



# Hybrid Inverter 4-12kW

MHT-4/5/6/8/10/12K-25

**15A**

Max. PV Input Current

**110%**

Unbalanced Output

**25A**

Max. Charge/Discharge

Residential | Three Phase | HV Battery | 2 MPPTs



## Maximized Energy Harvesting

- 160% DC oversizing boosts solar capture
- 110% unbalanced output enhances self-consumption
- Smooth transition to backup power ensures continuity during power outages



## Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- Up to 200% max backup @10s handles overloads
- IP65 protects both indoors and outdoors
- Silent 25dB operation for comfort



## Intelligent Energy Dynamics

- 7 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 4-12kW

Models		MHT-4K-25	MHT-5K-25	MHT-6K-25	MHT-8K-25	MHT-10K-25	MHT-12K-25
PV Side							
Max. PV Array Power	[kWp]	6.4	8	9.6	10.4	16	19.2
Max. PV Input Voltage *	[V]	1000*					
Rated PV Input Voltage	[V]	620					
Start-up Voltage	[V]	135					
MPPT Operating Voltage Range *	[V]	120-950*	120-950*	120-950*	200-950*	200-950*	200-950*
No. of MPP Trackers		2	2	2	2	2	2
No. of Strings per MPPT		1/1	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	15/15
Max. Short-circuit Current per MPPT	[A]	20/20	20/20	20/20	20/20	20/20	20/20
Battery Side							
Battery Type		Lithium-lion					
Battery Voltage Range	[V]	135-750					
No. of Battery Input		1					
Max. Charge/Discharge Current	[A]	25/25					
Max. Charge/Discharge Power	[kW]	4/4	5/5	6/6	8/8	10/10	12/12
Grid Side (On-Grid)							
Rated Output Power	[kW]	4	5	6	8	10	12
Rated AC Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V					
Rated AC Frequency	[Hz]	50/60					
Rated Output Current	[A]	5.8	7.3	8.7	11.6	14.5	17.4
Power Factor		0.8 leading ...0.8 lagging					
THDi (@Rated Power)		<3%					
Max. Input Apparent Power **	[kVA]	8.0	10.0	12.0	16.0	16.5	16.5
Rated AC Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V					
Rated AC Frequency	[Hz]	50/60					
Max. AC Input Current	[A]	12.2	15.2	18.2	24.4	25.0	25.0
Back-up Side (Off-Grid)							
Rated Output Power	[kW]	4	5	6	8	10	12
Peak Output Apparent Power	[kVA]	9@10s	9@10s	9@10s	18@10s	18@10s	18@10s
Rated Output Voltage	[V]	3L/N/PE; 220/380V; 230/400V; 240/415V					
Rated Output Frequency	[Hz]	50/60					
Rated Output Current	[A]	5.8	7.3	8.7	11.6	14.5	17.4
On/Off-grid Switching Time	[ms]	< 10ms					
THDv (@Linear Load)		<3%					
Efficiency							
MPPT Efficiency		99.90%	99.90%	99.90%	99.90%	99.90%	99.90%
Max. Efficiency		98.10%	98.10%	98.10%	98.20%	98.20%	98.20%
European Efficiency		97.30%	97.30%	97.30%	97.40%	97.40%	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]	534×418×210					
Weight	[KG]	26					
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 950V without battery, or 850V 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;