



Product Catalog



Energy Storage System

Solar Panel | Inverter | Li-ion Battery | Total Solution

About Us



Moli Power is a leading enterprise specializing in lithium batteries and related systems since 2016.

The company focuses on power of small scale mobility and energy storage solutions, integrating R&D, production, sales, and overseas business operations. With a professional technical team, advanced automation equipment, and a robust management system, Moli Power has achieved various quality certifications, e.g. ISO9001 and ISO14001 and etc.

10+

Years of Experiences

20+

Industry Awards

100+

Business Partner

100k+

Product Installed

The company has gained significant influence in the two-wheeler battery swapping and residential energy storage market, with successful projects in China, Singapore, Thailand, Sri Lanka, Maldives, Mali, Nigeria, Guinea and Cameroon.

Adhering to the motto "Powering better life," Moli Power is committed to innovation, customer satisfaction, and promoting green energy solutions for sustainable travel and low-carbon lifestyles.

As a one-stop solution provider, the company aims to expand its presence in the global high-speed electric motorcycle industry chain through continuous technological advancement and competitive participation.

Powering Better Life



Singapore | China | Thailand | Vietnam | Maldives

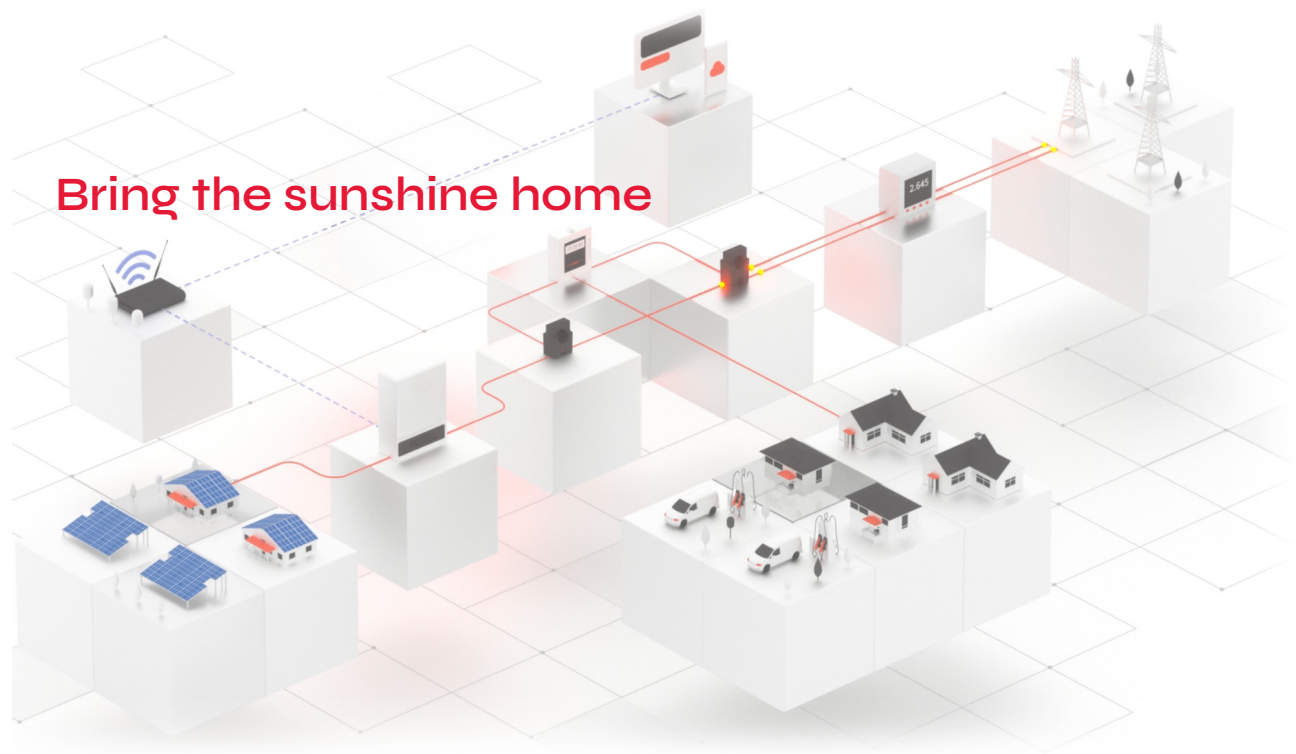


Sri Lanka | Mali | Nigeria | Guinea | Cameroon



Our Global Sites

Independent Energy



Solar Panel



Inverter



Li-ion Battery



Energy Management

Moli Power provides a solution to generate clean electricity for your own solar-powered home and facilities.

