

Datasheet of Hiconics MD series single phase hybrid inverter

Model	MD-HI6-SHO	MD-HI5-SHO	MD-HI3.8-SHO
PV Input			
Max. PV array Power [W]	3750/3750		
Max. DC Voltage[V]	600 ^{*3}		
Rated DC Operating Voltage[V]	360		
MPPT Voltage Range[V]	100-540		
MPP Voltage Range for Rated Power[V] ^{*5}	225-480	185-480	141-480
Start up Voltage[V]	120		
Max. Input Current(A/B)[A]	15/15		
Max. Short Circuit Current(A/B)[A]	18/18		
No. of MPP tracks/String per MPP tracker	2/1		
BAT Side			
Battery type	Li-ion		
Battery Voltage Range[V]	85 ^{*4} -400		
Battery Voltage Range for nominal Power[V]	250-400	225-400	170-400
Recommended battery Voltage[V]	300		
Max. charge/discharge Current[A] ^{*2}	25/25		
Communication Interfaces	RS485/CAN		
Reverse Connect Protection	Yes		
AC Grid Side(On-grid)			
Rated AC output Power[W]	6000 ^{*1}	5000 ^{*1}	3800
Max. Output Power(W)	6000 ^{*1}	5000 ^{*1}	3800
Rated Apparent Power Output to Utility Grid (VA)	6000 ^{*1}	5000 ^{*1}	3800
Max. Apparent Power Output to Utility Grid (VA)	6000 ^{*1}	5000 ^{*1}	3800
Rated Apparent Power from Utility Grid (VA)	6000	5000	3800
Max. Apparent Power from Utility Grid (VA)	6000	6000 ^{*6}	6000 ^{*6}
Rated grid Voltage[V]	L/N/PE ,230Va.c		
Grid Voltage Range [V]	180-280		
Rated grid frequency[Hz]	50		



AC Grid Frequency Range (Hz)	50±5		
Max. Output AC Current To Utility Grid(A)	26.1	21.7	16.5
Rate Output AC Current To Utility Grid (A)	26.1	21.7	16.5
Rated AC Current From Utility Grid(A)	26.1	21.7	16.5
Max. Ac Current From Utility Grid(A)	26.1	26.1 ^{*6}	26.1 ^{*6}
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
I.THD[%]	<3@Rated Power		<5@Rated Power
EPS Side			
Back-up Nominal Apparent Power(VA)	6000	5000	3800
Nominal Power[W]	6000	5000	3800
Max. Output Apparent Power without Grid (VA)	7500@10sec		
Max. Output Apparent Power with Grid (VA)	7500@10sec		
Nominal output Voltage[V]	L/N/PE 230Va.c		
Nominal output frequency[Hz]	50		
Rated Output Current (A)	26.1	21.7	16.5
Max. output Current[A]	26.1	21.7	16.5
Max. output over Current protection[A]	32.6@10sec		
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Switching from Grid Connected Mode to Standalone Mode[ms]	<20		
Output THD[%]	<5@Linear Load		
EFFICIENCY			
MPPT efficiency[%]	99.9		
Euro efficiency[%]	95.2	95.2	95.0
Max. efficiency[%]	96.8	96.7	96.5
Battery charge/discharge efficiency[%]	97.6(PV-BAT), 96.0(BAT-AC)	97.6(PV-BAT), 96.3(BAT-AC)	97.6(PV-BAT), 95.4(BAT-AC)
PROTECTION			
Method of active anti-islanding	Frequency Drift		
ENVIRONMENT LIMIT			
Ingress protection	IP65		
Protection class	Class I		
Pollution degree	PD3		
Over Voltage category	III(MAINS),II(DC)		

Hiconics Eco-energy Drive Technology Co., Ltd.

Add: No.3 Boxing 2nd Road, Economic and Technological Development Zone, 100176, Beijing, P.R.China

Tel: +86 10 5918 0033 Email: hiconics_service@midea.com



Operating temperatureRange[°C]	-20~+60(derating at +45)
Operation altitude[m]	<2000
Humidity	0-100%
Cooling Method	Natural Convection
User Interface	LED,APP
Communication with BMS	CAN/RS485
Communication with Meter	RS485
Communication with Portal	WIFI
Typical noise emission[dB]	<40
Dimension (W*H*D) [mm]	800 (±20) *450 (±20) *160 (±20)
Weight[KG]	34±3kg
Topology	Non-isolated
Self-consumption at Night (W)	<25
DC Connector	MC4 (4~6mm ²)
AC Connector	Quick Plug
Storage Temperature (°C)	-40~85
Standard warranty[years]	10
Country	China

STANDARD

Safety	IEC/EN 62109-1&2, IEC62477
EMC	IEC61000-6-1, IEC61000-6-3
Environment	IEC60529,IEC60068
Efficiency	IEC61683
Certification	EN50549-1,G99,G98,CEI0-21,VDE4105,AS/NZS4777.2

Remark:

- *1. The grid feed in Power for VDE4105 is limited 4600VA.
- *2. Battery charging Current is limited 25A and Power is limited 6000W.
- *3. The machine may be damaged if PV port exceeds this Voltage, full Power operation Voltage should be less than 480V, 480V-540V for limited Power operation.
- *4. Battery port boot Voltage must be greater than 95V.
- *5. The Power is 6000W according to the grid port.
- *6. The value will appear when the grid is charging battery and support EPS load.