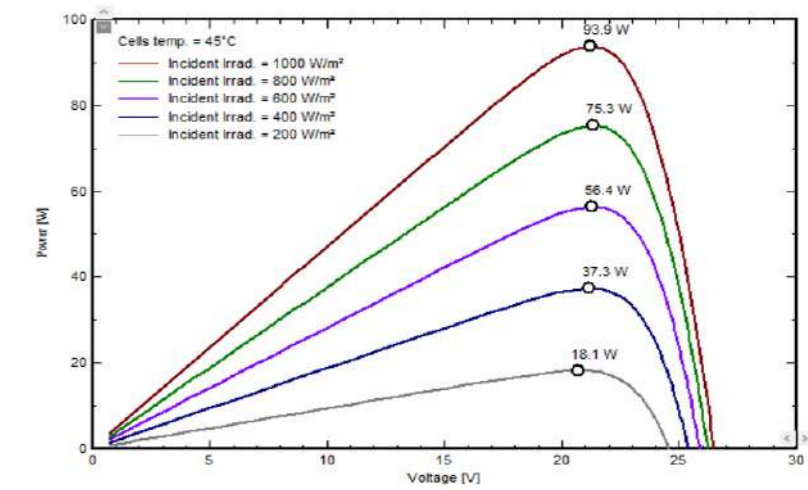
Cell	momo
Weight	5.4Kg
Cable Cross Section Size	910*585*30mm±2mm
No. of cells	36 (3*12)
Junction BoX	IP68, 1 diodes
Connector	MC4
Cable Length	900mm
Package size	970*640*60mm
Packed weight	6.0Kg



Curves under different temperature conditions



Curves under different irradiation intensities

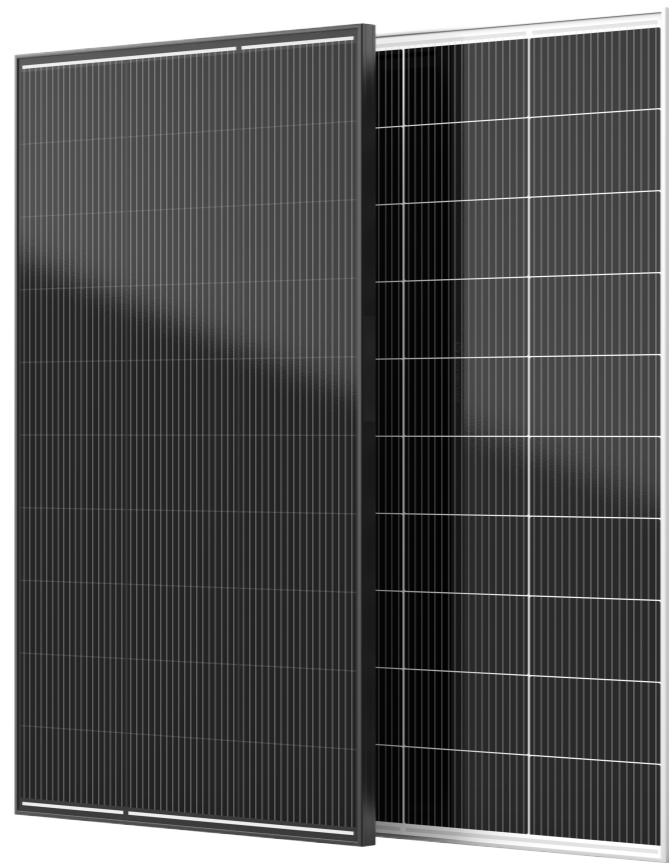


Power under different irradiation conditions

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# N-TOPcon MK14-140-160

High Efficiency Monocrystalline Solar Module



Higher output Power



Less shading and lower resistive loss



Low attenuation



Better mechanical loading tolerance

**30 Half Cell**

45.5\*182MM

**0~+5W**

Positive Power Tolerance

**22.0%**

maximum efficiency

**140W-160W**

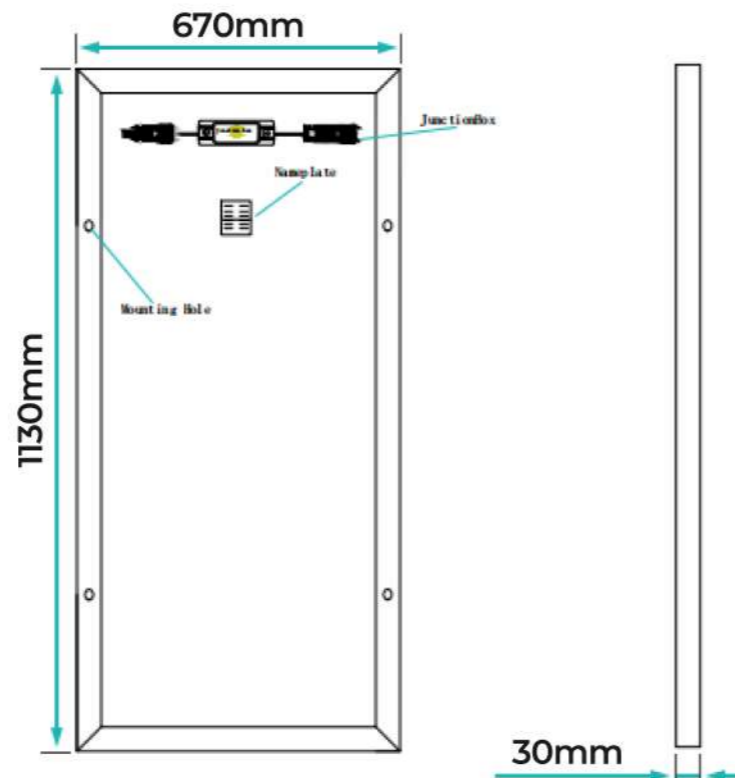
Output Power Range

## Quality System Certifications

ISO9001: 2023/ ISO Quality Management System  
 ISO14001: 2024/ Environmental Management System  
 ISO45001: 2024/ Occupational Health and Safety Management System Certification

## Product Quality Certifications

IEC61215+IEC61730+CQC/CGC  
 IECTS63163+IP68+CE  
 IECTS62994

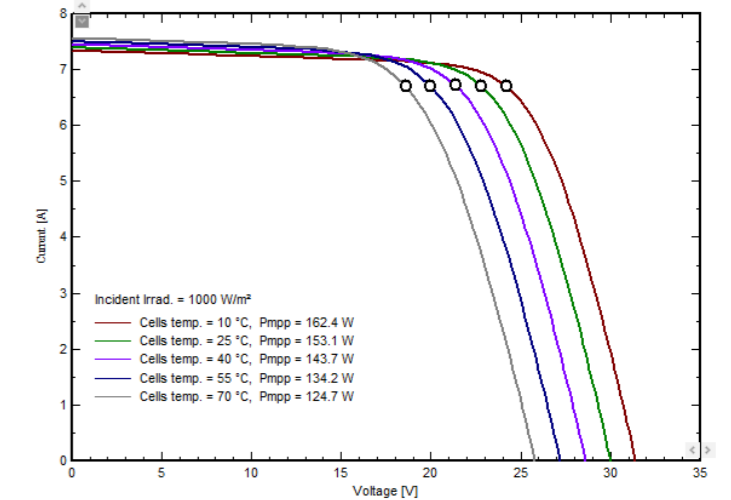


STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, wind speed 1m/s, AM1.5G

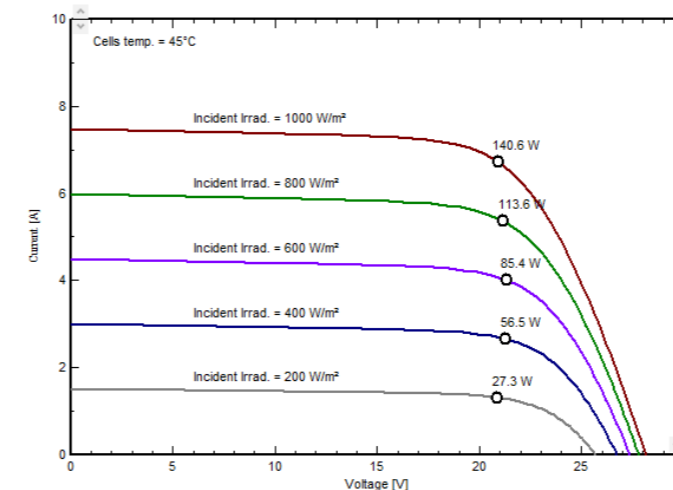
TYPE	MK14-140	MK14-145	MK14-150	MK14-155	MK14-160
Rated Maximum Power(Pmax) [W]	140W	145W	150W	155W	160W
Open Circuit Voltage(Voc) [V]	21.11V	21.28V	21.45V	21.62V	21.79V
Short Circuit Current(Isc) [A]	8.98A	9.03A	9.08A	9.13A	9.18A
MaximumPower Voltage(Vmp) [V]	17.26V	17.30V	17.34V	17.38V	17.42V
MaximumPower Current(Imp) [A]	8.12A	8.39A	8.66A	8.92A	9.19A
Pwoer Tolerance	0 ± 5W				
Maximum System Voltage	1500V				
Operating Temperature	-40°C~±85°C				
Safety Class	Class II				

