

HLX-HN 3-6K (SINGLE-PHASE)



- 2 MPPTs with Max. PV Input of 10kW
- IP54 Protection Rating: Ensures reliable dust and water resistance
- Parallel Operation: Supports up to 20 units for scalable energy solutions
- Max. Charge/Discharge Current: 140A
- Seamless Off-Grid Switching: Automatic transition for uninterrupted power
- Dedicated Port: Supports generator or smart load management for enhanced system stability
- Smart Monitoring: Remote configuration and real-time performance tracking

Model	3K	4K	5K	6K
Input (PV DC)				
Max. PV array power (W)	6000 (3000/3000)	8000 (4000/4000)	10000 (5000/5000)	13000 (6500/6500)
Max. PV input power (W)	6000 (3000/3000)	8000 (4000/4000)	8000 (4000/4000)	10000 (5000/5000)
Rated PV input voltage (V)	320			
Number of independent MPPT inputs	2/(1:1)			
PV input voltage range (V)	100~500			
MPPT voltage range (V)	80~420			
Start-up voltage (V)	100			
Max. PV input current per MPPT (A)	34 (17/17)			
Max. PV short-circuit current input per MPPT (A)	50 (25/25)			
Battery				
Compatible battery type	Lithium-ion/Lead-Acid			
Rated battery voltage (V)	48			
Battery voltage range (V)	38.4~60			
Max. charging/discharging current (A)	75	90	110	140
Max. charging/discharging power (W)	3300	4000	5000	6500
Recommend capacity of battery per inverter	>200AH			
Force wake up battery from PV function	YES			
Force wake up battery from Grid function	YES			
Force wake up battery from GEN function	YES			
Grid				
Rated AC voltage (V)	230			
Rated AC frequency (Hz)	50/60			
Rated AC output current (A)	14.3	17.5	22	26.5
Rated AC output power (W)	3300	4000	5000	6500
Max. AC input power (W)	6000	8000		9000
PF	0.99(Adjustable from 0.8 leading to 0.8 lagging)			
THDI	<5%			
Max. continuous AC passthrough current (A)	40			60
GEN				
Rated GEN voltage (V)	230			
Rated GEN frequency (Hz)	50/60			
Rated GEN input current (A)	26	32		
Rated GEN input power (W)	3300	7370		
Rated GEN current of BYPASS relays (A)	40			60
UPS				
Rated output power (W)	3300	4000	5000	6500
Rated output voltage (V)	230/120	230		
Rated output current (A)	14.3	17.5	26.5	
Rated output frequency (Hz)	50/60			22
Surge power, duration	6600, 5s	8000, 5s	10000, 5s	13000, 5s
Switching time	<10ms @ Single; <20ms @ Parallel			
Wave form	Sine wave			
Load Capacity of Motor	1HP	2HP	3HP	
OverLoad Capacity	10s@110%~150% load; 5s@150%~200% load			
THDV	3%			
Efficiency				
Max. MPPT efficiency	99.0%			
Max. efficiency	94.0%	93.0%		94.0%
Max. charging efficiency	94.0%	93.0%		94.0%
Max. discharging efficiency	93.0%			
Protection				
Over current/voltage protection	YES			
AC Short-circuit current protection	YES			
Grid monitoring	YES			
AC/DC surge protection	YES			
General				
Dimensions (W*H*D)	389*443*156mm / 15.3*17.4*6.1 in			
Weight	12kg / 24.5lbs			
Ingress protection rating	IP20/IP54(optional)			
Operating environment temperature range (°C)	0~50			
Storage temperature range (°C)	-15~60			
Relative humidity	5%~95%			
Display & Communication interface	LCD+LED, RS485/Wi-Fi/CAN			
Warranty	4 years			
Cooling method	Smart Cooling			
Topology on AC side	Transformer-less			
Topology on Battery side	Transformer			
Altitude	4000m,>2000m Power derating			
Noise emission (typical)	<40dB			
Standards & Certification				