

# 10-20kW Hybrid Inverter

MHT-10/12/15/20K-40

98.4%

Max. Efficiency

40A

Charge/Discharge

110%

Unbalanced Output

10ms

UPS-level Switch

Commercial

Three-Phase

HV Battery

2 MPPTs



## Optimal Power & Storage

- 98.4% Max. Efficiency
- 30A PV input current, 2 MPP trackers
- 110% Unbalanced Output
- 40A charge/discharge current



## Strong Load & Back-up

- 110% continuous AC output overloading
- 200% max. back-up output overloading @60s
- 10ms 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-10K-40	MHT-12K-40	MHT-15K-40	MHT-20K-40	
<b>PV Input</b>					
Recommended Max. input power	[kW]	15.0	18.0	22.5	30.0
Start-up voltage	[V]	135	135	135	135
Max. DC input voltage*	[V]	1000*	1000*	1000*	1000*
Rated DC input voltage	[V]	620	620	620	620
MPPT voltage range*	[V]	200-950*	200-950*	200-950*	200-950*
No. of MPP trackers		2	2	2	2
No. of DC inputs per MPPT		2/2	2/2	2/2	2/2
Max. input current	[A]	30/30	30/30	30/30	30/30
Max. short-circuit current	[A]	40/40	40/40	40/40	40/40
<b>Battery Side</b>					
Battery type		Lithium Battery (with BMS)			
Battery voltage range	[V]	135-750			
Maximum charging/discharge current	[A]	40/40			
<b>Grid Side</b>					
Rated output power	[kW]	10.0	12.0	15.0	20.0
Max. output apparent power	[kVA]	11.0 <sup>1)</sup>	13.2	16.5 <sup>3)</sup>	22.0
Max. input apparent power**	[kVA]	20.0	24.0	30.0	30.0
Max. charging power of battery	[kW]	10.0	12.0	15.0	20.0
Rated AC voltage		3L/N/PE; 220/380V;230/400V;240/415V			
Rated AC frequency	[Hz]	50/60	50/60	50/60	50/60
Max. output current	[A]	16.5 <sup>2)</sup>	20.0	25.0 <sup>4)</sup>	33.5
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
<b>Back-up Side</b>					
Rated output power	[kW]	10.0	12.0	15.0	20.0
Max. output apparent power	[kVA]	11.0	13.2	16.5	22.0
Max. output current	[A]	16.5	20.0	25.0	33.5
UPS switching time		<10ms	<10ms	<10ms	<10ms
Rated output voltage		3L/N/PE; 220/380V;230/400V;240/415V			
Rated output frequency	[Hz]	50/60	50/60	50/60	50/60
Voltage harmonic distortion		<3% @Linear load			
<b>Efficiency</b>					
Max. efficiency		98.4%	98.4%	98.4%	98.4%
European efficiency		97.5%	97.5%	97.5%	97.5%
<b>Protection</b>					
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			
<b>General Data</b>					
Over voltage category		PV: II Main: III			
Dimensions	[W×H×D mm]	534×418×210			
Weight	[KG]	28.0 (10-12kW) / 31.0 (15-20kW)			
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]	<40			
Display		OLED & LED			
Communication		CAN, RS485, WiFi/LAN (Optional)			

\* PV Max. Input voltage is 950V without battery, or 850V with battery, 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) G98: 10.5kVA; 2) G98: 16.00A; 3) AS 4777.2: 15.0kVA; 4) AS 4777.2: 21.7A