



KOYOE

DATASHEET

Single-Phase Hybrid Series

KY-1Hybrid-5k0-H



H1 SERIES



Customization

Combines with any other Koyoe ESS products. Supports series connection up to 6 inverters.



Communication

Monitoring Platform via app and website. Supports online system upgrade.



Advanced Performance

High-voltage inverter, 97.8% max efficiency. Provides higher charge & discharge rate when combines with Koyoe ESS *Requires additional Battery and BMS.



Efficient Fireproofing

Internal Novec 1230 Fire Suppression Stickers. Immediately isolates oxygen and reduces temperature.

Model	KY-1Hybrid-5K0-H
EFFICIENCY	
Max.Efficiency	>98.2%
PV INPUT	
Max. PV input power(W)	7000
Input starting up voltage (V)	100
Max. PV input voltage(V)	550
Min operating voltage (V)	120
MPP Operation Voltage Range(V)	120-500
Max. number of PV strings per MPPT	1/1
Max. PV input current(A)	12/12
Short-circuit current of PV input(A)	15/15
BATTERY	
Max Input/Output Voltage(V)	450
Operating Voltage Range(V)	85-450
Max Charge/Discharge Current(A)	25/25
Max Input/Output Power(W)	5000/5000
Battery Type	Li-ion/Lead-acid
AC INPUT AND OUTPUT	
Rated Power(W)	5000
Max. Apparent AC Power(VA)	5000
Nominal AC Voltage(Vac)	230,1 ϕ (L/N/PE)
AC Power Frequency(Hz)	50/60
Max. AC Output Current(A)	21.7
Power Factor Range	~1 (Adjustable from 0.8 leading to 0.8 lagging)
OutputTHDi(@Nominal Output)	<3%
OFF-GRID AC OUTPUT(BACK-UP AC OUTPUT)	
Rated Output Power(W)	5000
Max. Apparent AC Output Power(VA)	5000
Nominal AC Output Voltage(Vac)	230,1 ϕ (L/N/PE)(N not connect to PE inside)
AC Power Frequency(Hz)	50/60
Max. AC Output Current(A)	21.7
GENERAL DATA	
Operating Temperature Range	-25°C ...+60°C(>45°C derating)
Operating Altitude(m)	<4000
Noise(dB)	<40
Topology	Transformerless
Anti-Islanding method	RoCoF
Ingress Protection Rating	IP65
Relative Humidity	0-100%, no condensation
DC Connection Type	MC/Amphenol/Phoenix
AC Connection Type	Plug-in Connector
Display	LCD
Communication With Portal	RS485 (WiFi/GPRS Optional)
Communication With BMS	CAN
Communication With Meter	RS485
Mounting Method	Wall-mounting bracket
Dimensions (W*H*D)(mm)	390*500*185
Weight(Kg)	18
CERTIFICATION	
Safety	IEC62109-1/-2
EMC	EN61000-6-1/-2/-3,IEC61000
On-Grid standard	AS4777.2,NRS097-2-1:2017
COUNTRY	
Manufacture Of Country	China