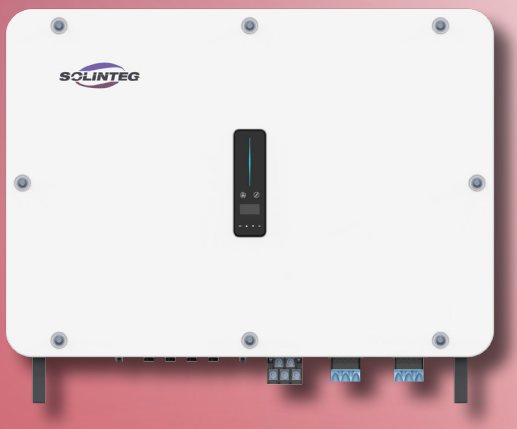


Hybrid Inverter 25-50kW

M2HT-25/29.9/30/40/50K-150

40A	100%	150A
Max. PV Input Current	Unbalanced Output	Max. Charge/Discharge

Commercial | Three Phase | HV Battery | 4 MPPTs



Enhanced Power & Performance

- 150% backup power @10s
- <10ms seamless on/off-grid switching
- 100% unbalanced load support
- Up to 200% grid input power support

Solar & Energy Optimization

- PV input current up to 20A per string
- Up to 200% DC oversizing boosts efficiency
- High charging/discharging current
- Versatile applications for all scenarios



System Integration & Flexibility

- Parallel operation supports both off-grid and on-grid
- Half-wave load compatibility for stable performance
- Diesel generator integration secures reliable backup
- Third-party EMS & BMS compatibility

Intelligent Control & Maintenance

- 6 built-in operating modes optimize energy use
- Dynamic pricing mode maximizes cost efficiency
- Remote Upgrade Ensures Fast Updates
- Precise Export Limitation Prevents Grid Backfeed

Integ M Series

The Power Master

EN-M2HT-25-50-NO1.01-2026
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Hybrid Inverter 25-50kW

Models		M2HT-25K-150	M2HT-29.9K-150	M2HT-30K-150	M2HT-40K-150	M2HT-50K-150
PV Side						
Max. PV Array Power	[kWp]	50	60	60	80	80
Max. PV Input Voltage *	[V]	1000				
Rated PV Input Voltage	[V]	620				
Start-up Voltage	[V]	135				
MPPT Operating Voltage Range *	[V]	200-950				
No. of MPP Trackers		4	4	4	4	4
No. of Strings per MPPT		2/2/2/2	2/2/2/2	2/2/2/2	2/2/2/2	2/2/2/2
Max. Input Current per MPPT	[A]	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40
Max. Short-circuit Current per MPPT	[A]	50/50/50/50	50/50/50/50	50/50/50/50	50/50/50/50	50/50/50/50
Battery Side						
Battery Type		Lithium Battery (with BMS)				
Battery Voltage Range	[V]	150-840				
No. of Battery Input		1				
Max. Charge/Discharge Current	[A]	150/150				
Max. Charge/Discharge Power	[kW]	25/25	29.9/29.9	30/30	40/40	50/50
Grid Side (On-Grid)						
Rated Output Power	[kW]	25.0	29.9	30.0	40.0	50.0
Max. Output Apparent Power	[kVA]	25.0	29.9	30.0	40.0	50.0
Rated AC Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated AC Frequency	[Hz]	50/60				
Rated Output Current	[A]	37.9/36.2/34.7	45.3/43.3/41.5	45.5/43.5/41.7	60.6/58/55.6	75.8/72.5/69.4
Max. Output Current	[A]	37.9	45.3	45.5	60.6	75.8
Power Factor		0.8 leading ...0.8 lagging				
THDi (@Rated Power)		<3%				
Max. Input Apparent Power **	[kVA]	50.0	60.0	60.0	80.0	80.0
Rated AC Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated AC Frequency	[Hz]	50/60				
Max. AC Input Current	[A]	75.8	90.9	90.9	121.2	121.2
Back-up Side (Off-Grid)						
Rated Output Power	[kW]	25.0	29.9	30.0	40.0	50.0
Peak Output Apparent Power	[kVA]	37.5 @10s	45 @10s	45 @10s	60 @10s	75 @10s
Rated Output Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated Output Frequency	[Hz]	50/60				
Rated Output Current	[A]	37.9/36.2/34.7	45.3/43.3/41.5	45.5/43.5/41.7	60.6/58/55.6	75.8/72.5/69.4
On/Off-grid Switching Time	[ms]	< 10ms				
THDv (@Linear Load)		<3%				
Generator Side						
Max. Input Apparent Power	[kVA]	30.0	36.0	36.0	48.0	60.0
Rated Input Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated Input Frequency	[Hz]	50/60				
Max. Input Current	[A]	45.5	54.5	54.5	72.7	90.9
Efficiency						
MPPT Efficiency		99.90%				
Max. Efficiency		97.80%				
European Efficiency		97.40%				
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]	919x739x305				
Weight	[KG]	89				
Ingress Protection		IP66				
Standby Self-consumption	[W]	< 40				
Topology		Transfomerless				
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		Smart Fan				
Noise Level	[dB]	< 65				
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 apparent power means the maximum power imported from the grid used to satisfy the backup loads and charge the battery;

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