## SPECIFICATIONS

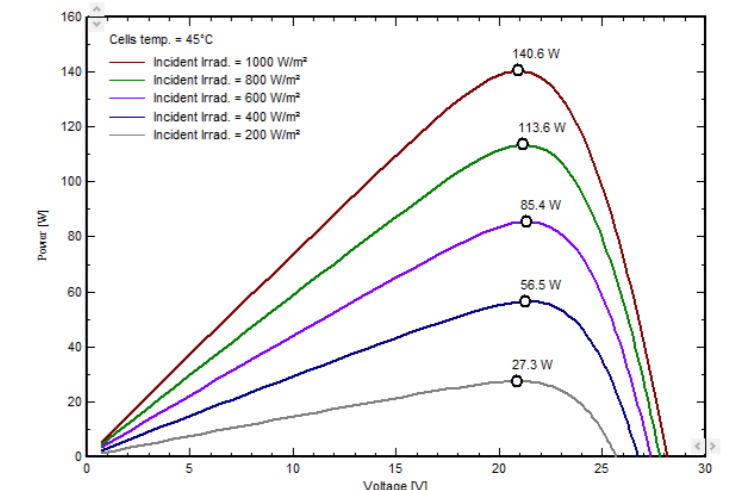
Cell	momo
Weight	7.6Kg
Dimensions	1130*670*30mm±2mm
Cable Cross Section Size	4mm <sup>2</sup>
No. of cells	30 (3*10)
Junction BoX	IP68, 1 diodes
Connector	MC4
Cable Length	900mm
Package size	1190*730*60mm
Packed weight	8.4Kg



Curves under different temperature conditions



Curves under different irradiation intensities

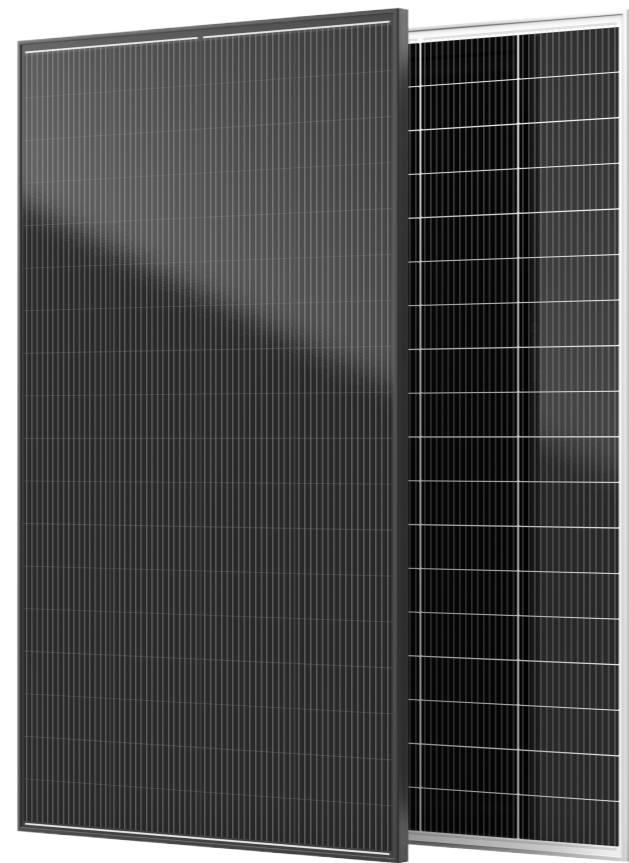


Power under different irradiation conditions

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# N-TOPcon MK30-200-225

High Efficiency Monocrystalline Solar Module



Higher output Power



Less shading and lower resistive loss



Low attenuation



Better mechanical loading tolerance

**72 Half Cell**

45.5\*182MM

**0~+5W**

Positive Power Tolerance

**22.0%**

maximum efficiency

**200W-225W**

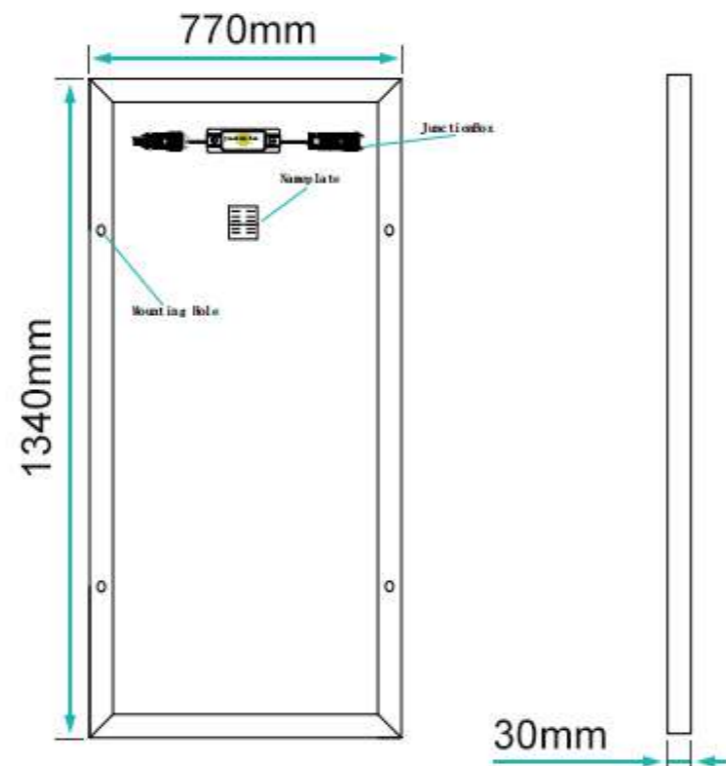
Output Power Range

## Quality System Certifications

ISO9001: 2023/ ISO Quality Management System  
 ISO14001: 2024/ Environmental Management System  
 ISO45001: 2024/ Occupational Health and Safety Management System Certification

## Product Quality Certifications

IEC61215+IEC61730+CQC/CGC  
 IECTS63163+IP68+CE  
 IECTS62994

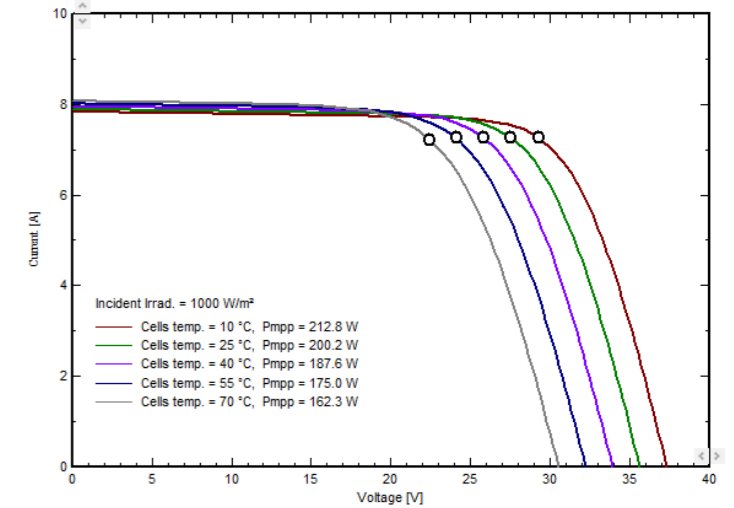


STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, wind speed 1m/s, AM1.5G

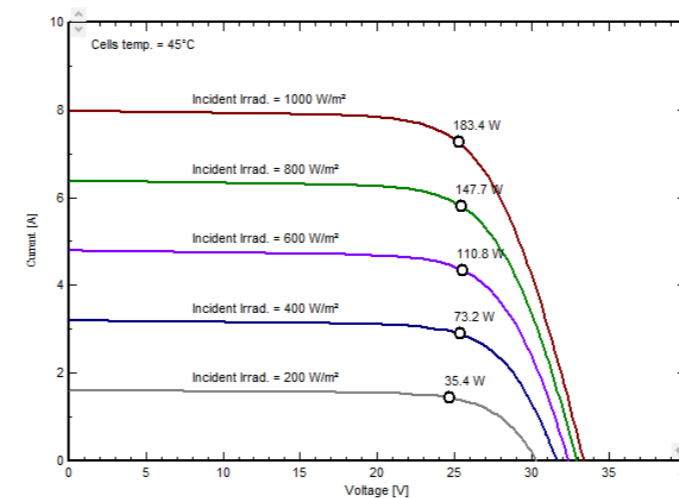
TYPE	MK30-200	MK30-205	MK30-210	MK30-215	MK30-220	MK30-225
Rated Maximum Power(Pmax) [W]	200W	205W	210W	215W	220W	225W
Open Circuit Voltage(Voc) [V]	23.06V	23.23V	23.40V	23.57V	23.74V	23.91V
Short Circuit Current(Isc) [A]	10.32A	10.47A	10.62A	10.79A	10.96A	11.13A
MaximumPower Voltage(Vmp) [V]	20.84V	20.88V	20.92V	20.96V	21.00V	21.04V
MaximumPower Current(Imp) [A]	9.60A	9.82A	10.04A	10.26A	10.48A	10.70A
Pwoer Tolerance	0 ± 5W					
Maximum System Voltage	1500V					
Operating Temperature	-40°C~±85°C					
Safety Class	Class II					