When it comes to residential solutions featuring superior safety and easy installation, Moli Power is the ideal choice for homeowners to go solar.

Enjoy your unparalleled experience of green energy, optimal solar energy usage, reduced electricity bills and much more.

Catalog

01

Solar Panel

02

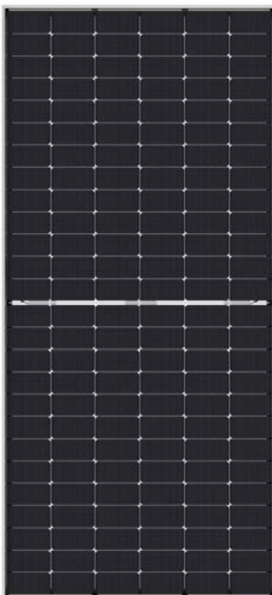
Li-ion Battery

03

Inverter

04

All-in-one System



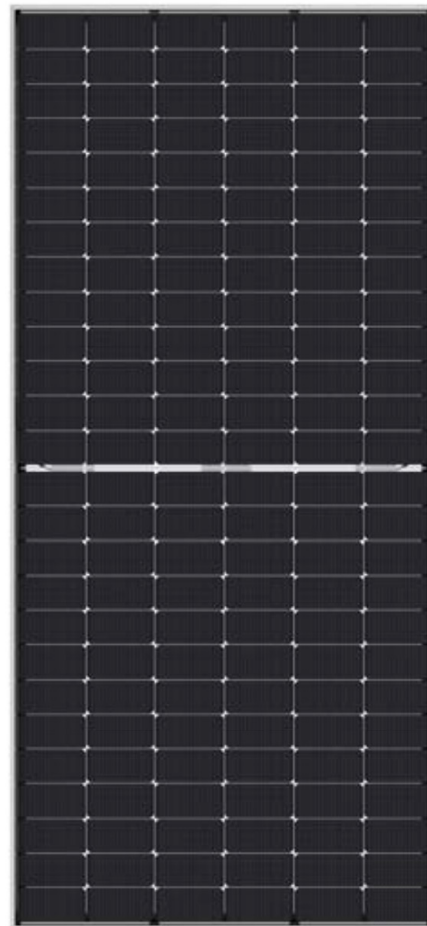
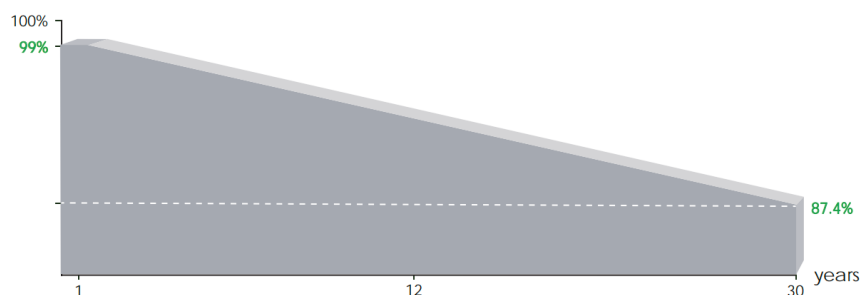
Solar Panel

N-type 590-610W Bifacial Module with Dual Glass

- IEC61215(2016), IEC61730(2016)
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018
- Occupational health and safety management systems

LINEAR PERFORMANCE WARRANTY

0.40% Annual Degradation Over 30 years



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.

