

Solar Inverter

Guard Series

14KW/16KW/18KW/20KW

- Supports PV array input up to 200% of rated inverter power for flexible solar system design.
- Compatible with lead-acid and Li-ion batteries, supporting various battery brands.
- Equipped with GEN port for diesel generator connection, smart loads, and AC coupling.
- Integrated with 0-export function for improved energy management.
- Low startup voltage threshold with a wide operating voltage range for flexible operation.
- Optional 4.3"/7" color touch screen provides a convenient user interface.

MODEL	HI-14K-SL	HI-16K-SL	HI-18K-SL	HI-20K-SL
Input DC (PV side)				
Max. PV access power	35kW	37.5kW	45kW	50kW
Max. PV input power	28kW	32kW	36kW	40kW
Max. PV input voltage	600V			
Nominal input voltage	360V			
MPPT working voltage range	80V-500V			
Number of independent MPPT / strings per MPPT	4/2			
MPPT max.current	4*40A			
Start-up voltage	100V			
Output/Input AC (Grid side)				
Nominal apparent power	14kW	16kW	18kW	20kW
Max.apparent power	15.4kVA	17.6kVA	19.8kVA	22kVA
Nominal voltage	220V/230V			
Nominal frequency	50Hz/60Hz			
Rated current	63.6A/60.8A	72.7A/69.5A	81.8A/78.2A	90.9A/86.9A
Max. current	66.9A	76.5A	86A	95A
Power factor	-0.8~+0.8(adjustable)			
THDi	<3%(Nominal Output)			
Grid system pattern	L+N+PE			
Max.AC current from utility grid	180A			
Output AC (Back-up)				
Nominal output apparent power	14kW	16kW	18kW	20kW
Max. output apparent power	15.4kVA	17.6kVA	19.8kVA	22kVA
Nominal output voltage	220V/230V			
Nominal output 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	280A	320A	360A	400A
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	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	465/350/790			
Weight	55kg			
Operation temperature range	-25℃~+60℃			
Heat dissipation mode	Smart cooling			
IP Class	IP66			
Maximum altitude	4000m			
Self-Consumption night	<3w			
Topology	Transformerless			
Protection				
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			

Product specifications are subject to change without notice.