

marvel[®] Tech

MHSI-6K-05LP1



Application: Residential Use



Excellent Performance

- 200% PV oversizing, 9kW usable PV power
- Max. 18A+18A PV input current with 2 MPPTs
- Max battery charge/discharge current of 135A
- Max. Grid Passthrough Current of 41A



High Flexibility

- Support 40-60V Lithium or Lead-acid battery
- Support generator/smart load/AC coupling
- Support multiple units in parallel
- 3 inverters in parallel for three phase



Safety & Reliability

- IP65: Indoor or outdoor installation
- Seamless transition to backup mode, for protection against power outages
- Compact and lightweight, easy to transport and space-saving



Intelligent Maintenance

- 4.3" LCD color touchscreen, easy to operate
- 6 time periods for battery charging/discharging
- Built-in WiFi, supporting remote monitoring and upgrade



Model name**MHSI-6K-05LP1****Efficiency**

Max. Efficiency (PV to AC)	97.3%
Eur. Efficiency (PV to AC)	96.8%
Max. Efficiency (BAT to AC)	94.3%

Input (PV)

Max. PV Access Power	12,000W
Max. PV Usable Power	9,000W
Max. PV Voltage	500V
Start-up Voltage	90V
MPPT Voltage Range	70V-480V
Max. Input Current	18A/18A
Max. Short Circuit Current	25A/25A
Nos. of MPPT	2
String per MPPT	1/1

Input/Output (BAT)

Battery Type	Lithium-ion/Lead-acid
Nominal Battery Voltage	48V
Battery Voltage Range	40V-60V
Max. Charging/Discharging Current	135A/135A
Max. Charging/Discharging Power	6,600W/6,600W

Input/Output (Grid)

Nominal AC Output Power	6,000W
Max. AC Apparent Power	6,600VA
Rated AC Output Current	27.3A/26.1A/25.0A
Max. AC Output Current	28.7A
Max. Input Power From Grid	9,000W
Max. Grid Passthrough Current	41A
Rated Grid Voltage	220V/230V/240V, L+N+PE
Grid Voltage Range	150V-300V (Adjustable)
Rated Grid Frequency	50Hz/60Hz
AC Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)
Power Factor	> 0.99 @rated power (Adjustable 0.8 LD - 0.8 LG)
THDI	<3% (Rated Power)

Output (Back up)

Nominal Output Power	6,000W
Max. Output Power	6,600VA
Rated AC Output Current	27.3A/26.1A/25.0A
Peak Output Power (1min)	7,200VA
Peak Output Power (10S)	10000VA
Nominal Output Voltage	220V/230V/240V, L+N+PE
Nominal Output Frequency	50Hz/60Hz
Transfer Time	10ms (Typical)
THDV	<3% @100% R Load

Protection

Protection Category	Class I
PV Switch	Optional
Anti-islanding Protection	Yes
AC Over Current Protection	Yes
Over Voltage Protection	Yes
AC Short Circuit Protection	Yes
PV Reverse Protection	Yes
Surge Arrester	Type III

General

Max. Operation Altitude	4000m (>2000m derating)
Protection Degree	IP65
Operating Temperature Range	-25 C ~60 C (>45 C derating)
Relative Humidity	0~100%
Cooling	Smart Fan Cooling
Mounting	Wall bracket
Dimensions (W*H*D)	367mm*421mm*215mm
Weight	15.5Kg

HMI & COM

Display	LED+LCD
Communication	CAN (for BMS), RS485, CAN (for parallel), 1*DO, 1*DI, Wi-Fi, LAN

Certification

Safety	IEC/EN 62109-1/2
EMC	IEC/EN 61000-6-1/2/3/4
Warranty	5 Years

Remarks:

- The range of output voltage and frequency may vary depending on different grid codes.
- Specifications are subject to change without advanced notice.