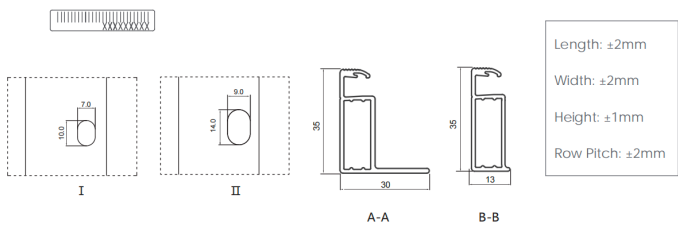
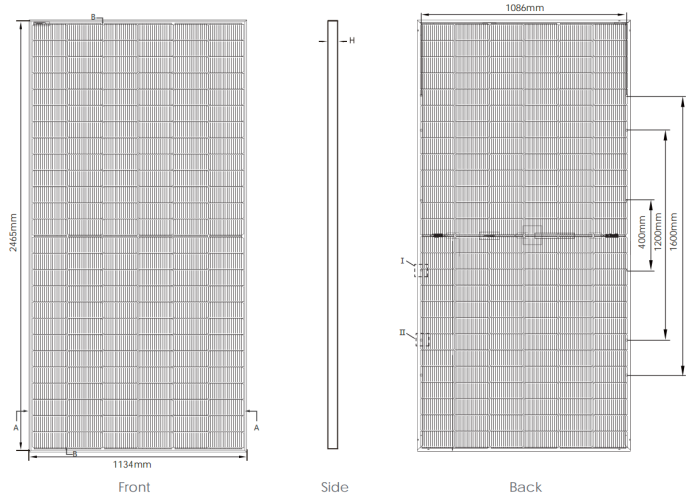


Enhanced Mechanical Load

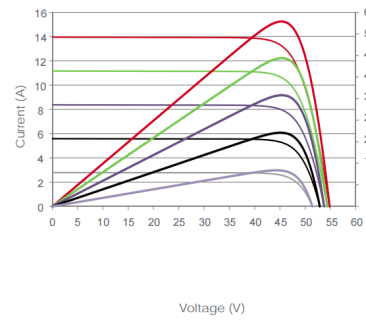
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



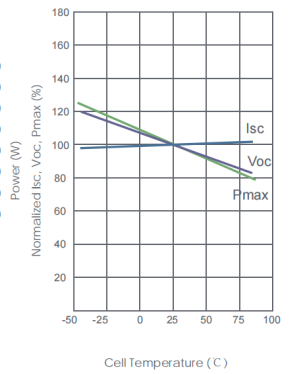
POSITIVE QUALITY™
Continuous Quality Assurance



Current-Voltage & Power-Voltage Curves (600W)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	156 (2×78)
Dimensions	2465×1134×35mm (97.05×44.65×1.38 inch)
Weight	34.6kg (76.38 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 400mm, (-): 200mm or Customized Length

SPECIFICATIONS

Module Type	JKM590N-78HL4-BDV		JKM595N-78HL4-BDV		JKM600N-78HL4-BDV		JKM605N-78HL4-BDV		JKM610N-78HL4-BDV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	590Wp	444Wp	595Wp	447Wp	600Wp	451Wp	605Wp	455Wp	610Wp	459Wp
Maximum Power Voltage (Vmp)	44.91V	41.89V	45.08V	42.00V	45.25V	42.12V	45.42V	42.23V	45.60V	42.35V
Maximum Power Current (Imp)	13.14A	10.59A	13.20A	10.65A	13.26A	10.71A	13.32A	10.77A	13.38A	10.83A
Open-circuit Voltage (Voc)	54.76V	52.02V	54.90V	52.15V	55.03V	52.27V	55.17V	52.41V	55.31V	52.54V
Short-circuit Current (Isc)	13.71A	11.07A	13.79A	11.13A	13.87A	11.20A	13.95A	11.26A	14.03A	11.33A
Module Efficiency STC (%)	21.11%		21.29%		21.46%		21.64%		21.82%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	30A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.30%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.046%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									
Refer. Bifacial Factor	80±5%									

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

		JKM590N-78HL4-BDV		JKM595N-78HL4-BDV		JKM600N-78HL4-BDV		JKM605N-78HL4-BDV		JKM610N-78HL4-BDV		
		5%	15%	25%	5%	15%	25%	5%	15%	25%	5%	15%
5%	Maximum Power (Pmax)	620Wp	625Wp	630Wp	635Wp	641Wp						
	Module Efficiency STC (%)	22.16%	22.35%	22.54%	22.73%	22.91%						
15%	Maximum Power (Pmax)	679Wp	684Wp	690Wp	696Wp	702Wp						
	Module Efficiency STC (%)	24.27%	24.48%	24.68%	24.89%	25.10%						
25%	Maximum Power (Pmax)	738Wp	744Wp	750Wp	756Wp	763Wp						
	Module Efficiency STC (%)	26.38%	26.61%	26.83%	27.05%	27.28%						

