

THREE PHASE
Hybrid inverter
HI-8~12K-TL



- Wide DC working voltage range, 2 MPPT design, adapt to multi-angle and multi-orientation PV panels.
- Up to 98% conversion efficiency with lower losses; IP65 Waterproof design, indoor& outdoor use.
- One machine for multiple purposes: On-grid + Energy storage + Off-grid.
- Support remote monitoring, remote upgrade and automatic battery management.
- Up to 7 Intelligent working modes, support remote monitoring on mobile/PC.
- Support for lead-acid, lithium batteries, but also to specify the brand of battery adaptation communication.
- 5-year standard warranty and 10-year extended warranty.

Technical Data	HI-8K-TL	HI-10K-TL	HI-12K-TL
PV String Input Data			
Max. DC input power	12kW	15kW	18kW
Max. DC input voltage	1000V		
Nominal input voltage	600V		
MPPT working voltage range	180V-950V		
Number of independent MPPT / strings per MPPT	2/1		
MPPT max. current	20A/20A		
Start-up voltage	200V		
AC Output/Input Data (On-grid)			
Nominal output apparent power	8kW	10kW	12kW
Max. output apparent power	8.8kVA	11kVA	13.2kVA
Nominal output voltage	400V±20%		
Nominal ouput frequency	50Hz/60Hz		
Rated output current	11.6A	14.5A	17.4A
Max. output current	13A	16A	19A
Power factor	-0.8-+0.8(adjustable)		
THDi	<3%(Nominal Output)		
Grid system pattern	3L+N+PE		
Max.apparent power from utility grid	16kVA	20kVA	24kVA
Max.AC current from utility grid	26A	32A	38A
Back-up Output Data (UPS)			
Nominal output apparent power	8kVA	10kVA	12kVA
Max. output apparent power	8.8kVA	11kVA	13.2kVA
Nominal output voltage	400V±20%		
Nominal ouput frequency	50Hz/60Hz		
Output THDV	3%		
Automatic switch time	<10ms		
Battery Input Data			
Battery type	Li-Ion/Lead-acid		
Battery voltage range	40V-60V		
Max. charging/discharging current	160A	200A	240A
Charging strategy for Li-Ion battery	Self-adaption to BMS		
Charging strategy for Lead-acid battery	Three-stage		
Efficiency			
Max. efficiency	98%		
Europe efficiency	97.5%		
Max. battery to load efficiency	94.5%		
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	425/290/710		
Weight	42kg		
Operation temperature range	-25°C~+60°C		
Heat dissipation mode	Smart cooling		
IP Class	IP 65		
Maximum altitude	4000m		
Self-Consumption night	<3w		
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 0-27 VDE AR 4105/VDE V 0124-100/NC RfG/PSE/PTPIREE/EN50549/NRS 097		

THREE PHASE
Hybrid inverter
HI-15~20K-TL



- Wide DC working voltage range, 2 MPPT design, adapt to multi-angle and multi-orientation PV panels.
- Up to 98% conversion efficiency with lower losses; IP65 Waterproof design, indoor& outdoor use.
- One machine for multiple purposes: On-grid + Energy storage + Off-grid.
- Support remote monitoring, remote upgrade and automatic battery management.
- Up to 7 Intelligent working modes, support remote monitoring on mobile/PC.
- Support for lead-acid, lithium batteries, but also to specify the brand of battery adaptation communication.
- 5-year standard warranty and 10-year extended warranty.

Technical Data	HI-15K-TL	HI-17K-TL	HI-20K-TL
PV String Input Data			
Max. DC input power	23kW	26kW	30kW
Max. DC input voltage		1000V	
Nominal input voltage		600V	
MPPT working voltage range		180V-950V	
Number of independent MPPT / strings per MPPT		2/1	
MPPT max. current		20A/20A	
Start-up voltage		200V	
AC Output/Input Data (On-grid)			
Nominal output apparent power	15kW	17kW	20kW
Max. output apparent power	17.5kVA	18.7kVA	22kVA
Nominal output voltage		400V±20%	
Nominal ouput frequency		50Hz/60Hz	
Rated output current	21.8A	24.5A	29A
Max. output current	24A	27A	32A
Power factor		-0.8~+0.8(adjustable)	
THDi		<3%(Nominal Output)	
Grid system pattern		3L+N+PE	
Max.apparent power from utility grid	30kVA	34kVA	40kVA
Max.AC current from utility grid	48A	54A	64A
Back-up Output Data (UPS)			
Nominal output apparent power	15kVA	17kVA	20kVA
Max. output apparent power	16.5kVA	18.7kVA	22kVA
Nominal output voltage		400V±20%	
Nominal ouput frequency		50Hz/60Hz	
Output THDV		3%	
Automatic switch time		<10ms	
Battery Input Data			
Battery type		Li-Ion/Lead-acid	
Battery voltage range		40V-60V	
Max. charging/discharging current	300A	340A	350A
Charging strategy for Li-Ion battery		Self-adaption to BMS	
Charging strategy for Lead-acid battery		Three-stage	
Efficiency			
Max. efficiency		98%	
Europe efficiency		97.5%	
Max. battery to load efficiency		94.5%	
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		425/290/710	
Weight		45kg	
Operation temperature range		-25°C~+60°C	
Heat dissipation mode		Smart cooling	
IP Class		IP 65	
Maximum altitude		4000m	
Self-Consumption night		<3w	
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 0-27 VDE AR 4105/VDE V 0124-100/NC RfG/PSE/PTPIREE/EN50549/NRS 097		