

# 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



## Maximized Energy Harvesting

- 110% unbalanced output enhances self-consumption
- 40A charging/discharging for efficient energy transfer
- Continuous 110% AC overloading sustains power
- 10ms UPS-level switch secures supply



## Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 200% max backup @60s handles overloads
- IP65 protects both indoors and outdoors



## 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

# 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