

HLX-HN 12-14K (SINGLE-PHASE)



- 2 MPPTs with 4 strings, Max. 24kW PV input
- Max. charging and discharging current: 250A
- Off-grid application for high demand with 12kW output power
- Dual AC output ports for multiple load connections
- Integrated Design with Load and Battery Breaker
- PV or AC or Generator wake up battery
- Supports up to 16 units in parallel

Model	12000	14000
INPUT (PV DC)		
Max. PV input power (W)	24000 (12000/12000)	
Rated PV input voltage (V)	320	
Number of independent MPPT inputs	2/(2:2)	
PV input voltage range (V)	100-480	
MPPT voltage range (V)	120-440	
Start-up voltage (V)	100	
Max. PV input current per MPPT (A)	35/35	
Max. PV short-circuit current input per MPPT (A)	44/44	
Battery		
Compatible battery type	Lithium-ion/Lead-Acid	
Rated battery voltage (V)	48/51.2	
Battery voltage range (V)	46.4~60/38.4~60	
Max. charging / discharging current (A)	250	
Max. charging / discharging power (W)	12000	
Force wake up battery from PV and Grid function	YES	
Grid		
Rated AC voltage (V)	230	
AC Start-up Voltage	90	
Acceptable Input Voltage Range (V)	130~280	
Rated AC frequency (Hz)	50/600	
Rated AC input current (A)	100	
Rated AC input power (W)	24000	
PF	0.99	
THDI	<5%	
Max. continuous AC passthrough current(A)	100	
GEN		
Rated GEN voltage (V)	230	
Rated GEN frequency (Hz)	50/60	
Rated GEN input current (A)	65	
Rated GEN input power (W)	15000	
Rated GEN current of BYPASS relays (A)	90	
UPS		
Rated output power (W)	12000	14000
Rated output voltage (V)	230	
Rated output current (A)	52	60
Rated output frequency (Hz)	50/60	
Switching time (UPS)	<10ms	
Wave form	Sine wave	
THDV	<3%	
Overload protection	5s@≥150% load /10s@110%~150% load	
Efficiency		
Max. efficiency	93.5%	
Max. charging / discharging efficiency	93.0%	
Max. MPPT efficiency	99.0%	
Protection		
PV reverse polarity protection(Y/N)	YES	
Over current / voltage protection(Y/N)	YES	
AC Short-circuit current protection(Y/N)	YES	
Grid monitoring(Y/N)	YES	
DC switch(Y/N)	YES	
DC / AC Surge protection	Type III	
Battery reverse polarity protection(Y/N)	Yes	
General		
Dimensions (W*H*D mm)	530*830*150mm / 17.72*25.59*5.9 in	
Weight	43.5kg / 95.9lbs	
Ingress protection rating	IP20	
Operating environment temperature range(°C)	0~45	
Storage temperature range(°C)	-15~60	
Relative humidity	5% ~ 95%	
Display & Communication interface	LCD+RGB, RS485 / Wifi / CAN	
Warranty	2 years	
Cooling method	Smart cooling	
Topology on AC / Battery side	Transformer-less / Transformer	
Altitude (m)	<2000	
Noise emission (typical)	<50dB	
Standard & Certification		
CE		