



Hybrid Inverter 5-10kW

M2HT-5/6/8/9.9/10K-30

20A

Max. PV Input Current

110%

Unbalanced Output

30A

Max. Charge/Discharge

Residential | Three Phase | HV Battery | 2 MPPTs



Maximized Energy Harvesting

- 110% unbalanced output enhances self-consumption
- Max. 30A charging/discharging for efficient energy transfer
- Max. 20A PV input current per string, 2 MPP trackers
- Smooth transition to backup power ensures continuity during power outages



Engineered for Versatility

- Max. 10 pcs parallel operation
- 160% max backup @10s handles overloads
- IP66 protects both indoors and outdoors
- Supports half-wave loading



Intelligent Energy Dynamics

- 5 work modes for diverse use
- SuperToU Station Management: Supports flexible and customizable operation modes.
- Centralized smart management for efficiency
- Supports diesel generators for diverse energy sourcing



Simplified Interaction

- Remote upgrades maintain system health
- Solinteg I-light for quick status checks
- OLED and App for easy control
- The newly enhanced Solinteg EMS platform for peak intelligent energy management



Integ M Series

The Power Master

Hybrid Inverter 5-10kW

Model		M2HT-5K-30	M2HT-6K-30	M2HT-8K-30	M2HT-9.9K-30	M2HT-10K-30
PV Side						
Max. PV Array Power	[kW]	10	12	16	20	20
Max. PV Input Voltage *	[V]	1000				
Rated PV Input Voltage	[V]	620				
Start-up Voltage	[V]	120				
MPPT Operating Voltage Range *	[V]	125-950				
No. of MPP Trackers		2	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]	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
Battery Side						
Battery Type		Lithium Battery (with BMS)				
Battery Voltage Range	[V]	130-750				
No. of Battery Input		1				
Max. Charging/Discharging Current	[A]	30/30				
Max. Charging/Discharging Power	[kW]	5/5	6/6	8/8	9.9/9.9	10/10
Grid Side (On-Grid)						
Rated Output Power	[kW]	5.0	6.0	8.0	9.9	10.0
Max. Output Apparent Power	[kVA]	5.0	6.0	8.0	9.9	10.0
Rated AC Voltage		3L/N/PE; 220/380V;230/400V;240/415V				
Rated AC Frequency	[Hz]	50/60				
Rated Output Current	[A]	7.6/7.2/6.9	9.1/8.7/8.3	12.1/11.6/11.1	15.2/14.5/13.9	15.2/14.5/13.9
Max. Output Current	[A]	8.8	10.5	14.0	17.6	17.6
Power Factor		0.8 leading ...0.8 lagging				
THDi (@Rated Power)		<3%				
Max. Input Apparent Power **	[kVA]	10.0	12.0	12.0	15.0	15.0
Rated AC Voltage		3L/N/PE; 220/380V;230/400V;240/415V				
Rated AC Frequency	[Hz]	50/60				
Max. AC Input Current	[A]	15.2	18.2	18.2	22.7	22.7
Back-up Side (Off-Grid)						
Rated Output Power	[kW]	5.0	6.0	8.0	9.9	10.0
Peak Output Apparent Power	[kVA]	9.6 @10s	9.6 @10s	16 @10s	16 @10s	16 @10s
Rated AC Voltage		3L/N/PE; 220/380V;230/400V;240/415V				
Rated Output Frequency	[Hz]	50/60				
Rated Output Current	[A]	7.6/7.2/6.9	9.1/8.7/8.3	12.1/11.6/11.1	15.2/14.5/13.9	15.2/14.5/13.9
On/Off-grid Switching Time		< 10ms				
THDv (@Linear Load)		<3%				
Efficiency						
MPPT Efficiency		99.9%				
Max. Efficiency		97.6%				
European Efficiency		96.9%				
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]	505x460x207				
Weight	[KG]	26.5				
Ingress Protection		IP66				
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+Backup)				
Cooling		Natural Convection				
Noise Level	[dB]	< 25				
Display		LED & OLED				
Communication		CAN, RS485				

* The maximum PV input voltage is 950V. The inverter will stop operating when the voltage is between 950V and 1000V. The inverter will be damaged if the voltage exceeds 1000V;

** Max input apparent power means the maximum power imported from the grid used to satisfy the backup loads and charge the battery;