*STC: Irradiance 1000W/m² Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C

AM=1.5

Wind Speed 1m/s

Solar Juice Series

12V 200Ah/300Ah Deep Cycle Li-ion Battery



Key Parameters

Items	12-300	12-210
Cell Model	NP71173207-300 (LFP)	NP54173207-210 (LFP)
Nominal Capacity (Ah)	300	210
	14.6V @ 0.2C to 10V	
Min. Capacity (Ah)	280	205
	14.6V @ 0.2C to 10V	
Charge Voltage (V)	14.6	
Standard Charging Current (A)	150	105
Max. Continuous Charging Current (A)	200	
Discharge Voltage (V)	9.2	
Standard Discharge Current (A)	150	105
Max. Continuous Discharging Current (A)	200	200
Operating Temp. (°C)	0 ~ 55	
	-20 ~ 60	
	≥ 6000	
Cycle Life	Charging / Discharging @ 0.2C 70% Capacity	
	< 50	
Impedance (mohm)	~25	
Weight (kg)	~20	
Protection Level	IP 67	
Connection Mode	up to 4 in series connection	
Dimension (L*D*H, mm)	386*206*272	

FlexStack Series

The All New Designed 12V 210Ah Li-ion Battery



Key Parameters

Items	FS 12-210
Nominal Capacity (Ah)	210
	14.6V @ 0.2C to 10V
Min. Capacity (Ah)	205
	14.6V @ 0.2C to 10V
Charge Voltage (V)	14.6
Standard Charging Current (A)	105
Max. Continuous Charging Current (A)	170
Discharge Voltage (V)	9.2
Standard Discharge Current (A)	105
Max. Continuous Discharging Current (A)	170
Operating Temp. (°C)	0 ~ 55
	-20 ~ 60
Cycle Life	≥ 6000
	Charging / Discharging @ 0.2C 70% Capacity
Impedance (mohm)	< 50
Weight (kg)	~21.5
Protection Level	IP 67
Connection Mode	up to 6 in series connection
Dimension (L*D*H, mm)	462/211/270mm

Ready for Multi-purpose Power Supply



Powering Better Life
Alimenter une Vie Meilleure



Solar Juice Series

Off-grid Inverter



Key Parameters	24V 3.5 kW	48V 5.5 kW
	G3000	G5000
Model		
Battery		
Type	Li-ion/Lead-acid	
Voltage (V)	24	48
Inverter Output		
Nominal Power (W)	3500	5500
Nominal Apparent Power (VA)	3500	5500
Parallel Capacity	No	9 units max.
AC Voltage Regulation (Battery Mode)	230 Vac±5%@50/60 Hz	
Surge Power (VA)	6000	10000
Efficiency (Peak)	93%	
Waveform	Pure Sinewave	
Transfer Time	10 ms (for personal computers), 15 ms (for home appliances)	
Solar Charge		
Max. PV Array Power (W)	4000	6000
MPPT Range @ Operating Voltage	120 Vdc ~ 430 Vdc	
Number of Independent MPPT	1	
Number of Strings per MPPT	1	
Max. Input Current per MPPT (A)	16	18
Max. PV Array Open Circuit Voltage (V)	500 Vdc	
AC Charger		
Max. AC Charge Current (A)	120	80
AC Input Voltage (V)	230 Vac	
Voltage Range (V)	170-280 Vac (Personal Computers), 90-280 Vac (Home Appliances)	
Frequency Range (Hz)	50/60	
General		
User Interface	APP+LCD Display+LED	
Communication	USB, Optional: Wi-Fi, 4G,GPRS, RS485/CAN, Dry Contact	
Ingress Protection Rating	IP 54	
Dimension (W*H*D, mm)	300*450*110.5	
Weight (kg)	7.5	
Relative Humidity (%)	20 ~ 95	
Max. Operating Altitude (m)	2000, Derating > 1000	
Operating Temp (°C)	0~50	
Storage Temp (°C)	-15 ~ 60	
Protection		
PV Over Voltage	yes	
PV Over Current	yes	
Battery Over Voltage	yes	
Battery Over Current	yes	
AC Surge	Type III	
Output Over Current	yes	
Output Over Voltage	yes	

