

IHY-12KL1C

Hybrid Inverter IP66

**12kW | SP-HYBRID****Multi-Function Output**

Support On-Grid, Smart Load and Back up Load

**High PV Input Power**

2 MPP Trackers, PV Input Power up to 24000W
Max. Solar Charging Current up to 240A

**High Efficiency**

MPPT Efficiency $\geq 99\%$
Maximum Battery Mode Conversion Efficiency $> 93\%$

**Powerful Performance**

Continuous working under $100\% < \text{Load} < 110\%$
(if overtemperature protection is not triggered)
Intelligent time-of-use (TOU) mode to gain peak valley tariff

**Highly User-friendly Design**

Low noise performance with perfect heat dissipation
Looks like a home appliance with stunning appearance
LCD Display with touch button

**Solid Quality**

IP66 Protection Design for harsh environmental condition
Warranty 5 years

Model	IHY-12KL1C
Efficiency	
MPP Tracking Efficiency	99.9%
Max. Conversion Efficiency	>93%
PV Input	
Max. PV Input Power (W)	24000
Max. PV Input Voltage (V)	500
Start-up Voltage (V)	60
MPPT Voltage Range (V)	60~425
Max. Input Current (A)	40/40
Number of MPPT	2
Number of Strings per MPPT	2
AC Output	
Nominal Output Power (W)	12000
Max. Output Apparent Power (VA)	12000
Nominal Output Voltage (Vac)	220/230/240 (L+N+PE)
Max. Output Current (A)	55
Output Frequency (Hz)	50/60
Power Factor	0.8 Leading to 0.8 Lagging
Total Current Harmonic Distortion	<2%
Surge Power (VA)	24000 @5s
Overload Capability	10s @110%≤Load<140% 7s @140%≤Load<200% *Working continuously @100%<Load<110%
AC Input	
Nominal Input Voltage (Vac)	230
Input Voltage Range (Vac)	90~280
Max. AC Input Current (A)	80 (Bypass Mode)
Nominal Operating Frequency (Hz)	50/60
Battery	
Battery Type	Lead-acid/Lithium-ion/User Defined
Rated Voltage (V)	48
Battery Voltage Range (V)	40~60
Max. Solar Charging Current (A)	240
Max. Mains/Generator Charging Current (A)	80
Max. Discharging Current (A)	240
General	
Dimensions (D*W*H mm)	210*350*580
Net Weight (kg)	25
Operating Temperature Range (°C)	-25 ~ +60 (>45°C Power Derating)
Max. Operating Altitude (m)	3000 (>2000m Power Derating)
Communication	WIFI/RS485/CAN/Dry Contact
Diesel Generator Support	Yes
Smart Load Support	Yes
Cooling Method	Intelligent Fan Cooling
Parallel Capability	Maximum 12 units
Noise (dB)	<60
Authentication Level	IEC62109-1,IEC62109-2,IEC61683,IEC61000
Protection	
Ingress Protection	IP66
PV Reverse Protection	Yes
Insulation Impedance Detection	Yes
Residual Current Monitoring	Yes
Overvoltage Protection	Yes
Overload Protection	Yes
Short Circuit Protection	Yes
Over Temperature Protection	Yes
Surge Protection	DC: TYPE II,AC: TYPE II