

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