Off-grid Inverter



Key Parameters

Model	HMKPLUS1500-12	VR2KS
Input		
Voltage (Vac)	230	230
Selectable Voltage Range (Vac)	170-280 (For Personal Computers)	85-305
	90-280 (For Home Appliances)	85-305
Frequency Range (Hz)	50/60 (Auto Sensing)	
Output		
AC Voltage Regulation (Battery Mode)	230 Vac \pm 5%	
Power (VA)	1500 (surge 3000)	2000 (surge 4000)
Efficiency (Peak) PV to INV.	97%	99%
Efficiency (Peak) Battery to INV.	94%	
Transfer Time	10 ms (Personal Computers), 20 ms (Home Appliances)	
Waveform	Pure Sinewave	
Battery & AC Charger		
Battery Voltage (Vdc)	12	12
Floating Charge Voltage (Vdc)	13.5	13.5
Over Charge Protection (Vdc)	16	16
Max. Charge Current (A)	80	166
Solar Charger		
Max. PV Array Power (W)	2000	2400
MPPT Range @ Operating Voltage (Vdc)	60 ~ 430	60-430
Max. PV Array Open Circuit Voltage (Vdc)	450	450
Max. Charging Current (A)	16	18
Max. Efficiency	98%	99%
General		
Dimension (D*W*H, mm)	128*300*363	218*331*366
Weight (kg)	6.9	3.8
Communication Interface	USB/RS232	RS485/CAN
Operating Environment		
Humidity (%)	5 ~ 95, Relative Humidity (Non-condensing)	
Operating Temp. (°C)	0 ~ 55	
Storage Temp. (°C)	-15 ~ 60	

Solar Juice Series

Off-grid Inverter

To be Announced



Key Parameters	24V 3.6kW	48V 6kW
Model	G3600	G6000
Battery		
Type	Li-Ion/Lead-acid	
Voltage (V)	24	48
PV input		
Maximum Power (W)	4320	7440
Maximum Voltage (V)	430 V	
Nominal Voltage (V)	120/240	240/400
MPPT Voltage Range (V)	30 ~ 387	
Start-Up Voltage (V)	25	
Maximum Current (A)	2*18	
Maximum Short-Circuit Current (A)	2*20	
MPPT Tracking Number	1	
MPPT Tracking Efficiency	99.9	
AC Input		
Nominal Voltage (V)	1-phase / L+N+PE, 230	
Voltage Range (V)	85-305	
Nominal Frequency (Hz)	50 ~ 60 (Adaptive select)	
Frequency Range (Hz)	40 ~ 70	
Power Factor	0.99	
Diesel Generator Input		
Nominal Voltage (V)	1-phase / L+N+PE, 230	
Voltage Range (V)	83 ~ 305	
Nominal Frequency (Hz)	50-60 Hz (Adaptive select)	
Frequency Range (Hz)	40 ~ 70	
AC Output		
Nominal Voltage (V)	1-phase / L+N+PE, 208/220/230 (Nominal)/240±5% (Setting on LCD), 50 Hz±0.1%	
Nominal Current (A)	15.7	27
Nominal Power (W)	3600	6000
120% Overload	Operation for > 60 Seconds	
150% Overload	Operation for > 10 Seconds	
200% Overload	Operation for > 5 Seconds	
300% Overload	Operation for > 1 Second	
Output Waveform	Pure Sinusoidal	
THDv	< 3%	
Bypass Voltage (V)	Following AC Input	
Bypass Power (W)	3600	6000
General Parameters		
Circuit Topology	High-Frequency Transformer Isolation	
Time from Bypass to Inverter (ms)	< 10	
Time from Inverter to Bypass (ms)	< 20	
MPPT Tracking Efficiency	99.90%	
Maximum Discharging Efficiency (%)	93.5	94.5
Maximum Charging Efficiency	92.5	93.5
Standby Power Consumption (W)	< 40	< 50
Units Paralleling Number	9 Units	
Electric Protection	OCP, Short-Circuit, OVP, UVP, Lighting, Battery OC etc.	
Display	LEDs / LCD /APP	
Communication	Modbus RTU	
Net Weight (kg)	4.5	7.5
Dimensions (W×H×D, mm)	300W × 450H × 110.5D	
Operating Temperature	-20°C ~ 55°C (> 40°C, Power derating)	
Storage Temperature	-40°C~ 65°C	
Relative Humidity	20% - 95% Without condensation	
Altitude	Derating @ > 3000 m	
Dust and Water Protection	IP20 / IP54 Optional	
Cooling	Intelligent speeding fan	
Noise Emission	< 60 dB(A)	
Certificate	CE Mark	
Interface		
Start-Up Switch	Button Switch for Battery Input (Automotive Start-Up Once Nominal PV or AC Input)	
Communication Module	RS485/CAN, WiFi/GRPS Optional	
Monitoring System	Optional	
Units Paralleling Cable	RS485/CAN, Optional	

