





THREE-PHASE
HYBRID INVERTER**HI-29-60K-TH**

-  Supports 7 intelligent working modes and automatically switch within 10ms.
-  Supports 100% 3-phase unbalanced output on both ports (BACKUP & GRID).
-  Sustain 200% rated power overload for 10 seconds.
-  Peak shaving and valley filling to enhance grid stability.
-  Low startup voltage threshold, wide operating voltage range.
-  Supports 20A maximum PV string current, compatible with 700W+ high-power modules.

Technical Data	HI-29K-TH	HI-30K-TH	HI-40K-TH	HI-50K-TH	HI-60K-TH
INPUT DC (PV SIDE)					
Max. PV access power	60kW	60kW	80kW	100kW	120kW
Max. PV input power	48kW	48kW	64kW	80kW	96kW
Max. PV input voltage	1000V				
Nominal input voltage	600V				
MPPT working voltage range	180V-850V				
Number of independent MPPT / strings per MPPT	3/3	3/3	4/3	4/3	4/3
MPPT max. current	3×45A	3×45A	4×45A	4×45A	4×45A
Start-up voltage	200V				
OUTPUT/INPUT AC (GRID SIDE)					
Nominal apparent power	29kW	30kW	40kW	50kW	60kW
Max. apparent power	29kVA	33kVA	44kVA	55kVA	66kVA
Nominal voltage	380V/400V				
Nominal frequency	50Hz/60Hz				
Rated current	44A/42A	45.4A/43.4A	60A/58A	75.7A/72.4A	90A/87A
Max. current	48.4A	50A	66A	84A	99A
Power factor	-0.8~+0.8 (adjustable)				
THDi	<3% (Nominal Output)				
Grid system pattern	3L+N+PE				
Max. AC current from utility grid	200A				
OUTPUT AC (BACK-UP)					
Nominal output power	29kW	30kW	40kW	50kW	60kW
Max. output apparent power	29kVA	33kVA	44kVA	55kVA	66kVA
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	200V-800V				
Max. charging/discharging current	2×50A / 2×50A				
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	680/342/708				
Weight	73kg				
Operation temperature range	-30°C~+60°C				
Heat dissipation mode	Smart cooling				
IP Class	IP 66				
Maximum altitude	4000m				
Self-Consumption night	<5W				
Topology	Transformerless				
FEATURES					
LCD display	Yes				
Communication interface	WiFi/GPRS/RS485				