

# 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 enhances 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
<b>Input DC (PV side)</b>					
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				
<b>Output/Input AC (Grid side)</b>					
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				
<b>Output AC (Back-up)</b>					
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				
<b>Battery</b>					
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				
<b>Efficiency</b>					
Max. MPPT efficiency	99.9%				
Europe efficiency	97.5%				
Max. battery to load efficiency	98%				
<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	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				
<b>Features</b>					
LCD display	Yes				
Communication interface	WiFi/GPRS/RS485				
Standards	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000, VDE AR 4105, VDE V 0124-100, NC RfG, PSE, PTRiREE, EN 50549-1, NRS 097				