

25-50kW Hybrid Inverter

MHT-25/30/36/40/50K-100

98.8%

Max. Efficiency

30A

PV Input Current

100%

Unbalanced Output

100A

Charge/Discharge

Commercial

Three-Phase

HV Battery

4 MPPTs



Maximized Energy Harvesting

- 100% unbalanced output enhances self-consumption
- 100A charging/discharging for efficient energy transfer
- Continuous 110% AC overloading sustains power
- Starts at 135V for more generation time



Engineered for Versatility

- 120% max backup @60s handles overloads
- IP65 protects both indoors and outdoors
- Parallel up to 10 devices for scalable system expansion



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
- Supports diesel generators for diverse energy sourcing



Integ M Series

The Power Master

Model		MHT-25K-100	MHT-30K-100	MHT-36K-100	MHT-40K-100	MHT-50K-100
PV Input						
Recommended Max. input power	[kW]	37.5	45.0	54.0	60.0	75.0
Start-up voltage	[V]	135	135	135	135	135
Max. DC input voltage*	[V]	1000*	1000*	1000*	1000*	1000*
Rated DC input voltage	[V]	620	620	620	620	620
MPPT voltage range*	[V]	200-850*	200-850*	200-850*	200-850*	200-850*
No. of MPP trackers		4	4	4	4	4
No. of DC inputs per MPPT		2	2	2	2	2
Max. input current	[A]	30×4	30×4	30×4	30×4	30×4
Max. short-circuit current	[A]	40×4	40×4	40×4	40×4	40×4
Battery Side						
Battery type		Lithium Battery (with BMS)				
Battery voltage range	[V]	135-750				
Maximum charging/discharge current	[A]	100/100				
Grid Side						
Rated output power	[kW]	25.0	30.0	36.0	40.0	50.0
Max. output apparent power	[kVA]	27.5	33.0 ¹⁾	39.6	44.0	55.0
Max. input apparent power**	[kVA]	30.0	36.0	43.5	48.0	60.0
Max. charging power of battery	[kW]	25.0	30.0	36.0	40.0	50.0
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
Max. output current	[A]	42.0	50.0 ²⁾	60.0	66.0	83.0
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
Back-up Side						
Rated output power	[kW]	25.0	30.0	36.0	40.0	50.0
Max. output apparent power	[kVA]	27.5	33.0	39.6	44.0	55.0
Max. output current	[A]	42.0	50.0	60.0	66.0	83.0
UPS switching time		<20ms	<20ms	<20ms	<20ms	<20ms
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
Voltage harmonic distortion		<3% @Linear load				
Generator Side						
Max. input apparent power**	[kVA]	30.0	36.0	43.5	48.0	60.0
Max. charging power of battery	[kW]	25.0	30.0	36.0	40.0	50.0
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
Max. input current	[A]	43.5	52.2	63.0	69.6	87.0
Efficiency						
Max. efficiency		98.8%	98.8%	98.8%	98.8%	98.8%
European efficiency		98.3%	98.3%	98.3%	98.3%	98.3%
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				
AC over-voltage protection		Integrated				
Overload protection		Integrated				
AC short-circuit protection		Integrated				
General Data						
Over voltage category		PV: II Main: III				
Dimensions	[W×H×D mm]	800×620×300				
Weight	[KG]	72.0				
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		Smart fan				
Noise Level	[dB]	<50				
Display		OLED & LED				
Communication		CAN, RS485, WiFi/LAN (Optional)				

* PV Max. Input voltage is 850V, 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;

1) AS 4777.2, VDE-AR-N 4105: 30.0kVA; 2) AS 4777.2, VDE-AR-N 4105: 43.5A