## SPECIFICATIONS

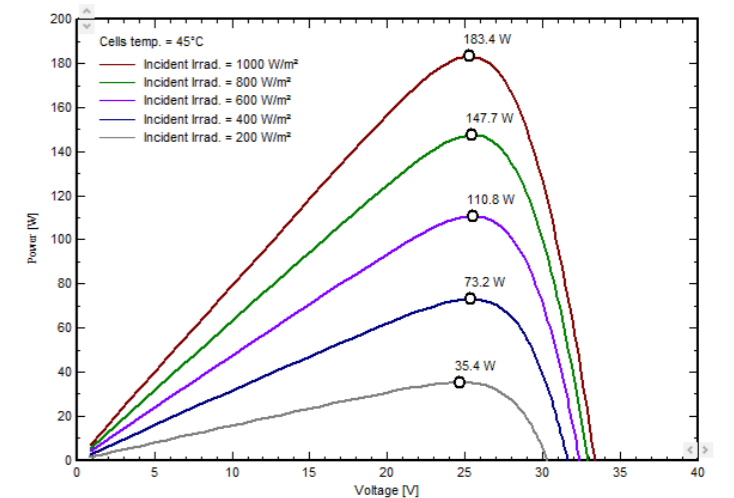
Cell	momo
Weight	10.2Kg
Dimensions	1340*770*30mm±2mm
Cable Cross Section Size	4mm <sup>2</sup>
No. of cells	72 (4*18)
Junction BoX	IP68, 1 diodes
Connector	MC4
Cable Length	900mm
Package size	1400*830*60mm
Packed weight	11.4Kg



Curves under different temperature conditions



Curves under different irradiation intensities

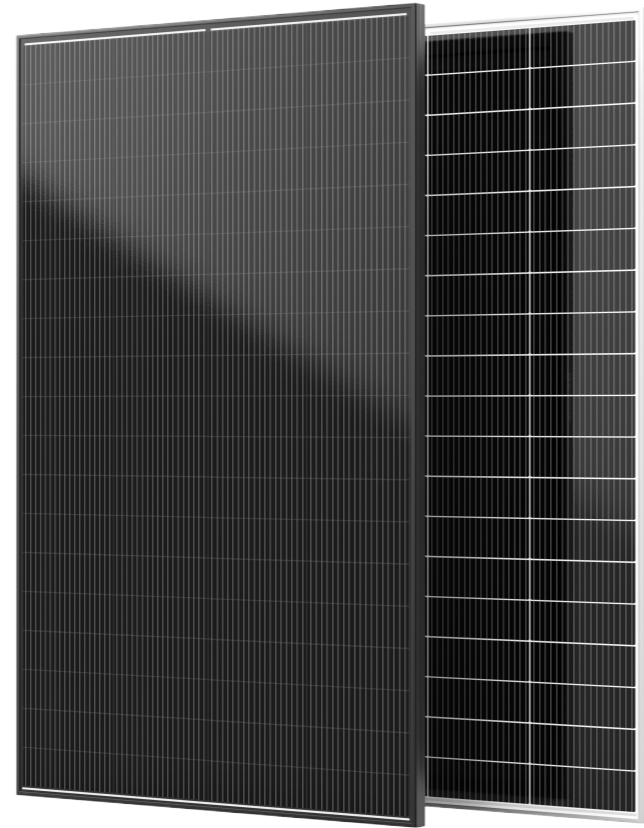


Power under different irradiation conditions

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# N-TOPcon MK04-245-270

High Efficiency Monocrystalline Solar Module



Higher output Power



Less shading and lower resistive loss



Low attenuation



Better mechanical loading tolerance

**76 Half Cell**

45.5\*182MM

**0~+5W**

Positive Power Tolerance

**22.0%**

maximum efficiency

**245W-270W**

Output Power Range

## Quality System Certifications

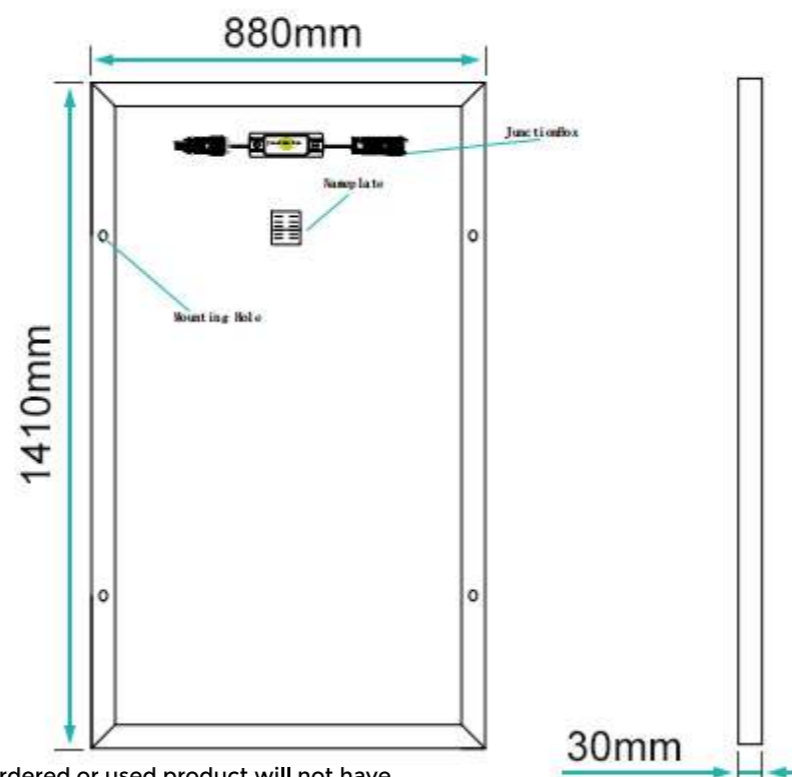
ISO9001: 2023/ ISO Quality Management System  
 ISO14001: 2024/ Environmental Management System  
 ISO45001: 2024/ Occupational Health and Safety Management System Certification

## Product Quality Certifications

IEC61215+IEC61730+CQC/CGC  
 IECTS63163+IP68+CE  
 IECTS62994



Note: Different regions have different certification requirements. Therefore, your ordered or used product will not have all the certifications listed in this specification sheet at the same time. If you want to know which specific certifications apply to your region, please contact our official sales team.

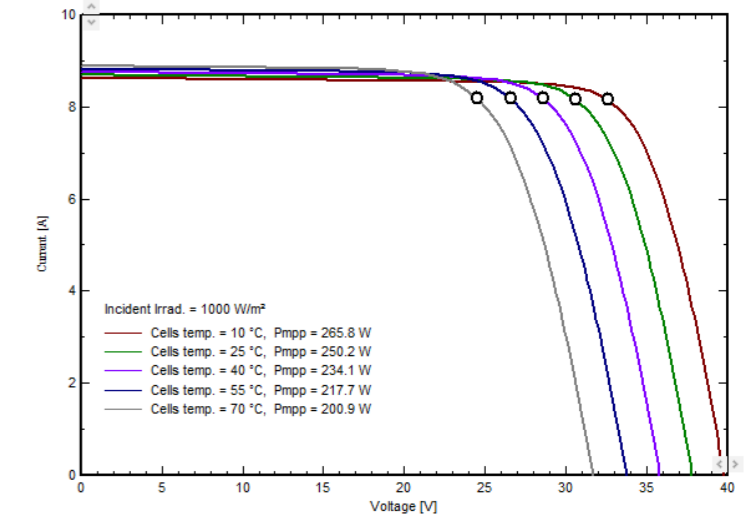


STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, wind speed 1m/s, AM1.5G

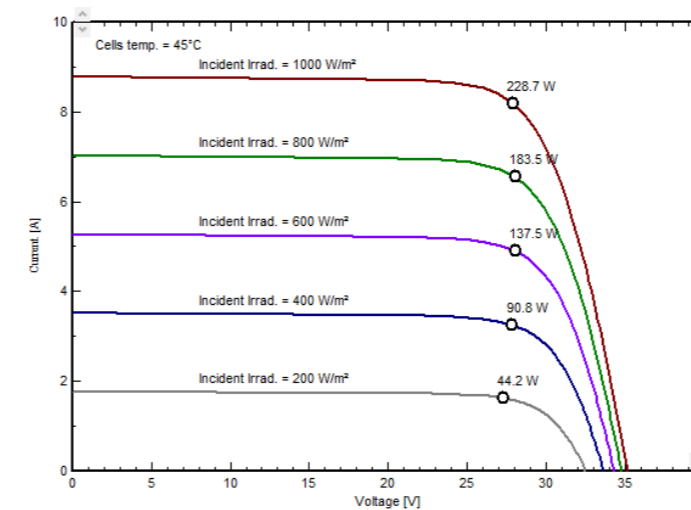
TYPE	MK04-245	MK04-250	MK04-255	MK04-260	MK04-265	MK04-270
Rated Maximum Power(Pmax) [W]	245W	250W	255W	260W	265W	270W
Open Circuit Voltage(Voc) [V]	23.39V	23.56V	23.73V	23.90V	24.07V	24.24V
Short Circuit Current(Isc) [A]	12.06A	12.11A	12.16A	12.21A	12.26A	12.31A
Maximum Power Voltage(Vmp) [V]	22.00V	22.04V	22.08V	22.12V	22.16V	22.20V
Maximum Power Current(Imp) [A]	11.14A	11.35A	11.55A	11.76A	11.96A	12.17A
Pwoer Tolerance	0 ± 5W					
Maximum System Voltage	1500V					
Operating Temperature	-40°C~±85°C					
Safety Class	Class II					

