



Hybrid Inverter 25-50kW

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

30A

Max. PV Input Current

100%

Unbalanced Output

100A

Max. 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
- Smooth transition to backup power ensures continuity during power outages



Engineered for Versatility

- Max. 10 pcs parallel for on-grid operation and max. 4 pcs parallel for off-grid operation
- 135% max backup @10s handles overloads
- IP65 protects both indoors and outdoors



Intelligent Energy Dynamics

- 6 work modes for diverse use
- Supports both ToU and dynamic pricing strategies for optimized energy use and cost savings
- Centralized smart management for efficiency
- Supports diesel generators for diverse energy sourcing



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 25-50kW

Models		MHT-25K-100	MHT-30K-100	MHT-36K-100	MHT-40K-100	MHT-50K-100
PV Side						
Max. PV Array Power	[kWp]	40	48	57.6	64	80
Max. PV Input Voltage *	[V]	1000				
Rated PV Input Voltage	[V]	620				
Start-up Voltage	[V]	135				
MPPT Operating Voltage Range *	[V]	200-850	200-850	200-850	200-850	200-850
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]	30/30/30/30	30/30/30/30	30/30/30/30	30/30/30/30	30/30/30/30
Max. Short-circuit Current per MPPT	[A]	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40
Battery Side						
Battery Type		Lithium-ion				
Battery Voltage Range ***	[V]	135-750				
No. of Battery Input		1				
Max. Charge/Discharge Current	[A]	100/100				
Max. Charge/Discharge Power	[kW]	25/25	30/30	36/36	40/40	50/50
Grid Side (On-Grid)						
Rated Output Power	[kW]	25.0	30.0	36.0	40.0	50.0
Max. Output Apparent Power	[kVA]	27.5	33 ⁽¹⁾	39.6	44.0	55.0
Rated AC Voltage		3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated AC Frequency	[Hz]	50/60				
Rated Output Current	[A]	37.9/38.0/34.7	45.5/43.5/41.7	54.5/52.0/50	60.6/60.0/55.6	75.8/75.0/69.4
Max. Output Current	[A]	42.0	50 ⁽²⁾	60.0	66.0	83.0
Power Factor		0.8 leading ...0.8 lagging				
THDi (@Rated Power)		<3%				
Max. Input Apparent Power ****	[kVA]	30.0	36.0	43.5	48.0	60.0
Rated AC Voltage		3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated AC Frequency	[Hz]	50/60				
Max. AC Input Current	[A]	43.5	52.2	63.0	69.6	87.0
Back-up Side (Off-Grid)						
Rated Output Power	[kW]	25.0	30.0	36.0	40.0	50.0
Peak Output Apparent Power	[kVA]	33.75 @10s	40.5 @10s	48.6 @10s	54 @10s	67.5 @10s
Rated Output Voltage		3L/N/PE; 220/380V; 230/400V; 240/415V				
Rated Output Frequency	[Hz]	50/60				
Rated Output Current	[A]	37.9/38.0/34.7	45.5/43.5/41.7	54.5/52.0/50	60.6/60.0/55.6	75.8/75.0/69.4
On/Off-grid Switching Time		< 10ms				
THDv (@Linear Load)		<3%				
Generator Side						
Max. Input Apparent Power	[kVA]	30	36	43.5	48	60
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	65.9	72.7	90.9
Efficiency						
MPPT Efficiency		99.90%				
Max. Efficiency		98.80%				
European Efficiency		98.30%				
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]	800×620×300				
Weight	[KG]	72				
Ingress Protection		IP65				
Standby Self-consumption	[W]	< 40				
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		Smart Fan				
Noise Level	[dB]	< 65				
Display		LED & OLED				
Communication		CAN, RS485				

* PV Max. input voltage is 850V, otherwise inverter will be waiting;

** 30A(two string)/20A(single string);

*** Firmware V05 and above supports a maximum battery voltage of up to 840V;

**** Max apparent power from the arid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;

(1) VDE-AR-N 4105: 30.0kVA; (2) VDE-AR-N 4105: 43.5A;

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