

4-12kW Hybrid Inverter

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

98.2%

Max. Efficiency

15A

PV Input Current

110%

Unbalanced Output

10ms

UPS-level Switch



Residential | Three-Phase | HV Battery | 2 MPPTs



Maximized Energy Harvesting

- 150% DC oversizing boosts solar capture
- 110% unbalanced output enhances self-consumption
- Continuous 110% AC overloading sustains power
- 10ms UPS-level switch secures supply



Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 200% max backup @60s handles overloads
- IP65 protects both indoors and outdoors
- Silent 25dB operation for comfort



Simplified Interaction

- Remote upgrades maintain system health
- Solinteg I-light for quick status checks
- OLED and App for easy control



Intelligent Energy Dynamics

- Five work modes for diverse use
- Six charge/discharge intervals optimize control
- Centralized smart management for efficiency

Integ M Series

The Power Master

Model		MHT-4K-25	MHT-5K-25	MHT-6K-25	MHT-8K-25	MHT-10K-25	MHT-12K-25
PV Input							
Recommended Max. input power	[kW]	6.0	7.5	9.0	12.0	15.0	18.0
Start-up voltage	[V]	135	135	135	135	135	135
Max. DC input voltage*	[V]	1000*	1000*	1000*	1000*	1000*	1000*
Rated DC input voltage	[V]	620	620	620	620	620	620
Minimum operating DC voltage	[V]	120	120	120	200	200	200
MPPT 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 DC inputs per MPPT		1/1	1/1	1/1	1/1	1/1	1/1
Max. input current	[A]	15/15	15/15	15/15	15/15	15/15	15/15
Max. short-circuit current	[A]	20/20	20/20	20/20	20/20	20/20	20/20
Battery Side							
Battery type		Lithium Battery (with BMS)					
Battery voltage range	[V]	135-750					
Maximum charging/discharge current	[A]	25/25					
Grid Side							
Rated output power	[kW]	4.0	5.0	6.0	8.0	10.0	12.0
Rated output apparent power	[kVA]	4.0	5.0	6.0	8.0	10.0	12.0
Max. output apparent power	[kVA]	4.4	5.5	6.6	8.8	11.0 ¹⁾	13.2
Max. input apparent power**	[kVA]	8.0	10.0	12.0	16.0	16.5	16.5
Max. charging power of battery	[kW]	4.0	5.0	6.0	8.0	10.0	12.0
Rated AC voltage		3L/N/PE; 220/380V;230/400V;240/415V					
Rated AC frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Rated output current	[A]	5.8	7.3	8.7	11.6	14.5	17.4
Max. output current	[A]	6.7	8.3	10.0	13.3	16.5 ²⁾	20.0
Power factor		0.8 leading ... 0.8 lagging					
Max. total harmonic distortion		<3% @Rated output power					
DCI		<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In
Back-up Side							
Rated output power	[kW]	4.0	5.0	6.0	8.0	10.0	12.0
Rated output apparent power	[kVA]	4.0	5.0	6.0	8.0	11.0	12.0
Max. output apparent power	[kVA]	4.4	5.5	6.6	8.8	11.0	13.2
Max. output current	[A]	6.7	8.3	10.0	13.3	16.5	20.0
UPS switching time		<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
Rated output voltage		3L/N/PE; 220/380V;230/400V;240/415V					
Rated output frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Voltage harmonic distortion		<3% @Linear load					
Efficiency							
Max. efficiency		98.1%	98.1%	98.1%	98.2%	98.2%	98.2%
European efficiency		97.3%	97.3%	97.3%	97.4%	97.4%	97.4%
Protection							
DC reverse polarity protection		Integrated					
Battery input reverse connection protection		Integrated					
Insulation resistance protection		Integrated					
Surge protection		Integrated					
Over-temperature protection		Integrated					
Residual current protection		Integrated					
Islanding protection		Integrated (Frequency shift)					
AC over-voltage protection		Integrated					
Overload protection		Integrated					
AC short-circuit protection		Integrated					
Protective class		Class I					
General Data							
Over voltage category		PV: II Main: III					
Dimensions	[W×H×D mm]	534×418×210					
Weight	[KG]	26.0					
Protection degree		IP65					
Standby self-consumption	[W]	<15					
Topology		Transformerless					
Operating Temperature Range	[°C]	-30~60					
Relative Humidity	[%]	0~100					
Operating Altitude	[m]	3000 (>3000m derating)					
Cooling		Natural Convection					
Noise Level	[dB]	<25					
Display		OLED & LED					
Communication		CAN, RS485, WiFi/LAN (Optional)					
Country of manufacture		China					

* PV Max. DC Input voltage and MPPT Max. voltage is 950V without battery, or 850V with battery. The inverter will stop working when voltage between 950V (without battery) / 850V (with battery) to 1000V. The inverter will cause damage when voltage higher than 1000V;

** 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;

1) G98: 10.5kVA; 2) G98: 16.00A