## SPECIFICATIONS

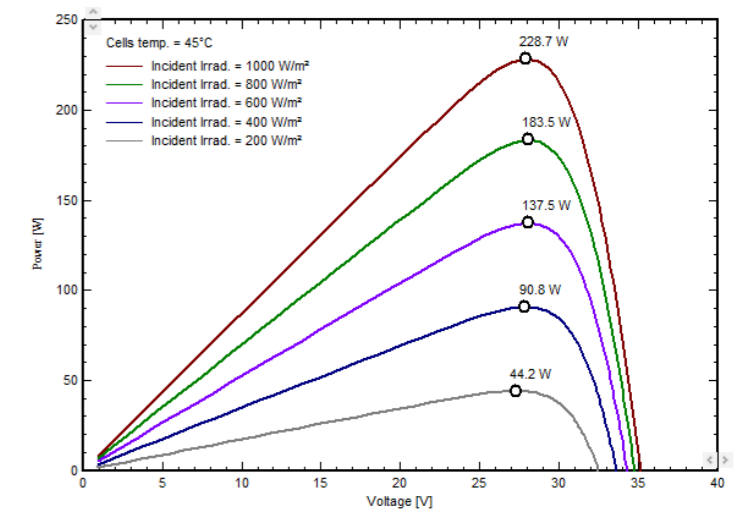
Cell	momo
Weight	12.3Kg
Dimensions	1410*880*30mm±2mm
Cable Cross Section Size	4mm <sup>2</sup>
No. of cells	76 (4*19)
Junction BoX	IP68, 1 diodes
Connector	MC4
Cable Length	900mm
Package size	1470*940*60mm
Packed weight	13.6Kg



Curves under different temperature conditions



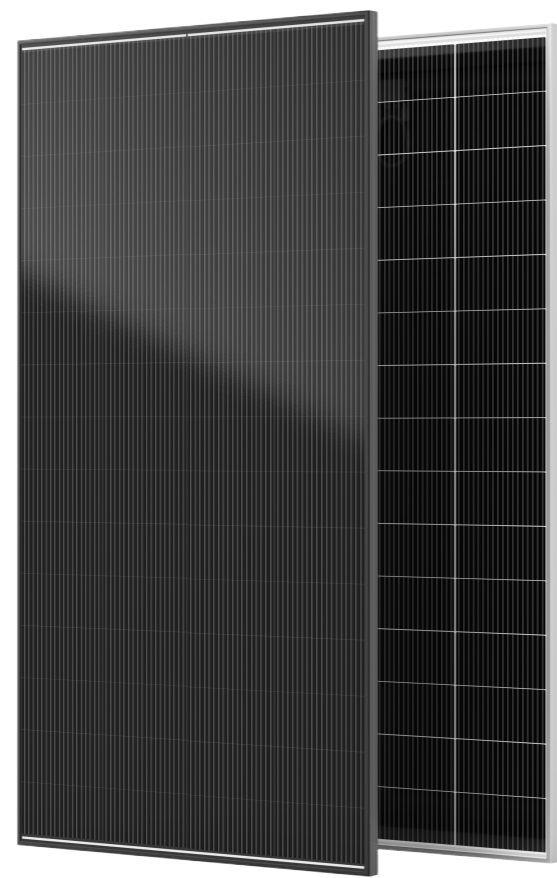
Curves under different irradiation intensities



Power under different irradiation conditions

# N-TOPcon MK05-290-330

High Efficiency Monocrystalline Solar Module



Higher output Power



Less shading and lower resistive loss



Low attenuation



Better mechanical loading tolerance

**60 Half Cell**

45.5\*182MM

**0~+5W**

Positive Power Tolerance

**22.7%**

maximum efficiency

**290W-330W**

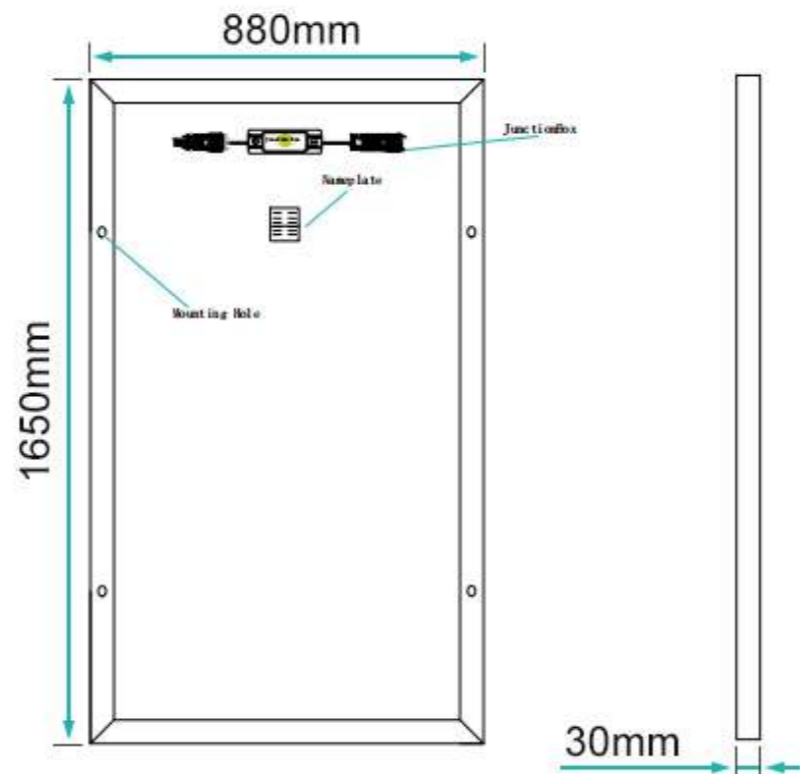
Output Power Range

## Quality System Certifications

ISO9001: 2023/ ISO Quality Management System  
 ISO14001: 2024/ Environmental Management System  
 ISO45001: 2024/ Occupational Health and Safety Management System Certification