Off-grid Inverter

To be Announced



Key Parameters		12V 3kW
Model		VC 3000
AC Input		
Line Type		1-phase / L+N+PE
Nominal Voltage (V)		120 / 230
Voltage Range (V)		120 ~ 240 / 90 ~ 264
Nominal Frequency (Hz)		50-60 (Adaptive select)
Frequency Range (Hz)		40 ~ 70
Power Factor		0.99
AC Output		
Nominal Voltage (V)		1-phase / L+N, 110 / 230 ±5%
Nominal Frequency (Hz)		50 Hz±0.1%
Nominal Current (A)		13.1
Nominal Power (W)		3,600
Output Wave		Pure Sinewave
THDv		< 3%
Bypass Voltage (V)		Following Line
Bypass Power (W)		3000
Battery		
Battery Cells		Lead-acid/Li-ion
Battery Voltage (V)		12 (10-15)
Max. Charging Current (A)		100
Charging Power (W)		1400
General Parameter		
Maximum Efficiency		92%
Time between Bypass with Inverter		
Electric Protection		OCP, short-circuit, OVP, UVP, lightning, battery OC etc.
Protection Class		Class II Double-insulated
Display		LCD / LEDs
Communication		Modbus RTU, Modbus TCP/UDP
Weight		
Dimension (W×H×D)		
Operating Temperature		-15°C - 55°C (> 40°C Power derating)
Storage Temperature		-40°C - 65°C
Relative Humidity		20% - 95% Without condensation
Altitude		>3000 m Derating/refer to IEC62040
Dust and water protection		IP20
Cooling		Fan Cooling
Noise Emission		< 60 dB(A)
Interface		
Start-up Switch		Button Switch
Communication Module		WiFi, Bluetooth, RS485 Optional
Monitoring System		Optional

BoltBox Series



All-in-one Power Station 2kW/2.7kWh



Key Parameters

Model	BoltBox 12-210
General Info	
Net Weight	~24.5kg
Dimension (L/W/H)	462/211/270mm
Capacity/Power	2700Wh/2000W
Display/Communication	LED/Bluetooth/APP
Operating Temperature	0~45 °C (> 40 °C, Power Derating)
Parallel Mode	Up to 3 Units
Output	
AC (x2)	Rated 2000W, 220V/10A, 50Hz
AC Surge	120% (1min), 150% (30s), 200% (1 s), >200% (200 ms)
USB-A (x2)	36W (USB-A+USB-C) (x2)
USB-C (x2) Fast Charging	
DC 12V	Rated 2000W
Input	
AC Charger	Rated 2000W, 150-280V/45-65 Hz
Solar Charger (x2)	1200W, 16-60V/18A (x2)
DC 12V	Rated. 2000W
Battery	
Cell Chemistry	LFP (Li-ion)
Cycle Life	> 6000 cycles
Protection	Over Voltage, Overload, Over Temperature, Short Circuit
	Low Temperature, Low Voltage, Overcurrent
Protection Level	IP 20

