

Three-phase
Hybrid Inverter
HI-5~12K-TH



- Supports 7 intelligent working modes and automatically switch within 10ms.
- Supports 100% 3-phase unbalanced output on both ports (BACKUP & GRID).
- Integrated 0-export function.
- Peak shaving and valley filling to enhances grid stability.
- Supports PV array input up to 160% of rated inverter power.
- Supports 20A maximum PV string current, compatible with 700W+ high-power modules.

Technical Data	HI-5K-TH	HI-6K-TH	HI-8K-TH	HI-10K-TH	HI-12K-TH
Input DC (PV side)					
Max. PV access power	10kW	12kW	16kW	20kW	24kW
Max. PV input power	8kW	9.6kW	12.8kW	16kW	19.2kW
Max. PV input voltage	1000V				
Nominal input voltage	600V				
MPPT working voltage range	180V-850V				
Number of independent MPPT/strings per MPPT	2/1				
MPPT max. current	20A/20A				
Start-up voltage	200V				
Output/Input AC (Grid side)					
Nominal power	5kW	6kW	8kW	10kW	12kW
Max. apparent power	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA
Nominal voltage	380V/400V				
Nominal frequency	50Hz/60Hz				
Rated current	7.5A/7.2A	9A/8.7A	12.2A/11.6A	15.2A/14.5A	18.2A/17.4A
Max. current	8.25A	10A	13.5A	16.8A	20A
Power factor	-0.8~+0.8(adjustable)				
THDi	<3%(Nominal Output)				
Grid system pattern	3L+N+PE				
Max. AC current from utility grid	60A				
Output AC (Back-up)					
Nominal output power	5kW	6kW	8kW	10kW	12kW
Max. output apparent power	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA
Nominal output voltage	380V/400V				
Nominal ouput frequency	50Hz/60Hz				
Output THDV	<3%				
Automatic switch time	<10ms				
Battery					
Battery type	Li-ion				
Battery voltage range	150V-750V				
Max. charging/discharging current	30A				
Charging strategy for Li-ion battery	Self-adaption to BMS				
Efficiency					
Max. MPPT efficiency	99.9%				
Europe efficiency	97.5%				
Max. battery to load efficiency	98%				
Protection					
Anti islanding protection	Yes				
Insulation impedance protection	Yes				
RCD detection	Yes				
PV reverse polarity protection	Yes				
Output over voltage protection	Yes				
Output over current protection	Yes				
General Data					
Dimensions(L/W/H)in mm	403/284/463				
Weight	30kg				
Operation temperature range	-25°C~+60°C				
Heat dissipation mode	Natural				
IP Class	IP 66				
Maximum altitude	4000m				
Self consumption (night)	<5W				
Topology	Transformerless				
Features					
LCD display	Yes				
Communication interface	WiFi/4G/USB/CAN/RS485				
Standards	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000, CEI 0-21, VDE AR 4105, VDE V 0124-100, NC RfG, PSE, PTRiREE, EN 50549-1, NRS 097				