## Product Quality Certifications

IEC61215+IEC61730+CQC/CGC  
 IECTS63163+IP68+CE  
 IECTS62994

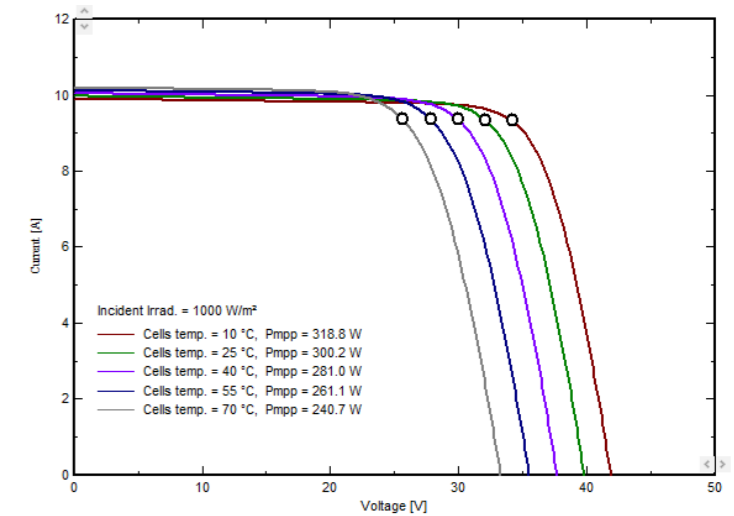


STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, wind speed 1m/s, AM1.5G

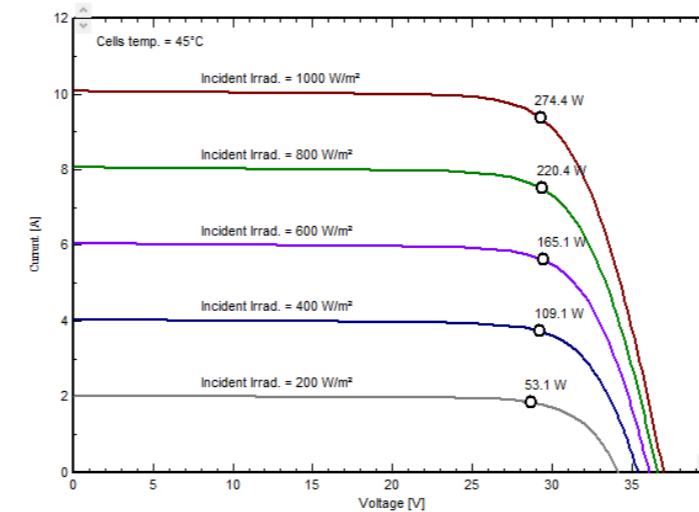
TYPE	MK05-290	MK05-295	MK05-300	MK05-305	MK05-310	MK05-315	MK05-320	MK05-325	MK05-330
Rated Maximum Power(Pmax) [W]	290W	295W	300W	305W	310W	315W	320W	325W	330W
Open Circuit Voltage(Voc) [V]	19.16V	19.33V	19.5V	19.67V	19.84V	20.01V	20.18V	20.35V	20.52V
Short Circuit Current(Isc) [A]	18.07A	18.12A	18.17A	18.22A	18.27A	18.32A	18.37A	18.42A	18.47A
Maximum Power Voltage(Vmp) [V]	17.32V	17.37V	17.40V	17.44V	17.48V	17.53V	17.56V	17.62V	17.64V
Maximum Power Current(Imp) [A]	16.75A	16.99A	17.25A	17.49A	17.74A	17.97A	18.23A	18.45A	18.71A
Pwoer Tolerance	0 ± 5W								
Maximum System Voltage	1500V								
Operating Temperature	-40°C~±85°C								
Safety Class	Class II								

## SPECIFICATIONS

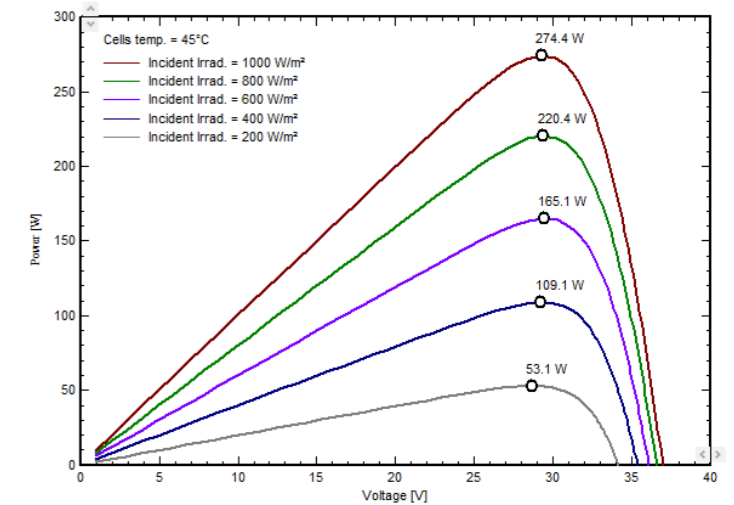
Cell	momo
Weight	14.3Kg
Dimensions	1650*880*30mm±2mm
Cable Cross Section Size	4mm <sup>2</sup>
No. of cells	60 (4*15)
Junction BoX	IP68, 1 diodes
Connector	MC4
Cable Length	900mm
Package size	1710*940*60mm
Packed weight	15.9Kg



Curves under different temperature conditions



Curves under different irradiation intensities

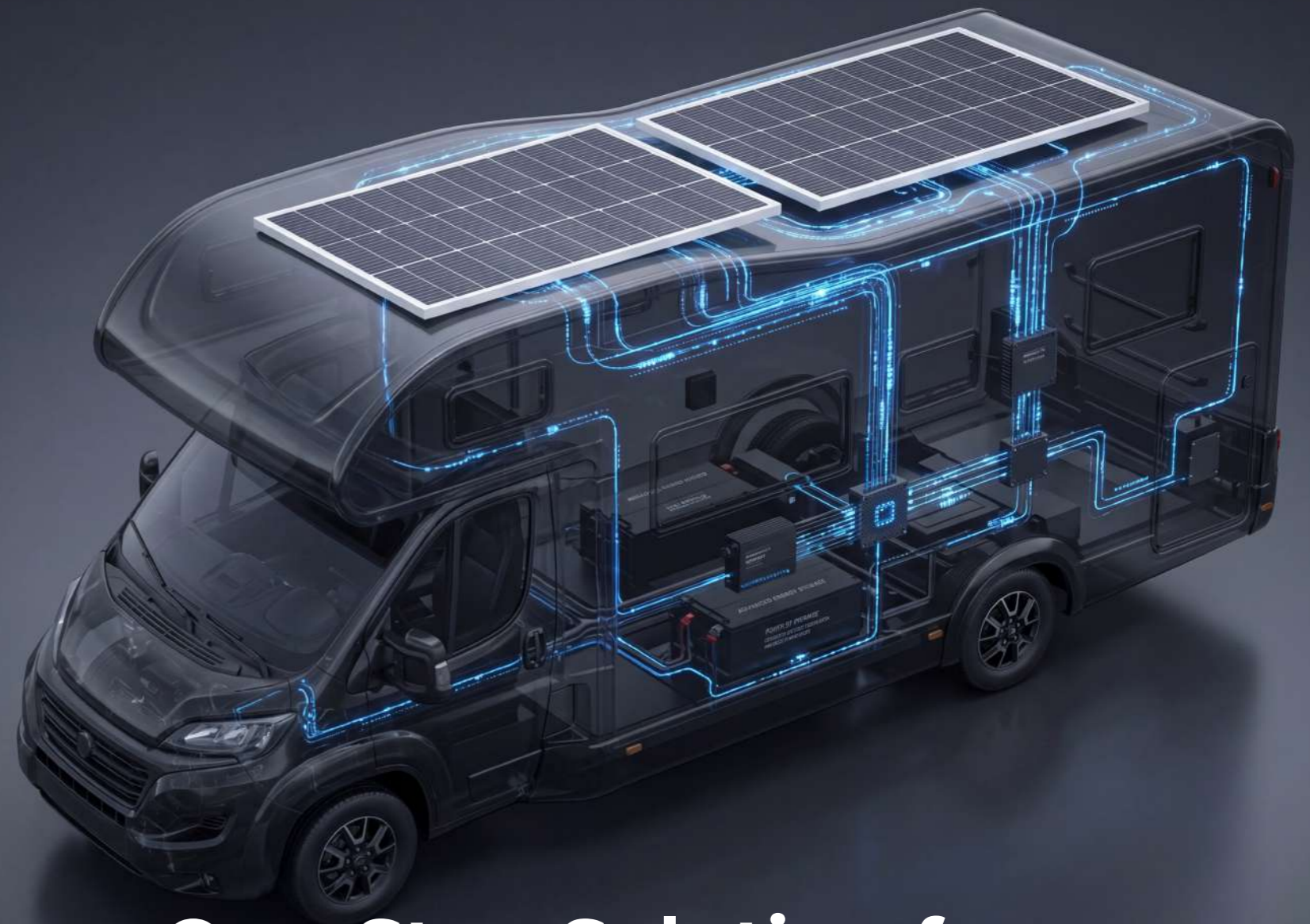


Power under different irradiation conditions

Note: Different regions have different certification requirements. Therefore, your ordered or used product will not have all the certifications listed in this specification sheet at the same time. If you want to know which specific certifications apply to your region, please contact our official sales team.

# Reduce Your Bills

High conversion rate of 25.6% to enhance power generation



## One-Stop Solution for Home Solar + Energy Storage



### IP68 Waterproof

IP68-rated for total waterproofing and dustproofing, even in heavy rain.



### Built for Extremes

Engineered to endure heavy snow, strong winds, and deliver reliable energy in the toughest conditions.







### Super Durability

Withstands heavy snow and high winds to deliver reliable power in the harshest conditions.

