

40-50kW Hybrid Inverter

MHT-40/50K-100-P

98.8%

Max. Efficiency

60A

PV Input Current

100%

Unbalanced Output

100A

Charge/Discharge

Commercial

Three-Phase

HV Battery

2 MPPTs



Optimal Power & Storage

- 98.8% Max. Efficiency
- 60A PV input current, 2 MPP trackers
- 100% Unbalanced Output
- 100A charge/discharge current



Strong Load & Back-up

- 110% continuous AC output overloading
- 120% max. back-up output overloading @60s
- 20ms UPS-level switching
- 150% DC oversizing



Convenient Installation & Operation

- Plug & Play terminals for easy wiring
- Solinteg I-light, power and alarm indicator
- OLED display and App for setting and data management
- WIFI configuration via App



Flexible Design & Use

- 135-750V wide battery voltage range
- IP65 for indoor and outdoor installation
- Support paralleling up to 10 devices
- Compact size and elegant appearance

Integ M Series

The Power Master

Model		MHT-40K-100-P	MHT-50K-100-P
PV Input			
Recommended Max. input power	[kW]	60.0	75.0
Start-up voltage	[V]	135	135
Max. DC input voltage*	[V]	1000*	1000*
Rated DC input voltage	[V]	620	620
MPPT voltage range*	[V]	200-850*	200-850*
No. of MPP trackers		2	2
No. of DC inputs per MPPT		3	3
Max. input current	[A]	60×2	60×2
Max. short-circuit current	[A]	80×2	80×2
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]	40.0	50.0
Max. output apparent power	[kVA]	44.0	55.0
Max. input apparent power**	[kVA]	48.0	60.0
Max. charging power of battery	[kW]	40.0	50.0
Rated AC voltage		3L/N/PE; 220/380V;230/400V;240/415V	
Rated AC frequency	[Hz]	50/60	50/60
Max. output current	[A]	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
Back-up Side			
Rated output power	[kW]	40.0	50.0
Max. output apparent power	[kVA]	44.0	55.0
Max. output current	[A]	66.0	83.0
UPS switching time		<20ms	<20ms
Rated output voltage		3L/N/PE; 220/380V;230/400V;240/415V	
Rated output frequency	[Hz]	50/60	50/60
Voltage harmonic distortion		<3% @Linear load	
Generator Side			
Max. input apparent power**	[kVA]	48.0	60.0
Max. charging power of battery	[kW]	40.0	50.0
Rated AC voltage		3L/N/PE; 220/380V;230/400V;240/415V	
Rated AC frequency	[Hz]	50/60	50/60
Max. input current	[A]	69.6	87.0
Efficiency			
Max. efficiency		98.8%	98.8%
European efficiency		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 (Frequency shift)	
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;