

Hybrid Inverter 3-6kW

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

20A	80V	30A
Max. PV Input Current	Start-up Voltage	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
- Smooth transition to backup power ensures continuity during power outages

Engineered for Versatility

- 200% max backup @10s handles overloads
- IP65 protects both indoors and outdoors
- Supports half-wave loading



Intelligent Energy Dynamics

- Five 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

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Model		M2HS-3K-30	M2HS-3.6K-30	M2HS-4.2K-30	M2HS-4.6K-30	M2HS-5K-30	M2HS-6K-30
PV Input							
Recommended Max. Input Power	[kW]	6	7.2	8.4	9.2	10	12
Start-up Voltage	[V]	80	80	80	80	80	80
Max. PV Input Voltage*	[V]	580*	580*	580*	580*	580*	580*
Rated PV Input Voltage	[V]	360	360	360	360	360	360
Operating Voltage Range*	[V]	70-550*	70-550*	70-550*	70-550*	70-550*	70-550*
Rated Power MPP Voltage Range	[V]	160-500	95-500	110-500	120-500	130-500	160-500
No. of MPP Trackers		1	2	2	2	2	2
No. of PV Inputs per MPPT		1	1/1	1/1	1/1	1/1	1/1
Max. PV Input Current	[A]	20	20/20	20/20	20/20	20/20	20/20
Max. Short-circuit Current	[A]	25	25/25	25/25	25/25	25/25	25/25
Battery Side							
Battery Type		LiFePO4 Battery(with BMS)					
Battery Voltage Range	[V]	80-450					
Maximum Charging/Discharge Current	[A]	30/30					
Grid Side							
Rated Output Power	[kW]	3.0	3.6	4.2	4.6	5.0	6.0
Max. Output Power	[kW]	3.0	3.6	4.2	4.6	5.0	6.0
Rated Output Apparent Power	[kVA]	3.0	3.6	4.2	4.6	5.0	6.0
Max. Output Apparent Power	[kVA]	3.0	3.6	4.2	4.6	5.0	6.0
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
Max. Output Current	[A]	13.6	16.4	19.1	20.9	22.7	27.3
Power Factor		0.8 leading …0.8 lagging					
Max. Total Harmonic Distortion		<3% @Rated output power					
DCI		<0.5%In					
Max. Input Apparent Power**	[kVA]	6.0	7.2	8.4	9.2	10.0	10.0
Rated Intput Voltage	[V]	L/N/PE, 220/230/240V					
Rated Intput Frequency	[Hz]	50/60					
Max. Intput Current	[A]	27.3	32.7	38.2	41.8	45.5	45.5
Back-up Side							
Rated Output Power	[kW]	3.0	3.6	4.2	4.6	5.0	6.0
Max. Output Power	[kW]	3.0	3.6	4.2	4.6	5.0	6.0
Rated Output Apparent Power	[kVA]	3.0	3.6	4.2	4.6	5.0	6.0
Max. Output Apparent Power	[kVA]	3.0	3.6	4.2	4.6	5.0	6.0
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	19.1	20.9	22.7	27.3
Peak output apparent power	[kVA]	5.8 @10s	5.8 @10s	8.4 @10s	8.4 @10s	8.4 @10s	8.4 @10s
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		97.1%	97.1%	97.1%	97.1%	97.1%	97.1%
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]	445×400×197					
Weight	[KG]	18	20				
Protection Degree		IP65					
Standby Self-consumption	[W]	<15					
Topology		Transformerless					
Operating Temperature Range	[℃]	-30~60					
Relative Humidity	[%]	0~100					
Operating Altitude	[m]	3000					
Cooling		Natural Convection					
Noise Level	[dB]	<25					
Display		OLED & LED					
Communication		CAN, RS485, WiFi/LAN (Optional)					

* 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;

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