# Power Every Way You Live with the All-New LiFePO Battery








				
Model	12V100Ah	12V200Ah	12V300Ah	Mini 12V100Ah
Voltage	12.8V	12.8V	12.8V	12.8V
Charge Voltage	14.6±0.2V	14.6±0.2V	14.6±0.2V	14.6±0.2V
Charge Temp	0°C~45°C	0°C~45°C	0°C~45°C	0°C~45°C
Discharge current	Max 100A	Max 200A	Max 200A	Max 100A
Charge current	Max 100A	Max 200A	Max 200A	Max 100A
Discharge Temp	-20°C~65°C	-20°C~65°C	-20°C~65°C	-20°C~65°C
Nominal capacity	1280Wh	2560Wh	3840Wh	1280Wh

				
Model	24V100Ah	48V100Ah	12.8V10Ah	12V100Ah Slim LiFePO4 Battery
Voltage	25.6V	51.2V	12.8V	12.8V
Charge Voltage	29±0.2V	54±0.2V	14.6±0.2V	14.6±0.2V
Charge Temp	0°C~45°C	0°C~45°C	0°C~55°C	0°C~55°C
Discharge current	Max 100A	Max 100A	Max 10A	Max 100A
Charge current	Max 100A	Max 100A	Max 5A	Max 100A
Discharge Temp	-20°C~65°C	-20°C~65°C	-20°C~65°C	-20°C~60°C
Nominal capacity	2560Wh	5120Wh	128Wh	1280Wh

# MPPT ML Series

Solar Charge Controller  
40A-100A

## FEATURES

-  Optional WiFi Support
-  12/24/36/48V Adaptive
-  3-Stage Smart Charging
-  Adjustable parameters by pressing buttons
-  Battery Compatibility: Works with lead-acid, lithium, and water-based batteries



## PRODUCT INFO

Model	ML60415
Cooling Method	Air Cooling
Display	High-Definition LCD with Backlight
Dimensions	219*260*110 mm
Weight	2.8KG
Recommended Wire Gauge	6AWG/16mm <sup>2</sup>
Protection Features	Over/Under Voltage, Reverse Polarity, Over-Temperature, Over-Load Protection

## SPECIFICATIONS

System Voltage	12/24/36/48V Auto-Recognition	Rated Current	60A		
Charging Mode	MPPT (Maximum Power Point Tracking)	Compatible Batteries	Lead-Acid / Lithium / Water-Based Batteries		
Charging Method	3-Stage: Bulk, Absorption, Float	Max PV Open Circuit Voltage (VOC)	DC150V		
Start-Up Time	≤10s	Dynamic Response Time	≤500us		
No-Load Power Consumption	≤4W	Tracking Efficiency	≥99.5%		
Max Conversion Efficiency	≥98%	Rated Load Current	40A		
Controller Operating Voltage	10~64V				
Rated Charging Power	12V	800W	Max PV Operating Voltage Range	12V	20~150V
	24V	1600W		24V	36~150V
	36V	2400W		36V	48~150V
	48V	3200W		48V	64~150V
Load Voltage	Same as Battery Voltage				

## OPERATING CONDITIONS

Temperature Compensation	-3mV/°C/2V	Operating Temperature	-20°C~+50°C
Noise Level	≤50dB	Humidity	0~90%RH
Altitude	0~3000M	Storage Temperature	-40°C~+70°C
Load Control Modes	Always On / Timer / Light Control		
Low Voltage Disconnect	10.5v*N(N stands for batteries number) Parameters can be adjustable		



# 51.2V-100Ah (5KWh)

Self-discharge	≤2%/ month
Monitoring and control communications	RS232、RS485 Port: Serial port communication
Work environment	Temperature: -20°C~+ 60°C; Humidity: ≤95%; At an altitude of: ≤4000m
Product Dimensions WxDxH(mm)	600*390*185mm
Net Weight	46.5±0.5KG
Installation	Wall mounted、Outdoor hanging wall type
Minimum battery capacity standard	≥95%
Differential pressure between battery charging and discharging ends	≤300mV

## MANAGEMENT SYSTEM

### CELL OVERCHARGE PROTECTION

Cell Over Charging alarm voltage	3600mV	Can be set
Cell Over Charge protection voltage	3650mV	Can be set
Cell Over Charging protection delay	1.0S	Can be set

### CELL OVER VOLTAGE PROTECTION IS REMOVED

Cell overcharge protection and restoration	3380mV	Can be set
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### CELL OVER DISCHARGE PROTECTION VOLTAGE

Cell Over discharging alarm voltage	2800mV	Can be set
Cell over discharge protection voltage	2700mV	Can be set
Cell over release protection delay	1.0S	Can be set

### CELL OVER RELEASE PROTECTION IS DISABLED

Over discharge renew voltage	2850mV	Can be set
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### OVERALL OVERCHARGE PROTECTION

Overall overcharge alarm voltage	57.6V	Can be set
Overall overcharge protection voltage	58.4mV	Can be set
Overall overcharge protection delay	1.0S	Can be set

### OVERALL OVER RELEASE PROTECTION IS REMOVED

Overall over discharge protection discharge voltage	45.6V	Can be set
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### CHARGE OVER CURRENT PROTECTION

Charge over current alarm current	100A	Can be set
Charge over current protection current	110A	Can be set
Charging over current protection delay	400ms	Can be set

**Charging over current recovery condition**  
The lock will be automatically unlocked 1 minute later. If the lock is unlocked for 10 consecutive times, the lock will not be automatically unlocked.

### DISCHARGE OVER CURRENT 1 PROTECTION

Discharge over current 1 Indicates the alarm current	100A	Can be set
Discharge over current 1 Protects the current	110A	Can be set
Discharge over current 1 Protection delay	1.0s	Can be set

**Over current recovery conditions**  
The lock will be automatically unlocked 1 minute later. If the lock is unlocked for 10 consecutive times, the lock will not be automatically unlocked.

### DISCHARGE OVER CURRENT 2 PROTECTION

Discharge over current 2 Protects the current	≥110A	Can be set
Discharge over current 2 Protection delay	100ms	Can be set

**Secondary over current recovery condition**  
The lock will be automatically unlocked 1 minute later. If the lock is unlocked for 10 consecutive times, the lock will not be automatically unlocked.

## PILE INDEX

Nominal voltage	51.2V
Nominal capacity	5 KWh
Minimum capacity	4.8 KWH
Combination	16S 1 P
Charging Voltage	58.4V
Voltage at end of Discharge	44.8V
Standard charge current	Sustained current: 50A Cut-off current: 0.01CA
Maximum charge current	100A
Standard discharge current	50A
Max continuous dischargecurrent	100A
The factory voltage	50.4V – 52V



# 51.2V 314Ah (16.07KWh)

Initial internal resistance	≤10m Ω
Self-discharge	≤2%/ month
Monitoring and control communications	RS232, RS485 Port: Serial port communication
Work environment	Temperature: -20°C~+ 60°C; Humidity: ≤95%; At an altitude of: ≤4000m
Product Dimensions WxDxH(mm)	450*260*871mm
Net Weight	127±0.5KG
Installation	Caster type vertical
Differential pressure between battery charging and discharging end	≥95%
Differential pressure between battery charging and discharging end	≤200mV

## MANAGEMENT SYSTEM

### CELL OVERCHARGE PROTECTION

Cell Over Charging alarm voltage	3600mV	Can be set
Cell Over Charge protection voltage	3650mV	Can be set
Cell Over Charging protection delay	1.0S	Can be set

### CELL OVER VOLTAGE PROTECTION IS REMOVED

Cell overcharge protection and restoration	3380mV	Can be set
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### CELL OVER DISCHARGE PROTECTION VOLTAGE

Cell Over discharging alarm voltage	2800mV	Can be set
Cell over discharge protection voltage	2700mV	Can be set
Cell over release protection delay	3000ms	Can be set

### CELL OVER RELEASE PROTECTION IS DISABLED

Over discharge renew voltage	2850mV	Can be set
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### OVERALL OVERCHARGE PROTECTION

Overall overcharge alarm voltage	57.6V	Can be set
Overall overcharge protection voltage	58.4mV	Can be set
Overall overcharge protection delay	1.0S	Can be set

### OVERALL OVER RELEASE PROTECTION IS REMOVED

Overall over discharge protection discharge voltage	48V	Can be set
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### CHARGE OVER CURRENT PROTECTION

Charge over current alarm current	200A	Can be set
Charge over current protection current	210A	Can be set
Charging over current protection delay	3000ms	Can be set
Charging over current recovery condition	Automatic recovery is attempted in 10min, and locking is attempted for 3 times, which can be achieved by manual recovery or discharge.	

### DISCHARGE OVER CURRENT 1 PROTECTION

Discharge over current 1 Indicates the alarm current	200A	Can be set
Discharge over current 1 Protects the current	210A	Can be set
Discharge over current 1 Protection delay	3000ms	Can be set

Over current recovery conditions	Automatic recovery is attempted in 1min, and locking is attempted for 3 times, which can be achieved by manual recovery or discharge.	
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### DISCHARGE OVER CURRENT 2 PROTECTION

Discharge over current 2 Protects current	250A	Can be set
Discharge over current 2 Protection delay	500ms	Can be set

Secondary over current recovery condition	The lock will be automatically unlocked 1 minute later. If the lock is unlocked for 10 consecutive times, the lock will not be automatically unlocked.	
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## PILE INDEX

Nominal voltage	51.2V
Nominal capacity	314Ah
Minimum capacity	310Ah
Combination	1P 16S
Charging Voltage	58.4V
Voltage at end of Discharge	44.8V
Standard charge current	Sustained current: 100A Cut-off current: 0.01CA
Maximum charge current	157A
Standard discharge current	157A
Max continuous discharge current	200A
The factory voltage	50.4V – 52V



# 51.2V 628Ah (32.15KWh)

Initial internal resistance	≤20m Ω
Self-discharge	≤2%/ month
Monitoring and control communications	RS232、RS485 Port: Serial port communication
Work environment	Temperature: -20°C~+ 60°C; Humidity: ≤95%; At an altitude of: ≤4000m
Product Dimensions WxDxH(mm)	700*400*782mm
Net Weight	210±0.5KG
Installation	Caster type, vertical
Minimum battery capacity standard	≥98%
Differential pressure between battery charging and discharging end	≤200mV

