

Integ M Series

THE POWER MASTER



3-8KW Hybrid Inverter

Residential | Single Phase | HV Battery

97.6%

Max. Efficiency

15A

PV Input Current

10ms

UPS-level Switching

30A

Charge/Discharge Current



Talented

- 97.6% max. efficiency
- Within 10ms UPS-level switching
- Max. 15A PV input current



Powerful

- Max. 30A charge/discharge current
- 85-450V super wide battery voltage range



Reliable

- IP65 protection degree
- Compact and elegant design with integrated die-casting technology
- Long-term efficient operation with advanced heat dissipation design
- Outstanding working performance thanks to Solinteg MORE platform

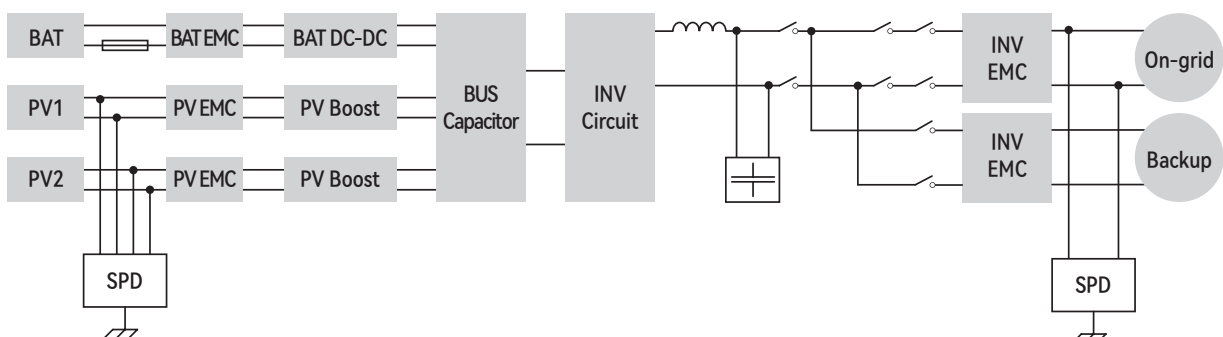


Friendly

- Convenient installation and O&M with horizontal design and quick plug terminals
- Easy data check via both OLED display and App
- Intelligent energy management with Solinteg built-in EMS
- Easy Wifi configuration via App
- Ideal for residential application with low operating noise



Circuit Diagram



Type Designation	MHS-3K-30	MHS-3.6K-30	MHS-4.2K-30	MHS-5K-30	MHS-6K-30	MHS-8K-30
PV Input						
Max. Input Power (kW)	4.80	5.76	6.72	8.00	9.60	12.80
Start-up Voltage (V)	80	80	80	80	80	80
Max. DC Input Voltage (V)*	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360
MPPT Voltage Range (V)	100-550	100-550	100-550	100-550	100-550	100-550
No. of MPP Trackers	1	1	2	2	2	2
No. of DC Inputs per MPPT	1	1	1/1	1/1	1/1	1/1
Max. Input Current (A)	15	15	15/15	15/15	15/15	15/15
Max. Short-circuit Current (A)	20	20	20/20	20/20	20/20	20/20
Battery Side						
Battery Type	Lithium Battery (with BMS)					
Battery Voltage Range (V)	85-450					
Max. Charge/Discharge Current (A)	30/30					
Grid Side						
Rated Output Power (kW)	3.00	3.60	4.20	5.00 ³⁾	6.00	8.00
Max. Output Apparent Power (kVA)	3.30	3.96 ¹⁾	4.60	5.50 ⁴⁾	6.60	8.00
Max. Input Apparent Power (kVA)**	6.00	7.20	8.40	10.00	12.00	12.00
Max. Charging Power of Battery (kW)	3.00	3.60	4.20	5.00	6.00	8.00
Rated AC Voltage (V)	L/N/PE; 220/230/240V					
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Max. Output Current (A)	15.00	18.00 ²⁾	21.00	25.00 ⁵⁾	28.70	36.30
Power Factor	0.8 leading ... 0.8 lagging					
Max. Total Harmonic Distortion	<3% @Rated output power					
DCI	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In
Back-up Side						
Rated Output Power (kW)	3.00	3.60	4.20	5.00	6.00	8.00
Max. Output Apparent Power (kVA)	3.30	3.96	4.60	5.50	6.60	8.00
Max. Output Current (A)	15.00	18.00	21.00	25.00	28.70	36.30
UPS Switching Time	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
Rated Output Voltage (V)	L/N/PE; 220/230/240V					
Rated Output Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Peak Output Apparent Power (kVA)***	3.9, 60s	4.7, 60s	5.5, 60s	6.5, 60s	7.8, 60s	10, 60s
Voltage Harmonic Distortion	<3% @Linear load					
Efficiency						
Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
European Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
Compliance						
IEC/EN 62109, IEC/EN 61000, EN50549-1, TOR Generator Type A, VDE-AR-N-4105						

Protection	
DC Reverse Polarity Protection	Integrated
Battery Input Reverse Connection Protection	Integrated
Insulation Resistance Protection	Integrated
Surge Protection	Integrated
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Islanding Protection	Integrated
AC Over-voltage Protection	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

General Data	
Over Voltage Category	PV: II; Main: III
Dimensions (W×H×D mm)	534×418×210
Weight (KG)	27.0
Protection Degree	IP65
Standby Self-consumption (W)	<15
Topology	Transformerless
Operating Temperature Range (°C)	-30~60
Relative Humidity (%)	0~100
Operating Altitude (m)	3000 (>3000m derating)
Cooling	Natural Convection
Noise Level (dB)	<25
Display	OLED & LED
Communication	CAN, RS485, WiFi/LAN (Optional)

* Max. operating DC voltage is 600V, max. withstanding DC voltage is 550V

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery

*** The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is related to the overload power

1) G98: 3.68kVA; 2) G98: 16.00A; 3) AS 4777.2: 5.0kW, VDE-AR-N 4105: 4.6kW; 4) AS 4777.2: 5.0kVA, VDE-AR-N 4105: 4.60kVA, C10/11: 5.0kVA;

5AS 4777.2: 21.7A, VDE-AR-N 4105: 21.0A, C10/11: 21.7A;