

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 O-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 apparent 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 output 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 62109-1/IEC 62109-2/EN IEC 61000-6-1/EN IEC 61000-6-3/CEI 0-21/ VDE AR 4105/VDE V 0124-100/NC RfG/PSE/PTPIREE/EN 50549-1/NRS 097		