## MANAGEMENT SYSTEM

### CELL OVERCHARGE PROTECTION

Cell Over Charging alarm voltage	3600mV	Can be set
Cell Over Charge protection voltage	3650mV	Can be set
Cell Over Charging protection delay	1.0S	Can be set

### CELL OVER VOLTAGE PROTECTION IS REMOVED

Cell overcharge protection and restoration	3380mV	Can be set
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### CELL OVER DISCHARGE PROTECTION VOLTAGE

Cell Over discharging alarm voltage	2800mV	Can be set
Cell over discharge protection voltage	2700mV	Can be set
Cell over release protection delay	3000ms	Can be set

### CELL OVER RELEASE PROTECTION IS DISABLED

Over discharge renew voltage	2850mV	Can be set
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### OVERALL OVERCHARGE PROTECTION

Overall overcharge alarm voltage	57.6V	Can be set
Overall overcharge protection voltage	58.4mV	Can be set
Overall overcharge protection delay	1.0S	Can be set

### OVERALL OVER RELEASE PROTECTION IS REMOVED

Overall over discharge protection discharge voltage	48V	Can be set
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### CHARGE OVER CURRENT PROTECTION

Charge over current alarm current	200A	Can be set
Charge over current protection current	210A	Can be set
Charging over current protection delay	3000ms	Can be set
Charging over current recovery condition	Automatic recovery is attempted in 10min, and locking is attempted for 3 times, which can be achieved by manual recovery or discharge.	

### DISCHARGE OVER CURRENT 1 PROTECTION

Discharge over current 1 Indicates the alarm current	300A	Can be set
Discharge over current 1 Protects the current	310A	Can be set
Discharge over current 1 Protection delay	3000ms	Can be set
Over current recovery conditions	Automatic recovery is attempted in 1min, and locking is attempted for 3 times, which can be achieved by manual recovery or discharge.	

### DISCHARGE OVER CURRENT 2 PROTECTION

Discharge over current 2 Protects current	350A	Can be set
Discharge over current 2 Protection delay	500ms	Can be set
Secondary over current recovery condition	The lock will be automatically unlocked 1 minute later. If the lock is unlocked for 10 consecutive times, the lock will not be automatically unlocked.	

## PILE INDEX

Nominal voltage	51.2V
Nominal capacity	628Ah
Minimum capacity	620Ah
Combination	2P 16S
Charging Voltage	58.4V
Voltage at end of Discharge	43.2V
Standard charge current	Sustained current: 200A Cut-off current: 0.01CA
Maximum charge current	300A
Standard discharge current	300A
Max continuous discharge current	300A
The factory voltage	50.4V – 52V



# 51.2V-100Ah

Mobile energy storage system

## PHOTOVOLTAIC INPUT

PV Charging Mode	MPPT
PV Input Power Max	6000W
Mppt Tracking Range	80~450Vdc
Optimum Voltage	240Vdc
Max PV Input Voltage	500Vdc
Max PV Input Current	18A
PV Charging Current Max	100A
AC Charging Current Max	60A
Charging Current Max	100A

## GRID CONNECTED OPERATION

Output Rated Power	5000W
Output Voltage	220/230/240VAC ±5%
Output Frequency	50/60Hz ±0.1%
Frequency range	47Hz~52Hz(50Hz), 57Hz~62Hz(60Hz)
rated output current	22.7A/21.7A/20.8A
Power factor	0.98 (rated power)

## OFF-GRID OPERATION

### AC INPUT

rated input voltg	220/230/240VAC ±5%
Input voltage rang	165VAC~280VAC/ 120VAC~280VAC
Incoming frequency	50/60Hz±0.1%
Input frequency range	45Hz~55Hz(50Hz), 55Hz~65Hz(60Hz)

### AC OUTPUT

Output Rated Power	5000W
Output Voltage	220/230/240VAC±5%
Output Frequency	50/60Hz±0.1%

## MIXED OPERATION (COMPLEMENTARY MODE)

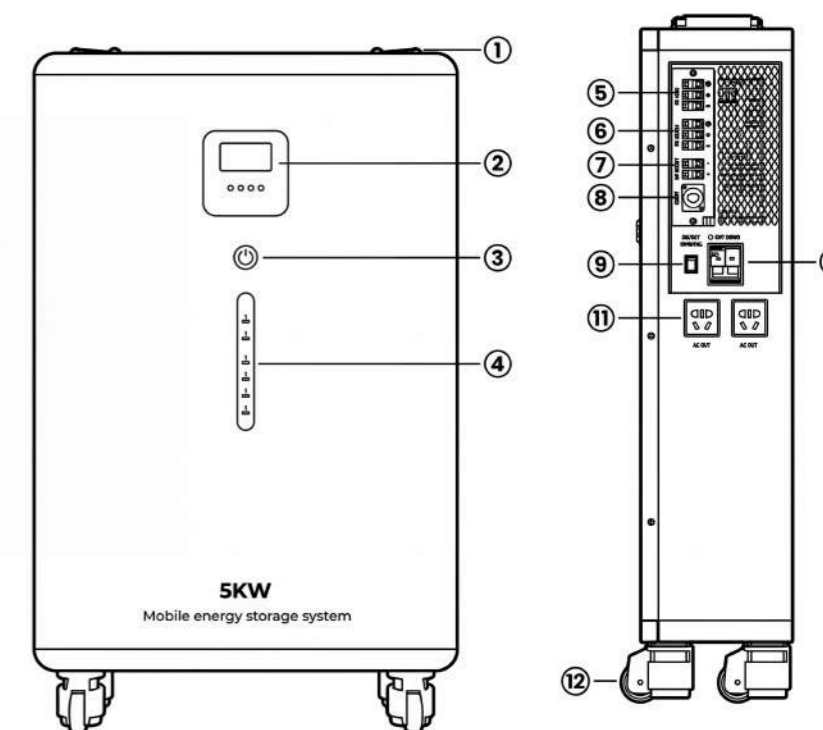
### AC INPUT

rated input voltage	220/230/240VAC ±5%
Input voltage range	187VAC~264VAC
Incoming frequency	50/60Hz ±0.1%
Input frequency range	47Hz~52Hz(50Hz), 57Hz~62Hz(60Hz)

### AC OUTPUT

Output Rated Power	5000W
Output Voltage	220/230/240VAC ±5%
Rated output current	22.7A/21.7A/20.8A

## APPEARANCE FUNCTION











## GENERAL

Battery Type	LiFePO4 Battery 100Ah
Battery Capacity	5.12kWh
Dimensions (WxHxD)	500*790*182mm
Screen Type	LCD+LED
Waveform	pure sine wave
Frequency Range	50Hz/60Hz (Adaptive)
Operating Temperature	20%~95% (no condensation)
Storage Temperature	-15°C~60°C
Altitude	Altitude should not exceed 2000m, derated above 2000m, refer to IEC62040
Noise Level	≤55dB
Product Weight	55KG

No	Name	Description
①	Battery Handle	Used for handling and pushing equipment
②	Screen	Display the operational status of the product, such as SOC
③	Power Button	Turn on and off storage system
④	LED	Display the operational status of the product, such as SOC
⑤	Grid AC Input	Can connect the Equipment to grid for AC charging
⑥	AC Output	widely used in areas that use 220V; generates almost same AC power
⑦	Solar Input	Can be connected to solar panels
⑧	Communication interface	Communication interface
⑨	AC Button	Turn on and off AC output
⑩	Fuse Protect	Overload protection
⑪	2xAC Output	Standard AC receptacle: widely used in areas that use 220V; generates almost same
⑫	Wheel	Used for handling and pushing equipment

# ED3024EMH

## KEY FEATURES

-  Low no-load power loss (half that of similar high-frequency models)
-  Pure sine wave output, compatible with all types of loads
-  Multiple adjustable parameters to suit your needs
-  Slim, compact design for easy installation and transport
-  Fuse-based reverse battery protection for safer installation
-  Optional solar controller with MPPT
-  High-precision output voltage to protect your appliances
-  External WIFI / BMS function for lithium battery



## OUTPUT SPECIFICATIONS

Solar Inverter Output Power	3000W
Output Voltage	220/230/ 240VAC±5%
Output Frequency	50/60Hz±0.1%
Output Wave	Pure Sine Wave
Transfer Tim	≤10ms (UPS mode) / ≤20ms (INV mode)
Peak Power	6000VA
Overload Ability	Battery Mode: 11s@105%~150% Load 2s@150%~200% Load 400ms@>200% Load

## AC INPUT VOLTAGE

AC Input	220VAC (standard) / 110VAC (custom)
Input Voltage Range	90-280VAC ±3V (Normal Mode) 170-280VAC ±3V (UPS Mode)
Input Frequency	50/60Hz ±5%
Rated Power	3000W

