

12KW~20KW Three-phase Hybrid Inverter

Features



- PV & Storage System**
 Integrate PV and storage system modem, support multiple batteries, integrate with EMS Smart Energy Management Systems;
- Smart Switching**
 UPS function, support three-phase imbalance, on/off grid switch within 10ms;
- Wide Voltage Input Range**
 Wide PV voltage input range 180V-950V, wide batteries voltage range 180V-700V;
- Safe and Reliable**
 IP65 protection and a built-in lightning protection system with high-precision leakage protection.
- Smart and Simple**
 Ultra-silent, with flexible communications and remote/local USB upgrade options.
- High Efficiency**
 Support bifacial panels and a maximum DC current 12.5A and PV input power up to 1.3 X rated power.



Hybrid

10 Years
Design Life



EURO
EN50549

AUS ESP ZA SA
GER AUT ITA UK
Grid Standards

Product Parameters

Model		ETH12KW	ETH15KW	ETH17K	ETH20KW
Efficiency	MAX Efficiency	98.40%			
	European Efficiency	97.50%			
PV	MAX Input Power	18000W	22500W	25500W	30000W
	MAX Input Voltage	1000V			
	MPPT Operating Voltage	180~950V			
	Start-up Voltage	120V			
	MAX Input Current	15A/15A	15A/28A	28A/28A	
	MAX Short Circuit Current	18A/18A	18A/32A	32A/32A	
	Number of MPPT Trackers	2	2	2	
	Number of Strings Per MPPT	1/1	1/2	2/2	
Battery	Battery Voltage Range	180-700V			
	MAX Charge/Discharge Current	50A/50A			
	MAX Charge/Discharge Power	12kW/12kW	15kW/15kW	17kW/17kW	20kW/20kW
	Battery Type	Li-ion / Lead-acid			
AC Output (On-grid)	Nominal Output Power	12000W	15000W	17000W	20000W
	MAX Apparent Power	12000VA	15000VA	17000VA	20000VA
	Nominal Output Voltage	380V/400V, 3L/N/PE			
	Nominal Output Frequency	50Hz / 60Hz			
	MAX Output Current	18A	22A	25A	31A
	Power Factor	≈1 (0.8 lead to 0.8 lag can be set)			
	Total Harmonic Distortion	<3%			
AC Output (Back-up)	Nominal Output Power	12000W	15000W	17000W	20000W
	MAX Apparent Power	12000VA	15000VA	17000VA	20000VA
	Nominal Output Voltage	380V/400V, 3L/N/PE			
	Nominal Output Frequency	50Hz / 60Hz			
	MAX Output Current	18A	22A	25A	31A
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			
	Noise	<40dB			
	Topology	Transformerless Isolation			
	Cooling	Intelligent Fan			
	Ingress Protection Rating	IP65			
	Relative Humidity	0%~100% (Non-condensing)			
	DC Connector Type	MC / Amphenol / Phoenix			
	AC Connector Type	Plug-in Connector			
	Display	LCD			
	Cloud Communication	RS485 (WiFi / 4G / GPRS Optional)			
	BMS Communication Mode	CAN			
	Communication with Meter	RS485			
	Installation	Wall Mount			
Self-consumption at Night	< 10W				
Dimensions (W*D*H)	505*220*630mm				
Weight	Approx. 34kg		Approx. 36kg		
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			