

HH3P-5/6/8/10KA1-HU Three-phase Hybrid Inverter



**4 MPPTs with double battery
current for super performance**



4 MPPTs

4 integrated MPPTs, suitable for houses with multi-pitched rooftops, supports high current solar panels



Double current

Maximum battery charge and discharge current: 50A (the common industrial level is 25A)



Safe

IP66 industry highest protection level

Supports unbalanced and half-wave loads on both the grid and back-up port



EPS

Back-up switch time <10ms



Overload capacity

Backup overload capacity increased to 1.6 times 60 seconds, support ref and AC inductive loads

Model	HH3P-5KA1-HU	HH3P-6KA1-HU	HH3P-8KA1-HU	HH3P-10KA1-HU
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Input DC (PV side)				
Recommended max. PV power	8kW	9.6kW	12.8kW	16kW
Max. input voltage	1000V			
Rated voltage	600V			
Start-up voltage	160V			
MPPT voltage range	200-850V			
Max. Input current	16A/ 16A/ 16A		16A/ 16A/ 16A/ 16A	
Max. short circuit current	24A/ 24A/ 24A		24A/ 24A/ 24A/ 24A	
MPPT number	3	3	4	4
Max. number of input strings per MPPT	1	1	1	1
Battery				
Battery type	Li-ion			
Battery voltage range	120-600V			
Max. charge/discharge power	5kW	6kW	8kW	10kW
Max. charge/discharge current	25A	25A	50A	50A
Communication	CAN/RS485			
Output AC (Grid side)				
Rated output power	5kW	6kW	8kW	10kW
Max. apparent output power	5kVA	6kVA	8kVA	10kVA
Rated grid voltage	3L / N / PE, 380/400V			
Rated grid frequency	50/60Hz			
Rated grid output current	7.6A/7.2A	9.1A/8.7A	12.2A/11.5A	15.2A/14.4A
Max. Output current	7.6A/7.2A	9.1A/8.7A	12.2A/11.5A	15.2A/14.4A
Power factor	>0.99(0.8 leading - 0.8 lagging)			
THDi	<3%			
Input AC (Grid side)				
Max. input power	7.5kW	9kW	12kW	15kW
Rated input current	11.4A	13.8A	18.2A	22.8A
Rated input voltage	3L / N / PE, 380/400V			
Rated input frequency	50/60 Hz			
Output AC (Back-up)				
Rated output power	5kW	6kW	8kW	10kW
Max. apparent output power	8kVA, 60sec	9.6kVA, 60sec	12.8kVA, 60sec	16kVA, 60sec
Back-up switch time	<10ms			
Rated output voltage	3L / N / PE, 380/400V			
Rated frequency	50/60 Hz			
Rated output current	7.6A/7.2A	9.1A/8.7A	12.2A/11.5A	15.2A/14.4A
THDv(@linear load)	<2%			
Efficiency				
Max. efficiency	96.50%	97.00%	97.50%	97.90%
EU efficiency	96.77%	97.10%	97.41%	97.51%
Protection				
Anti-islanding protection	Yes, Active Frequency Drift			
Integrated AFCI (DC arc-fault circuit protection)	Yes			
Insulation Resistor detection	Yes			
Residual current monitoring unit	Yes			
Output over current protection	Yes			
Output short protection	Yes			
Output overvoltage protection	Yes			
Integrated DC switch	Yes			
DC reverse-polarity protection	Yes			
PV overvoltage protection	Yes			
Battery reverse protection	Yes			
General Data				
Dimensions (W*H*D)	600*500*210mm		600*500*230mm	
Weight	27.58kg		30.18kg	
Topology	Transformerless			
Overvoltage Category	III(Main) II(PV)			
Self-consumption (night)	<25W			
Operating ambient temperature range	-25 ~ +60°C			
Protection rating	IP66			
Protective class	I			
Cooling concept	Natural convection			
Max. Operation altitude	4000m			
Grid connection standard	AS/NZS 4777.2:2020			
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3			
Features				
PV connection	MC4 connector			
Battery connection				
AC connection	Quick connection plug			
Display screen	LED + Bluetooth + APP			
Communication	CAN, RS485, Ethernet, Wi-Fi, LAN			
Country of manufacture	China			

¹ Only inverters of the same brand and power range are supported for parallel, and the battery capacity under each inverter should be the same.

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