

Hybrid Inverter 3-8kW

MHS-3/3.6/4.2/5/6/8K-30

15A	80V	30A
Max. PV Input Current	Start-up Voltage	Max. Charge/Discharge

Residential | Single-Phase | HV Battery | 1-2 MPPTs



Maximized Energy Harvesting

- 160% DC oversizing boosts solar capture
- Starts at 80V for more generation time
- Continuous 110% AC overloading sustains power
- Smooth transition to backup power ensures continuity during power outages

Engineered for Versatility

- Wide 85-450V range fits diverse batteries
- IP65 protects both indoors and outdoors
- Silent 25dB operation for comfort



Intelligent Energy Dynamics

- Five work modes for diverse use
- The newly enhanced Solinteg EMS platform for peak intelligent energy management
- Centralized smart management for efficiency

Simplified Interaction

- Remote upgrades maintain system health
- Solinteg I-light for quick status checks
- OLED and App for easy control

Integ M Series

The Power Master

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Model		MHS-3K-30	MHS-3.6K-30	MHS-4.2K-30	MHS-5K-30	MHS-6K-30	MHS-8K-30
PV Input							
Recommended 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 SideWWW							
Battery Type		Lithium Battery (with BMS)					
Battery Voltage Range	[V]	85-450					
Maximum Charging/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	10.00	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					
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					
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
On/Off-grid Switching Time	[ms]	<10ms					
Rated Output Voltage	[V]	L/N/PE, 220/230/240V					
Rated Output Frequency	[Hz]	50/60					
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%
Protection							
Integrated Protection		DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection / Surge protection / Over-temperature protection / Residual current protection / Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection					
General Data							
Over Voltage Category		PV: II Main: III					
Dimensions	[W×H×D mm]	534×418×210					
Weight	[KG]	27					
Protection Degree		IP65					
Standby Self-consumption	[W]	<15					
Topology		Transformerless					
Operating Temperature Range	[℃]	-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)					

* PV Max. Input voltage is 550V without battery, or 500V with battery, otherwise inverter will be waiting;
** 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;

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

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