Hybrid Inverter 10-20kW

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

30A
Max. PV Input Current

110%
Unbalanced Output

40A
Max. Charge/Discharge

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
- Smooth transition to backup power ensures continuity during power outages

Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 180% max backup @10s handles overloads
- IP65 protects both indoors and outdoors

Intelligent Energy Dynamics

- 6 work modes for diverse use
- Supports TOU and dynamic pricing strategies with user-defined scheduling rules
- Peak shaving control based on configurable thresholds
- Centralized smart management for efficiency

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

EN-MHT-10-20-NO1.02-2026

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Models		MHT-10K-40	MHT-12K-40	MHT-15K-40	MHT-20K-40
PV Side					
Max. PV Array Power	[kWp]	16	19.2	24	32
Max. PV Input Voltage *	[V]	1000*			
Rated PV Input Voltage	[V]	620			
Start-up Voltage	[V]	135			
MPPT Operating Voltage Range *	[V]	200-950*	200-950*	200-950*	200-950*
No. of MPP Trackers		2	2	2	2
No. of Strings per MPPT		2/2	2/2	2/2	2/2
Max. Input Current per MPPT	[A]	30/30	30/30	30/30	30/30
Max. Short-circuit Current per MPPT	[A]	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]	40/40			
Max. Charge/Discharge Power	[kW]	10/10	12/12	15/15	20/20
Grid Side (On-Grid)					
Rated Output Power	[kW]	10	12	15	20
Max. Output Apparent Power	[kVA]	11(1)	13.2	16.5	22.0
Rated AC Voltage		3L/N/PE; 220/380V; 230/400V; 240/415V			
Rated AC Frequency	[Hz]	50/60			
Rated Output Current	[A]	15.2/14.5/13.9	18.2/17.4/16.7	22.7/21.7/20.8	30.3/29/27.8
Max. Output Current	[A]	16.5(2)	20.0	25.0	33.5
Power Factor		0.8 leading ...0.8 lagging			
THDi (@Rated Power)		<3%			
Max. Input Apparent Power **	[kVA]	20.0	24.0	30.0	30.0
Rated AC Voltage		3L/N/PE; 220/380V; 230/400V; 240/415V			
Rated AC Frequency	[Hz]	50/60			
Max. AC Input Current	[A]	30.4	36.4	45.4	45.4
Back-up Side (Off-Grid)					
Rated Output Power	[kW]	10	12	15	20
Peak Output Apparent Power	[kVA]	18@10s	18@10s	24@10s	24@10s
Rated Output Voltage		3L/N/PE; 220/380V; 230/400V; 240/415V			
Rated Output Frequency	[Hz]	50/60			
Rated Output Current	[A]	15.2/14.5/13.9	18.2/17.4/16.7	22.7/21.7/20.8	30.3/29/27.8
On/Off-grid Switching Time		< 10ms			
THDv (@Linear Load)		<3%			
Efficiency					
MPPT Efficiency		99.90%			
Max. Efficiency		98.40%			
European Efficiency		97.50%			
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]	534×418×210			
Weight	[KG]	28	28	31	31
Ingress Protection		IP65			
Standby Self-consumption	[W]	< 15			
Topology		Transfomerless			
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]	< 40			
Display		LED & OLED			
Communication		CAN, RS485			

* 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 utlity grid used to satisfy the backup loads and charge the battery;

(1) G98: 10.5kVA; (2) G98: 16.00A;

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