Three-phase
Hybrid Inverter
HI-15~25K-TH

INHENERGY

- Equipped with GEN port, compatible with diesel generators, smart loads, and AC coupling.

- IP66 rated enclosure, designed for both indoor and outdoor deployment in harsh environments.

- Supports setting 9 periods, including three periods each for self-consumption, battery charge, and battery discharge.

- Supports 100% 3-phase unbalanced output on both ports (BACKUP & GRID).

- Integrated 0-export function.

- Peak shaving and valley filling to enhances grid stability.

Technical Data	HI-15K-TH	HI-20K-TH	HI-25K-TH
Input DC (PV side)			
Max. PV access power	30kW	40kW	50kW
Max. PV input power	24kW	32kW	40kW
Max. PV input voltage		1000V	
Nominal input voltage		600V	
MPPT working voltage range		180V-850V	
Number of independent MPPT / strings per MPPT		2/2	
MPPT max. current		30A/30A	
Start-up voltage		200V	
Output/Input AC (Grid side)			
Nominal apparent power	15kW	20kW	25kW
Max. apparent power	16.5kVA	22kVA	25kVA
Nominal voltage		380V/400V	
Nominal frequency		50Hz/60Hz	
Rated current	22.7A/21.7A	30A/29A	37.8A/36.3A
Max. current	25A	33A	38A
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	15kW	20kW	25kW
Max. output apparent power	16.5kVA	22kVA	25kVA
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		50A	
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		32kg	
Operation temperature range		-25℃~+60℃	
Heat dissipation mode		Smart cooling	
IP Class		IP 66	
Maximum altitude		4000m	
Self-Consumption night		<5W	
Topology		T ransformerless	
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	