

Features



Parallel Connection

Parallel connection with up to 9 units



High-Power Module Compatibility

Higher PV input current up to 18A



Seamless Switchover

UPS-level switching time $\leq 4\text{ms}$



Remote Monitoring

Built-in WiFi module for HaiPower monitoring



Efficient Battery Charge/Discharge

Max. 120A charge current

Max. 137A discharge current



Touch Screen

4.3" 800 x 480 interactive display
without physical keys



Enhanced Overload Capacity

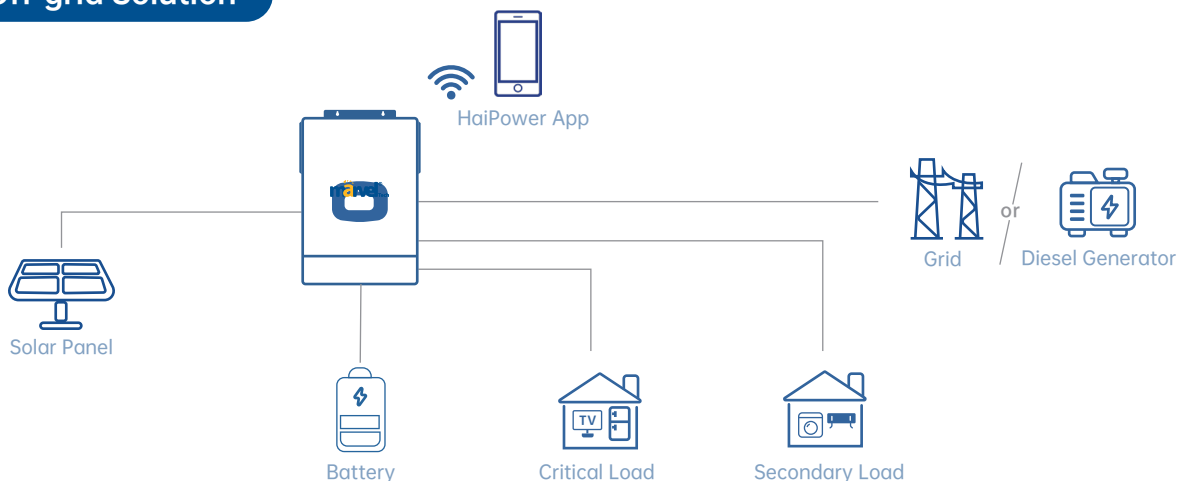
2 times the rated power for 5 seconds



Smart Load Management

Dual AC outputs to power loads on demand priority

Off-grid Solution



Specifications

Model

MHFI-4024-AG3

Solar Input Data

Max. PV Input Power	5000W
Max. Input Voltage	500V
Start-up Voltage	90V
MPPT Voltage Range	60V~450V
Max. Input Current per MPPT	18A
Max. Short Circuit Current per MPPT	23A
Number of MPPT	1

Battery Data

Battery Type	Li-Ion / Lead-acid
Nominal Battery Voltage	24V
Battery Voltage Range	20~30V
Max. Discharge Current	137A
Max. Charge / Discharge Power	3300W
Li-Ion Battery Activation	Yes
Li-Ion Battery Communication	CAN / RS485
Max. Solar Charge Current	120A
Max. AC Charge Current	100A
Max. Charge Current (PV+AC)	120A

AC Input Data (Grid)

Nominal Input Voltage	230Vac, L / N / PE
Input Voltage Range	90~280V
Max. Input Current	25A
Nominal Input Power	5700W
AC Frequency Range	50 / 60Hz (Auto sensing)

Inverter Output Data

Nominal Output Power	4000W with PV & battery 3300W with battery only
Peak Apparent AC Power	8000VA
Nominal AC Voltage	230V
Nominal Grid Frequency	50 / 60Hz
Voltage Waveform	Pure Sine Wave
Transfer Time (Typ)	4ms
Nominal Output Current	17.4A
Overload Protection	30s@102%-110% load; 10s@110%-130% load; 5s@130%-200% load
THDv (@linear load)	<3%

Efficiency

Peak Efficiency	94%
MPPT Efficiency	≥99.9%

Protect

DC Surge Protection	Yes
AC Surge Protection	Yes
AC Short Circuit Protection	Yes

System Parameters

Dimension (W*H*D)	333*505*120mm
Weight	10.6kg
Relative Humidity	5%~95% (Non-condensing)
Operating Temperature Range	-10°C~60°C
Noise Emission	≤50dB
Altitude	2000m
Cooling Method	Fan Cooling
Ingress Protection	IP21

Characteristic

Number of AC Output	2
Display	LCD & APP
Communication Interface	RS485 / USB / CAN / Wi-Fi
Parallel Capability	9