BoltBox Series



Stacking

2.7-10.8 kWh

Expandable Battery Pack
2.7 kWh/pack




Quick Plug

6 kW/8.1 kWh

Multiple Interface

Grade A
LFP Battery

App 
Easy Monitoring

2000W
AC/DC Output

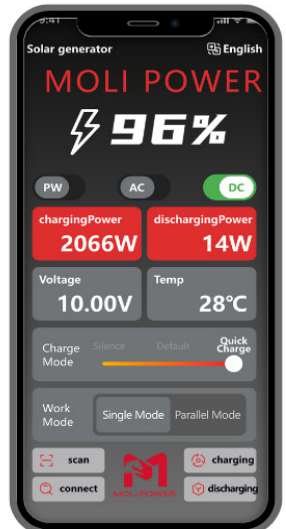
Ultra Fast
10-80% SoC in 60 min

1200W
PV/Solar Input










Parallel
Up to 3 Units



BoltBox Series



Ready for multiple scenarios

-  (300W) ≈ 9hrs Refrigerator
-  (1000W) ≈ 3hrs Air-conditioner
-  (200W) ≈ 14hrs TV
-  (80W) ≈ 34hrs Fan
-  (30W) ≈ 90hrs Light
-  (1500W) ≈ 2hrs Electric Kettle
-  (1000W) ≈ 3hrs Water pump
-  (800W) ≈ 3.5hrs Washing machine
-  (1200W) ≈ 2.5hrs Microwave

One-stop choice for home and life

Solar Vigour Series

All-in-one Hybrid ESS



Key Parameters	30kW/60kWh	40kW/80kWh
Model	MP-SV-30-60	MP-SV-40-80
Battery		
Model	NP54173207-205	NP71173207-280
System Configuration		1P90S
Rated Battery Pack Energy (kWh)	11.8	16.1
Number of Battery Packs	5	5
Rated System Energy (kWh)	59	80.5
Rated System Voltage (V)		288
Voltage Range (V)		252 ~ 324
Discharge (C-rate)		0.5
Cycle Life		8000
PV Parameter		
Recommended Max. PV Array Power (kW)	60	80
Max. Operating PV Input Current Per String (A)	8*20	
MPPT Voltage Range (V)		DC 150 ~ 950
Full Power MPPT Voltage Range (V)	DC 375 ~ 850	DC 500 ~ 850
Start-up Voltage (V)		DC 200
Number of MPPT		4
Strings per MPPT		2
Number of PV Input		8
AC Parameter		
Rated Output Power (kW)	30	40
Overload Capability		110% Long Term
Rated Voltage (V)		AC 380/400
Rated Current (A)	43	58
AC Input		3W+N+PE
Grid Voltage Range (V)		AC 380/400
Grid Frequency (Hz)		50/60
THDi		< 3%
Power Factor		0.8 Leading to 0.8 Lagging
DC Component		≤ 0.5%
Switching Time (ms)		< 100
General		
IP Level		IP 53 (System)
Interface		RS485/CAN
Protocol		Modbus-RTU, CAN
Temp. Control		Battery (Passive Cooling)
		PCS (Air Cooling)
Fire Extinguisher System		Aerosol
Working Temp. (°C)		-20 ~ 55
Working Humidity (%)		0 ~ 95 (Non-condense)
Working Height Level (m)		≤ 2000
Weight (kg)	720	846
Dimension (W*D*H)		830*840*1750

High Performance Inverter



SiC Inside
Efficiency in Hand

- 4 MPPT / 8 PV Input with efficiency 99.9%
- Support Black Start, On/Off-grid Mode, Generator Input
- Real-time Energy Management System Monitoring
- SiC Topography, Extreme Efficiency.
- IP 66 Protect Level



Real-time Monitoring
Anywhere, Anytime

Safe & Reliable High Performance Battery



- Ultra Safe LFP Li-ion Battery
- Deep Cycle up to 8,000
- Long Life-span up to 20 years
- High Accuracy BMS
- Modular Design for Easy Maintenance
- 3 Level Protecting Mechanisms
- Ready for All Weather Conditions
- Complete Fire Extinguishing System
- Environmental Friendly
- Certificates to Meet up Various Regulations

Compatible with



Mixed-use Supported

- On/Off-grid
- Energy Storage
- Solar+Energy Storage
- EV+Solar+Energy Storage

All-round-safety Protection

Uninterrupted Energy Supply

Various Scenarios



Powering Better Life



molipower.com

Case Study





Villa in China

Solar
39 kW

Battery (Solar Vigour)
60 kW/120 kWh

Support daily use of the family
in the Villa.

