



Hybrid Inverter 3-6kW

M2HS-3/3.6/4.2/4.6/5/6K-30

20A

Max. PV Input Current

80V

Start-up Voltage

30A

Max. Charge/Discharge

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



Maximized Energy Harvesting

- Max. 30A charging/discharging for efficient energy transfer
- 80-450V super wide battery voltage range
- Max. 20A PV input current per string, 1-2 MPP trackers



Engineered for Versatility

- Up to 200% max backup @10s handles overloads
- IP65 protects both indoors and outdoors
- Smooth transition to backup power ensures continuity during power outages



Intelligent Energy Dynamics

- 6 work modes for diverse use
- Supports both ToU and dynamic pricing strategies for optimized energy use and cost savings
- 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 3-6kW

Models		M2HS-3K-30	M2HS-3.6K-30	M2HS-4.2K-30	M2HS-4.6K-30	M2HS-5K-30	M2HS-6K-30
PV Side							
Max. PV Array Power	[kWp]	6	7.2	8.4	9.2	10	12
Max. PV Input Voltage *	[V]	580*					
Rated PV Input Voltage	[V]	360					
Start-up Voltage	[V]	80					
MPPT Operating Voltage Range *	[V]	70-550*					
No. of MPP Trackers		1	2	2	2	2	2
No. of Strings per MPPT		1	1/1	1/1	1/1	1/1	1/1
Max. Input Current per MPPT	[A]	20	20/20	20/20	20/20	20/20	20/20
Max. Short-circuit Current per MPPT	[A]	25	25/25	25/25	25/25	25/25	25/25
Battery Side							
Battery Type		Lithium-lion					
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	4.6/4.6	5/5	6/6
Grid Side (On-Grid)							
Rated Output Power	[kW]	3	3.6	4.2	4.6	5 ⁽³⁾	6
Max. Output Apparent Power	[kVA]	3	3.6 ⁽¹⁾	4.2	4.6	5 ⁽⁴⁾	6
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	20.9/20/19.2	22.7/21.7/20.8	27.3/26.1/25
Max. Output Current	[A]	13.6	16.4 ⁽²⁾	19.1	20.9	22.7 ⁽⁵⁾	27.3
Power Factor		0.8 leading ...0.8 lagging					
THDi (@Rated Power)		<3%					
Max. Input Apparent Power **	[kVA]	6	7.2	8.4	9.2	10	10
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	41.8	45.5	45.5
Back-up Side (Off-Grid)							
Rated Output Power	[kW]	3.0	3.6	4.2	4.6	5.0	6.0
Peak Output Apparent Power	[kVA]	5.8 @10s	5.8 @10s	8.4 @10s	8.4 @10s	8.4 @10s	8.4 @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	20.9/20/19.2	22.7/21.7/20.8	27.3/26.1/25
On/Off-grid Switching Time	[ms]	< 10ms					
THDv (@Linear Load)		<3%					
Efficiency							
MPPT Efficiency		99.90%					
Max. Efficiency		97.60%					
European Efficiency		97.10%					
Max. Battery to AC Efficiency		95.60%					
Max. PV to Battery Efficiency		96.90%					
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]	445×400×197					
Weight	[KG]	18	20	20	20	20	20
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, otherwise inverter will be waiting;

** Max apparent power means the maximum power imported from the 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;(5) VDE-AR-N 4105: 21.0A;