

# 30KW-60KW Three-phase Hybrid Inverter

## Features



- PV & Storage System**  
 Integrate PV and storage system modern, support multiple batteries, integrate with EMS Smart Energy Management Systems;
- Smart Switching**  
 Modular design, supporting multiple parallel connections, expandable power and capacity;
- Wide Voltage Input Range**  
 Wide PV voltage input range 180V-900V, wide batteries voltage range 220V-800V;
- Safe and Reliable**  
 IP54 protection, all-aluminum design, built-in anti-lightning protection, high precision leakage protection;
- Smart and Simple**  
 Ultra-silent, with flexible communications and remote/local USB upgrade options.
- Efficient Power Generation**  
 High-current instantaneous charge-discharge switching to improve power generation efficiency.



Hybrid

10 Years  
Design Life



EURO  
EN50549

AUS ESP ZA SA  
GER AUT ITA UK  
Grid Standards

## Product Parameters

Model	ETH30KW	ETH35KW	ETH40KW	ETH45KW	ETH50KW	ETH55KW	ETH60KW		
Efficiency	MAX Efficiency		98.40%				98.60%		
	European Efficiency		97.50%				97.50%		
PV	MAX Input Power		45000W	52500W	60000W	67500W	75000W	82500W	90000W
	MAX Input Voltage		1000V						
	MPPT Operating Voltage		180~900V / 630V						
	Start-up Voltage		180V						
	MAX Input Current		36A / 36A / 36A			36A / 36A / 36A / 36A			
	MAX Short Circuit Current		42A / 42A / 42A			42A / 42A / 42A / 42A			
	Number of MPPT Trackers		3			4			
	Number of Strings Per MPPT		2002/2/2			2 / 2 / 2 / 2			
Battery	Battery Voltage Range		220~800V						
	MAX Charge/Discharge Current		100A/100A						
	MAX Charge/Discharge Power		30000W	35000W	40000W	45000W	50000W	55000W	60000W
AC Output (On-grid)	Battery Type		Li-ion / Lead-acid						
	Nominal Output Power		3000W	35000W	40000W	45000W	50000W	55000W	60000W
	MAX Apparent Power		30000VA	35000VA	40000VA	45000VA	50000VA	55000VA	60000VA
	Nominal Output Voltage		380V/400V, 3L/N/PE						
	Nominal Output Frequency		50Hz / 60Hz						
	MAX Output Current		45A	52A	60A	66A	75A	80A	87A
	Power Factor		≈1 (0.8 lead to 0.8 lag can be set)						
	Total Harmonic Distortion		<3%						
AC Output (Back-up)	Nominal Output Voltage		380V/400V, 3L/N/PE						
	Nominal Output Frequency		50Hz / 60Hz						
	Nominal Output Current		45A	52A	60A	66A	75A	80A	87A
	Nominal Output Power		30000W	35000W	40000W	45000W	50000W	55000W	60000W
	MAX Apparent Power		30000VA	35000VA	40000VA	45000VA	50000VA	55000VA	60000VA
	MAX Single-phase Apparent Power		10000VA	11000VA	13000VA	15000VA	17000VA	18000VA	20000VA
	Switching Time		<10ms						
	Protection	AC Overcurrent Protection		Integrated					
Ground Fault Protection		Integrated							
Power Network Monitoring		Integrated							
Residual Current Monitoring		Integrated							
General Data	Operating Temperature Range		-25°C~60°C (Derating occurs when >45°C)						
	Altitude		<4000m (Derating occurs when >2000m)						
	Noise		<40dB						
	Topology		Transformerless Isolation						
	Cooling		Intelligent Fan						
	Ingress Protection Rating		IP54						
	Relative Humidity		5%~90%						
	DC Connector Type		AC Connector Type						
	AC Connector Type		Quick Plug Terminal						
	Display		LCD						
	Cloud Communication		RS485 (WiFi / 4G / GPRS Optional)						
	BMS Communication Mode		CAN						
Communication with Meter		RS485							
Installation		Wall Mount / Floor Mount							
Self-consumption at Night		< 10W							
Dimensions ( W*D*H )		800*350*875mm							
Weight		Approx. 102kg							
Certification	Safety Standards		IEC62109-1/-2						
	EMC Standards		EN61000-6-1/-2/-3, IEC61000						
	On-grid Standard		AS4777.2:2020, NRS097-2-1:2017, PN-EN50549- 1:2019, VDE-AR-N 4105:2018, EN50549-1:2019+AC:2019-4						