Case Study



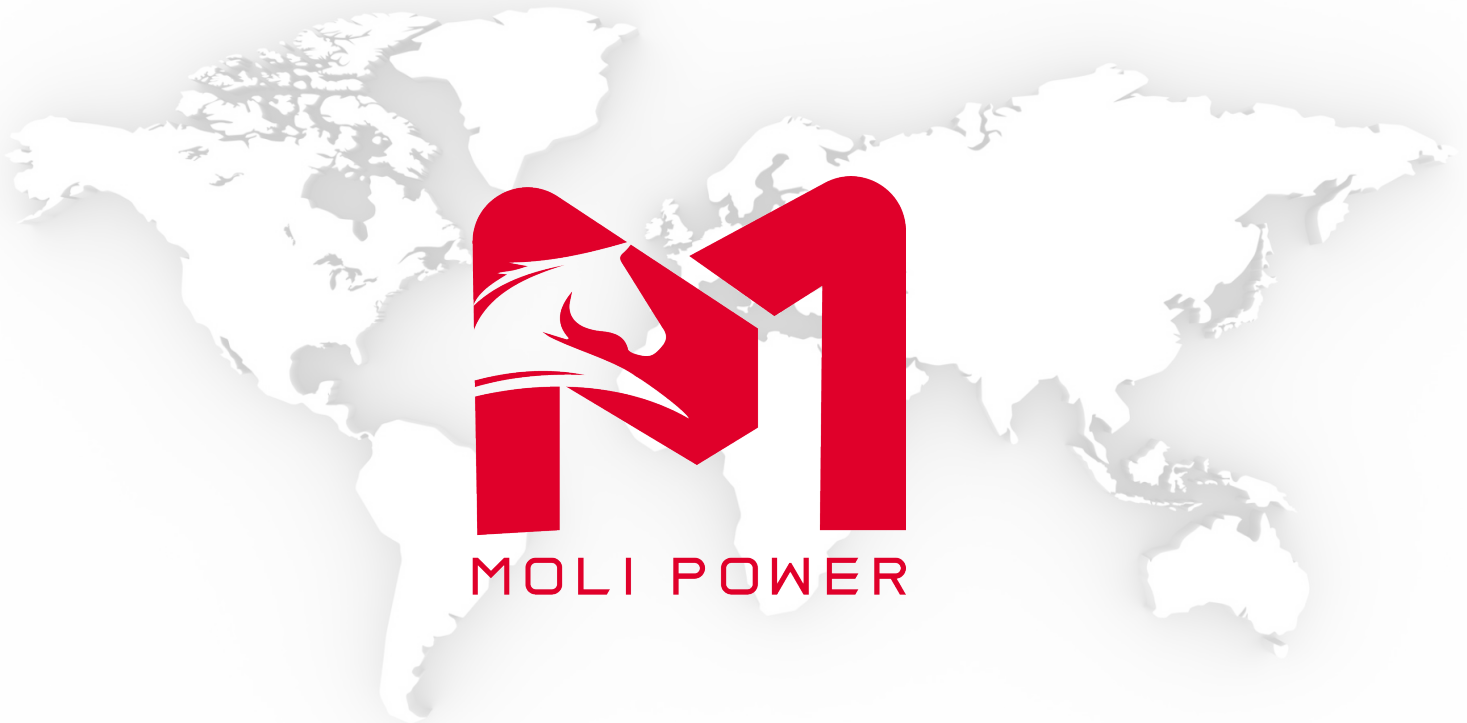


Residential ESS Africa



Powering Better Life

Powering Better Life



Singapore

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Contact: +65 80205389

China

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Thailand

Add: 99/44-45 Moo 8 Tha Kham Sub-District, Bang Pakong District, Chachoengsao Province 24130
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Vietnam

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Maldives

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Contact: +96 09938369

Sri Lanka

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Contact: +94 766012345

Mali

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Contact: +223 78822222

Nigeria

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Guinea

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Cameroon

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