



MOLI POWER

# Product Catalog

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# Solar Juice Series

## 12V Deep Cycle Li-ion Battery



### Key Parameters

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

# Ready for Multi-purpose Power Supply



# Solar Juice Series

## Off-grid Inverter



Key Parameters	24V 3.5 kW	48V 5.5 kW
Model	G3000	G5000
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 unis 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	
Max. Solar Charge Current (A)	120	80
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		12V 1.5 kW
Model	HMKPLUS1500-12	
<b>Input</b>		
Voltage (Vac)	230	
Selectable Voltage Range (Vac)	170-280 (For Personal Computers)	
	90-280 (For Home Appliances)	
Frequency Range (Hz)	50/60 (Auto Sensing)	
<b>Output</b>		
AC Voltage Regulation (Battery Mode)	230 Vac $\pm$ 5%	
Surge Power (VA)	3000	
Efficiency (Peak) PV to INV.	97%	
Efficiency (Peak) Battery to INV.	94%	
Transfer Time	10 ms (Personal Computers), 20 ms (Home Appliances)	
Waveform	Pure Sinewave	
<b>Battery &amp; AC Charger</b>		
Battery Voltage (Vdc)	12	
Floating Charge Voltage (Vdc)	13.5	
Over Charge Protection (Vdc)	16	
Max. Charge Current (A)	80	
<b>Solar Charger</b>		
Max. PV Array Power (W)	2000	
MPPT Range @ Operating Voltage (Vdc)	60 ~ 430	
Max. PV Array Open Circuit Voltage (Vdc)	450	
Max. Charging Current (A)	80	
Max. Efficiency	98%	
<b>General</b>		
Dimension (D*W*H, mm)	128*300*363	
Weight (kg)	6.9	
Communication Interface	USB/RS232	
<b>Operating Environment</b>		
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
<b>Battery</b>		
Type	Li-Ion/Lead-acid	
Voltage (V)	24	48
<b>PV input</b>		
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	
<b>AC Input</b>		
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	
<b>Diesel Generator Input</b>		
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	
<b>AC Output</b>		
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
<b>General Parameters</b>		
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	
<b>Interface</b>		
Start-Up Switch	Bottom Switch for Battery Input (Automatic Start-Up Once Nominal PV or AC Input)	
Communication Module	RS485/CAN, WiFi/GRPS Optional	
Monitoring System	Sinevolts Cloud Optional	
Units Paralleling Cable	RS485/CAN, Optional	

# Solar Juice Series

## Off-grid Inverter

To be Announced



Key Parameters	12V 3kW
<b>Model</b>	VC 3000
<b>AC Input</b>	
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
<b>AC Output</b>	
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
<b>Battery</b>	
Battery Cells	Lead-acid/Li-ion
Battery Voltage (V)	12 (10-15)
Max. Charging Current (A)	100
Charging Power (W)	1400
<b>General Parameter</b>	
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)
<b>Interface</b>	
Start-up Switch	Bottom Switch
Communication Module	WiFi, Bluetooth, RS485 Optional
Monitoring System	Optional

# Solar Vigour Series

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All-in-one Hybrid ESS 30kW / 60kWh





## Key Parameters 30kW/60kWh All-in-one ESS

<b>Model</b>	<b>MP-SV-30-60</b>
<b>Battery</b>	
Model	NP54173207-205
System Configuration	1P90S
Rated Battery Pack Energy (kWh)	11.8
Number of Battery Packs	5
Rated System Energy (kWh)	59
Rated System Voltage (V)	288
Voltage Range (V)	252 ~ 324
Discharge (C-rate)	0.5
Cycle Life	≥ 6000
<b>PV Parameter</b>	
Recommended Max. PV Array Power (kW)	60
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
Start-up Voltage (V)	DC 125
Number of MPPT	4
Strings per MPPT	2
Number of PV Input	8
<b>AC Parameter</b>	
Rated Output Power (kW)	30
Overload Capability	110% Long Term
Rated Voltage (V)	AC 380/400
Rated Current (A)	43
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
<b>General</b>	
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.	-20 ~ 55
Working Humidity (%)	0 ~ 95 (Non-condense)
Working Height Level (m)	≤ 2000
Weight (kg)	900
Dimension (W*D*H)	830*840*1750

# High Performance Inverter



- 4 MPPT / 8 PV Input with efficiency 99.9%
- Support Black Start, On/Off-grid Mode, Generator Input
- Real-time 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
- Completed Fire Extinguish System
- Environment Friendly
- Certificates to Meet up Various Regulations

# Compatible with



## Mixed-used Supported

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

## All-round-safety Protection

## Uninterrupted Energy Supply

# Verious Scenarios



Powering Better Life



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