

Datasheet of Hiconics HEC2-S hybrid inverter

Model	HEC2-S6.0Hr2	HEC2-S5.0Hr2	HEC2-S3.8Hr2
PV Input			
Max. PV array power string 1/string 2 [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
Startup 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	6000
Rated grid voltage[V]	L/N/PE 230Va.c		
Grid Voltage Range[V]	180-280		
Rated grid frequency[Hz]	50		

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AC Grid Frequency Range (Hz)	50±5		
Max. Input/output current [Aa.c.]	26.1/26.1	26.1/21.7	26.1/16.5
Rate input/output current [Aa.c.]	26.1/26.1	21.7/21.7	16.5/16.5
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 overcurrent protection[A]	32.6@10sec		
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), 96.0(BAT-AC)	97.6(PV-BAT), 95.4(BAT-AC)
ENVIRONMENT LIMIT			
Ingress protection	IP65		
Protection class	Class I		
Pollution degree	PD3		
Over voltage category	Ⅲ(MAINS),Ⅱ(DC)		
Operating temperature range[°C]	-20~+60(debating at +45)		
Operation altitude[m]	<2000		
Humidity	0-95%		
Cooling Method	Natural Convection		
User Interface	LED,APP		
Communication with BMS	CAN/RS485		
Communication with Meter	RS485		

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Communication with Portal	WIFI
Typical noise emission[dB]	<40
Dimension (W*H*D) [mm]	800*435*160
Weight[KG]	34
Topology	Non-isolated
Self-consumption at Night (W)	<25
DC Connector	MC4 (4~6mm2)
AC Connector	Quick Plug
Storage Temperature (°C)	-40~85
Country of manufacture	China
Standard warranty[years]	5
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,CEI021,VDE4105,AS4777.2
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.	