## BATTERY

Rated Voltage	24Vdc
Constant Charging (Configurable)	28.2Vdc
Charging Voltage (Configurable)	27Vdc

## CHARGER

PV Charging Mode	MPPT
Max PV Input Power	3000W
MPPT Input Voltage Range	30~500Vdc
Optimal Vmp Range	300~400Vdc
Max PV Input Voltage	500Vdc
Max PV Input Current	13A
Max PV Charging Current	100A
Max AC Charging Current	60A
Max Charging Current	100A

## DISPLAY & INTERFACE









LCD	Can display operating mode/ load/input/output
RS232	Baud Rate 2400
Expansion Slot Communication interface	Lithium Battery BMS Communication Card, WIFI /Pitch2.54mm
Parallel Function	Not Support Parallel

## AMBIENT TEMPERATURE

Operating Temperature	-10°C~50°C
Operating Environment Humidity	-10°C~60°C
Storage Temperature	20%~90% Non Condensing
Noise	≤ 50dB

# GD6248SMH

## KEY FEATURES

-  Low no-load loss, lower than high-frequency machines with the same power rate
-  Pure sine wave output, suitable for different loads
-  Multiple parameters can be adjusted according to user needs
-  Slim Body, Convenient Installation And Transportation
-  Battery Reverse Connection Protection with Fuse Switch, Safer Installation
-  Optional solar controller with MPPT
-  High Precision of Output Voltage, Take Care of Your Appliances
-  External WIFI / BMS function for lithium battery



## OUTPUT SPECIFICATIONS

PV Inverter Output Power	6500W
Output Voltage	220/230/240VAC±5%
Output Frequency	50/60Hz ±0.1%
Output Wave	Pure Sine Wave
Transfer Tim	≤10ms (UPS mode) / ≤20ms (INV mode)
Peak Power	12400 VA
Overload Ability	Battery Mode: 11s@105%~150% Load 2s@150%~200% Load 400ms@>200% Load

## AC INPUT VOLTAGE

AC Input	220VAC (standard) / 110VAC (custom)
Input Voltage Range	90-280VAC ±3V (Normal Mode) 170-280VAC ±3V (UPS Mode)
Input Frequency	50/60Hz ±5%
Rated Power	6200W

## GRID-CONNECTED OPERATION

Output Voltage	220/230/240VAC
Grid Voltage Range	170-265VAC
Grid Frequency Range	49-51±1Hz/59-61±1Hz
Rated Output Current	26.9A
Power Factor Range	>0.99
Peak Efficiency (DC/AC)	98%

## CHARGER

PV Charging Mode	MPPT
Max PV Input Power	8500W
MPPT Input Voltage Range	60-500Vdc
Optimal Vmp Range	360-430Vdc
Max PV Input Voltage	500Vdc
Max PV Input Current	27A
Max PV Charging Current	120A
Max AC Charging Current	100A
Max Charging Current	120A

## BATTERY

Rated Voltage	48Vdc
Constant Charging(Configurable)	56.4Vdc
Charging Voltage(Configurable)	54Vdc

## DISPLAY & INTERFACES









LCD	Can display operating mode/load/input/output
RS232	Baud Rate 2400
Expansion Slot Communication interface	Lithium Battery BMS Communication Card, WIFI /Pitch2.54mm
Parallel Function	Not Support Parallel

## AMBIENT TEMPERATURE

Operating Temperature	-10°C~50°C
Operating Environment Humidity	-10°C~60°C
Storage Temperature	20%~90% Non Condensing
Noise	≤ 50dB

# GD6248SMHB

## KEY FEATURES

-  Low no-load loss, lower than high-frequency machines with the same power rate
-  Pure sine wave output, suitable for different loads
-  Multiple parameters can be adjusted according to user needs
-  Slim Body, Convenient Installation And Transportation
-  Battery Reverse Connection Protection with Fuse Switch, Safer Installation
-  Optional solar controller with MPPT
-  High Precision of Output Voltage, Take Care of Your Appliances
-  External WIFI / BMS function for lithium battery



## OUTPUT SPECIFICATIONS

Rated Power	6200W
Output Voltage	220/230/240VAC±5%
Output Frequency	50/60Hz±0.1%
Output Wave	Pure Sine Wave
Peak Power	12400 VA
Transfer Time (Adjustable)	10ms for Computer Equipment 20ms for Household Equipment
Overload Ability	Battery Mode: 21s@105%~150% Load 11s@150%~200% Load 400ms@>200% Load

## AC INPUT VOLTAGE

Input Formation	L+N+PE
AC Input	220/230/240 VAC
Input Voltage Range	90-280VAC ±3V (Normal mode) /170-280VAC ±3V (UPS mode)
Frequency	50/60Hz (Adaptive)

## PHYSICAL PARAMETERS

SIZE(I*W*H)	495*312*125mm
Standards & Certifications	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1

## GRID-CONNECTED OPERATION

Output Voltage	220/230/240VAC
Grid Voltage Range	195-253VA
Grid Frequency Range	49-51 ±1Hz/59-61 ±1Hz
Rated Output Current	26.9A
Power Factor Range	> 0.99
Peak Efficiency (DC/AC)	98%

## CHARGER

PV Charging Mode	MPPT
Max PV Input Power	8500W
MPPT Input Voltage Range	60-500Vdc
Optimal Vmp Range	360-430Vdc
Max PV Input Voltage	500Vdc
Max PV Input Current	27A
Max PV Charging Current	120A
Max AC Charging Current	100A
Max Charging Current	120A

## BATTERY

Rated Voltage	48Vdc
Constant Charging (Configurable)	56.4Vdc
Charging Voltage (Configurable)	54Vdc

## DISPLAY & INTERFACES









LCD	Can display operating mode/load/input/output
RS232	5PIN/Pitch 2.54mm Baud Rate 2400
Expansion Slot Communication interface	Lithium Battery BMS Communication Card, WIFI 2×5PIN/Pitch2.54mm
Parallel Support	Support Parallel

## AMBIENT TEMPERATURE

Operating Temperature	-10°C~50°C
Storage Temperature	-15°C~60°C
Operating Environment Humidity	20%~95% Non Condensing
Noise	≤ 50dB
Ork Altitude	No more than 1000m, if 1000m<, Rate power will lower, MAX 4000m, Refer to IEC62040

# GD11048SMHB

## KEY FEATURES

-  Low no-load loss, lower than high-frequency machines with the same power rate
-  Pure sine wave output, suitable for different loads
-  Multiple parameters can be adjusted according to user needs
-  Slim Body, Convenient Installation And Transportation
-  Battery Reverse Connection Protection with Fuse Switch, Safer Installation
-  Optional solar controller with MPPT
-  High Precision of Output Voltage, Take Care of Your Appliances
-  External WIFI / BMS function for lithium battery



## OUTPUT SPECIFICATIONS

Rated Power	11000W
Output Voltage	220/230/240VAC ±5%
Output Frequency	50/60Hz ±0.1%
Output Wave	Pure Sine Wave
Peak Power	22000 W
Transfer Time (Adjustable)	10ms for Computer Equipment, 20ms for Household Equipment
Overload Ability	Battery Mode: 21s@105%~150% Load 11s@150%~200% Load 400ms@>200% Load

## AC INPUT VOLTAGE

Input Formation	L+N+PE
AC Input	220/230/240 VAC
Input Voltage Range	90-280VAC±3V (Normal Mode) 170-280VAC±3V (UPS Mode)
Frequency	50/60Hz (Adaptive)

## PHYSICAL PARAMETERS

SIZE(I*W*H)	570*471*148mm
Standards & Certifications	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1

## GRID-CONNECTED OPERATION

Output Voltage	220/230/240VAC
Grid Voltage Range	195-253VA
Grid Frequency Range	49-51±1Hz/59-61±1Hz
Rated Output Current	47.8A
Power Factor Range	>0.99
Peak Efficiency (DC/AC)	98%

## CHARGER

PV Charging Mode	MPPT*2
Max PV Input Power	2x7500W
MPPT Input Voltage Range	90-500Vdc
Optimal Vmp Range	360-430Vdc
Max PV Input Voltage	500Vdc
Max PV Input Current	27A/27A
Max PV Charging Current	150A
Max AC Charging Current	150A
Max Charging Current	150A

## BATTERY

Rated Voltage	48Vdc
Constant Charging(Configurable)	56.4Vdc
Charging Voltage(Configurable)	54Vdc

## DISPLAY & INTERFACES

LCD	Shows operating mode, load status, input/output parameters
RS232	5PIN/Pitch2.54mm Baud Rate 2400
Expansion Slot Communication interface	Lithium Battery BMS Communication Card, WIFI 2x5PIN/Pitch2.54mm
Parallel Support	Support Parallel

## AMBIENT TEMPERATURE

Operating Temperature	-10°C~50°C
Storage Temperature	-15°C~60°C
Operating Environment Humidity	20%~95% Non Condensing
Noise	≤ 50dB
Ork Altitude	No more than 1000m, if 1000m<, Rate power will lower, MAX 4000m, Refer to IEC62040