



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

- 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
- 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]	37.9/36.2/34.7	45.5/43.5/41.7	54.5/52.1/50	60.6/58/55.6	75.8/72.5/69.4
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]	45.5	54.5	65.9	72.7	90.9
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]	37.9/36.2/34.7	45.5/43.5/41.7	54.5/52.1/50	60.6/58/55.6	75.8/72.5/69.4
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;

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

EN-MHT-25-50-NO1.01-2026

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