

## Three-phase Hybrid Inverter HI-5~20K-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

-IP66 Waterproof design, indoor& outdoor use

-One machine for multiple purposes:On-grid+Energy storage+Off-grid

-Support the diesel generator and the grid access at the same time

-Up to 7 Intelligent working modes, support remote monitoring on APP/Web

-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

-Colorful touch LCD (4.3/7 inch optional)

Technical Data	HI-5K-TL	HI-6K-TL	HI-8K-TL	HI-10K-TL	HI-12K-TL	HI-15K-TL	HI-20K-TL	
<b>PV String Input Data</b>								
Max. DC input power	7.5kW	9kW	12kW	15kW	18kW	23kW	30kW	
Max. DC input voltage	1000V							
Nominal input voltage	600V							
MPPT working voltage range	180V-850V							
Number of independent MPPT / strings per MPPT	2/1			2/2				
MPPT max. current	2*20A			2*36A				
Start-up voltage	200V							
<b>AC Output/Input Data (On-grid)</b>								
Nominal output apparent power	5kW	6kW	8kW	10kW	12kW	15kW	20kW	
Max. output apparent power	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA	17.5kVA	22kVA	
Nominal output voltage	400V±20%							
Nominal output frequency	50Hz/60Hz							
Rated output current	7.3A	8.7A	11.6A	14.5A	17.4A	21.8A	29A	
Max. output current	8A	9.5A	13A	16A	19A	24A	32A	
Power factor	-0.8~+0.8(adjustable)							
THDi	<3%(Nominal Output)							
Grid system pattern	3L+N+PE							
Max.apparent power from utility grid	10kVA	12kVA	16kVA	20kVA	24kVA	30kVA	40kVA	
Max.AC current from utility grid	16A	19A	26A	32A	38A	48A	64A	
<b>Back-up Output Data (UPS)</b>								
Nominal output apparent power	5kVA	6kVA	8kVA	10kVA	12kVA	15kVA	20kVA	
Max. output apparent power	5.5kVA	6.6kVA	8.8kVA	11kVA	13.2kVA	16.5kVA	22kVA	
Nominal output voltage	400V±20%							
Nominal output frequency	50Hz/60Hz							
Output THDV	3%							
Automatic switch time	<10ms							
<b>Battery Input Data</b>								
Battery type	Li-Ion/Lead-acid							
Battery voltage range	40V-60V							
Max. charging/discharging current	100A	120A	160A	200A	240A	300A	400A	
Charging strategy for Li-Ion battery	Self-adaption to BMS							
Charging strategy for Lead-acid battery	Three-stage							
<b>Efficiency</b>								
Max. efficiency	98%							
Europe efficiency	97.5%							
Max. battery to load efficiency	94.5%							
<b>Protection</b>								
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							
<b>General Data</b>								
Dimensions(L/W /H)in mm	425/290/710			42kg				45kg
Operation temperature range	-25°C~+60°C							
Heat dissipation mode	Smart cooling							
Maximum altitude	IP 66			4000m				<3w
Topology	Transformerless							
<b>Features</b>								
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 AR4105/VDE V 0124-100/NC RfG/PSE/PTPIREE/EN50549/NRS 097							