



# Hybrid Inverter 10-20kW

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

30A

110%

40A

Max. PV Input Current

**Unbalanced Output** 

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**

- 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



#### **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 10-20kW**

Models		MHT-10K-40	MHT-12K-40	MHT-15K-40	MHT-20K-40	
PV Side		M11-10K-40	MIII-12K-40	MIII-13K-40	MIII-20K-40	
Max. PV Array Power	[kWp]	16	19.2	24	32	
Max. PV Input Voltage *	[V]			00*	32	
Rated PV Input Voltage	[V]	620				
Start-up Voltage	[V]			35		
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	D d	40/40	40/40	40/40	40/40	
Battery Type		Lithium-lion				
Battery Voltage Range	[V]	135-750				
No. of Battery Input	[4]	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)	[KVV]	10/10	12712	13/13	20/20	
Rated Output Power	[kW]	10	12	15	20	
Max. Output Apparent Power	[kVA]	11 <sup>(1)</sup>	13.2	16.5	22.0	
Rated AC Voltage	[V]	11			22.0	
Rated AC Voltage Rated AC Frequency	[Hz]	3L/N/PE; 220/380V; 230/400V; 240/415V 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 <sup>(2)</sup>	20.0	25.0	33.5	
Power Factor	[A]	10.5			33.5	
FHDi (@Rated Power)		0.8 leading0.8 lagging <3%				
	[kVA]	20.0	24.0	30.0	30.0	
Max. Input Apparent Power **	[V]	20.0			30.0	
Rated AC Voltage	[Hz]	3L/N/PE; 220/380V; 230/400V; 240/415V 50/60				
Rated AC Frequency	[A]	30.4	36.4	45.4	45.4	
Max. AC Input Current Back-up Side (Off-Grid)	[A]	30.4	30.4	45.4	45.4	
Rated Output Power	[kW]	10	12	15	20	
Peak Output Apparent Power	[kVA]	18@10s	18@10s	24@10s	24@10s	
Rated Output Voltage	[V]	10@105			24@105	
Rated Output Frequency	[Hz]	3L/N/PE; 220/380V; 230/400V; 240/415V 50/60				
Rated Output Frequency	[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	[ms]	15.2/14.5/13.9 18.2/17.4/16.7 22.7/21.7/20.8 30.3/29/27.8 < 10ms				
THDv (@Linear Load)	[III5]	<3%				
Efficiency				J /6		
MPPT Efficiency			000	20%		
Max. Efficiency		99.90% 98.40%				
European Efficiency		97.50%				
Protection			71.	5078		
ntegrated 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]		534×4	18×210		
Veight	[KG]	28	28	31	31	
ngress Protection			IP	65		
Standby Self-consumption	[W]		<	15		
Topology		Transfomerless				
Operating Temperature Range	[°C]	-30~60				
Relative Humidity	[%]	0~100				
		3000				
•	[m]		II(PV+Battery), III(Mains)			
Max. Operation Altitude	[m]		II(PV+Batter	ry), III(Mains)		
Max. Operation Altitude Over Voltage Category	[m]			ry), III(Mains) rt Fan		
Max. Operation Altitude  Over Voltage Category  Cooling  Noise Level	[m]		Smar			
Max. Operation Altitude Over Voltage Category Cooling			Smar <	rt Fan		

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

<sup>\*</sup> 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;