



Hybrid Inverter

3-8kW

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

15A

Max. PV Input Current

80V

Start-up Voltage

30A

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

- 7 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

Hybrid Inverter 3-8kW

Models		MHS-3K-30	MHS-3.6K-30	MHS-4.2K-30	MHS-5K-30	MHS-6K-30	MHS-8K-30
PV Side							
Max. PV Array Power	[kWp]	4.8	5.8	6.7	8	9.6	12.8
Max. PV Input Voltage *	[V]			600*			
Rated PV Input Voltage	[V]			360			
Start-up Voltage	[V]			80			
MPPT Operating Voltage Range *	[V]			100-550*			
No. of MPP Trackers		1	1	2	2	2	2
No. of Strings per MPPT		1	1	1/1	1/1	1/1	1/1
Max. Input Current per MPPT	[A]	15	15	15/15	15/15	15/15	15/15
Max. Short-circuit Current per MPPT	[A]	20	20	20/20	20/20	20/20	20/20
Battery Side							
Battery Type				Lithium-ion			
Battery Voltage Range	[V]			85-450			
No. of Battery Input				1			
Max. Charge/Discharge Current	[A]			30/30			
Max. Charge/Discharge Power	[kW]	3/3	3.6/3.6	4.2/4.2	5/5	6/6	8/8
Grid Side (On-Grid)							
Rated Output Power	[kW]	3	3.6	4.2	5 ⁽³⁾	6	8
Max. Output Apparent Power	[kVA]	3.3	3.96 ⁽¹⁾	4.6	5.5 ⁽⁴⁾	6.6	8
Rated AC Voltage	[V]			L/N/PE; 220/230/240V			
Rated AC Frequency	[Hz]			50/60			
Rated Output Current	[A]	13.6/13/12.5	16.4/15.7/15	19.1/18.3/17.5	22.7/21.7/20.8	27.3/26.1/25	36.3/34.8/33.3
Max. Output Current	[A]	15	18 ⁽²⁾	21	25	28.7	36.3
Power Factor				0.8 leading ...0.8 lagging			
THDi (@Rated Power)				<3%			
Max. Input Apparent Power **	[kVA]	6	7.2	8.4	10	10	12
Rated AC Voltage	[V]			L/N/PE; 220/230/240V			
Rated AC Frequency	[Hz]			50/60			
Max. AC Input Current	[A]	27.3	32.7	38.2	45.5	45.5	54.5
Back-up Side (Off-Grid)							
Rated Output Power	[kW]	3.0	3.6	4.2	5.0	6.0	8.0
Peak Output Apparent Power	[kVA]	5.46@10s	5.46@10s	5.46@10s	7.8@10s	7.8@10s	10.4@10s
Rated Output Voltage	[V]			L/N/PE; 220/230/240V			
Rated Output Frequency	[Hz]			50/60			
Rated Output Current	[A]	13.6/13/12.5	16.4/15.7/15	19.1/18.3/17.5	22.7/21.7/20.8	27.3/26.1/25	36.3/34.8/33.3
On/Off-grid Switching Time	[ms]			< 10ms			
THDv (@Linear Load)				<3%			
Efficiency							
MPPT Efficiency				99.90%			
Max. Efficiency				97.60%			
European Efficiency				97.00%			
Protection							
Integrated Protection		DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection / Surge protection(DC/AC: Type II/Type II) / Over-temperature protection / Residual current protection / Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection					
General Data							
Dimensions	[W×H×D mm]			534×418×210			
Weight	[KG]			27			
Ingress Protection				IP65			
Standby Self-consumption	[W]			< 15			
Topology				Transformerless			
Operating Temperature Range	[°C]			-30~60			
Relative Humidity	[%]			0~100			
Max. Operation Altitude	[m]			3000			
Over Voltage Category				II(PV+Battery), III(Mains)			
Cooling				Natural Convection			
Noise Level	[dB]			<25			
Display				LED & OLED			
Communication				CAN, RS485			

* 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) VDE-AR-N 4105: 4.6kW; (4) VDE-AR-N 4105: 4.60kVA;