

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
- 65-450V 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

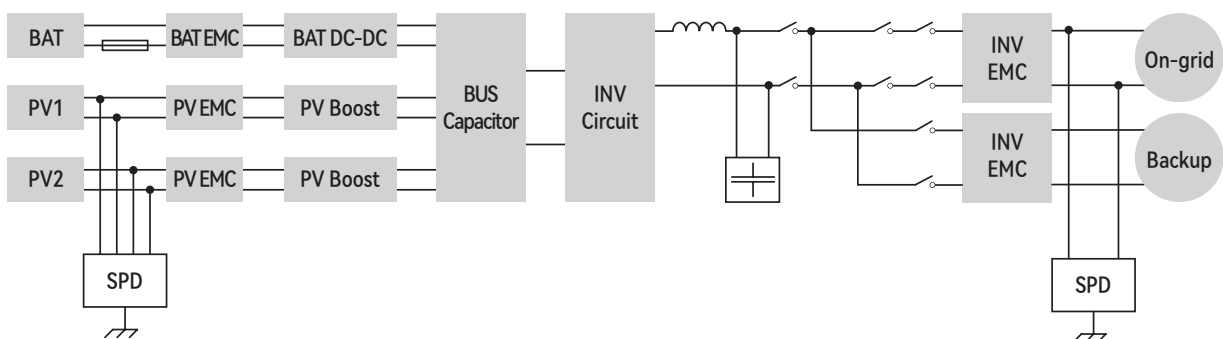


Friendly

- 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-7K-30	MHS-8K-30
PV Input							
Max. Input Power (kW)	4.80	5.76	6.72	8.00	9.60	11.20	12.80
Start-up Voltage (V)	80	80	80	80	80	80	80
Max. DC Input Voltage (V)*	600	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360	360
MPPT Voltage Range (V)	100-550	100-550	100-550	100-550	100-550	100-550	100-550
No. of MPP Trackers	1	1	2	2	2	2	2
No. of DC Inputs per MPPT	1	1	1/1	1/1	1/1	1/1	1/1
Max. Input Current (A)	15	15	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	20/20
Battery Side							
Battery Type	Lithium Battery (with BMS)						
Battery Voltage Range (V)	85-465						
Max. Charge/Discharge Current (A)	30/30						
Grid Side							
Rated Output Power (kW)	3.00	3.60	4.20	5.00 ³⁾	6.00	7.00	8.00
Max. Output Apparent Power (kVA)	3.30	3.96 ¹⁾	4.60	5.50 ⁴⁾	6.60	7.70	8.00
Max. Input Apparent Power (kVA)**	6.00	7.20	8.40	10.00	12.00	12.00	12.00
Max. Charging Power of Battery (kW)	3.00	3.60	4.20	5.00	6.00	7.00	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	50/60
Max. Output Current (A)	15.00	18.00 ²⁾	21.00	25.00 ⁵⁾	28.70	35.00	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	<0.5%In
Back-up Side							
Rated Output Power (kW)	3.00	3.60	4.20	5.00	6.00	7.00	8.00
Max. Output Apparent Power (kVA)	3.30	3.96	4.60	5.50	6.60	7.70	8.00
Max. Output Current (A)	15.00	18.00	21.00	25.00	28.70	35.00	36.30
UPS Switching Time	<10ms	<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	50/60
Peak Output Apparent Power (kVA)***	3.9, 60s	4.7, 60s	5.5, 60s	6.5, 60s	7.8, 60s	9.1, 60s	10, 60s
Voltage Harmonic Distortion	<3% @Linear load						
Efficiency							
Max. Efficiency	97.6%	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%	97.0%
Compliance							
IEC/EN 62109, IEC/EN 61000, EN50549-1, TOR Generator Type A, VDE-AR-N-4105							
Protection				General Data			
DC Reverse Polarity Protection	Integrated			Over Voltage Category	PV: II; Main: III		
Battery Input Reverse Connection Protection	Integrated			Dimensions (W×H×D mm)	534×418×210		
Insulation Resistance Protection	Integrated			Weight (KG)	27.0		
Surge Protection	Integrated			Protection Degree	IP65		
Over-temperature Protection	Integrated			Standby Self-consumption (W)	<15		
Residual Current Protection	Integrated			Topology	Transformerless		
Islanding Protection	Integrated (Frequency shift)			Operating Temperature Range (°C)	-30~60		
AC Over-voltage Protection	Integrated			Relative Humidity (%)	0~100		
Overload Protection	Integrated			Operating Altitude (m)	3000 (>3000m derating)		
AC Short-circuit Protection	Integrated			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;