



HLX-IST 12K (SINGLE-PHASE)

- 3 MPPTs, Max. 18kW of PV input
- 12kW UPS output for backup during power cuts
- Supports up to 10pcs in parallel for on/off grid
- On/off grid seamless switching

Model	12K
INPUT (PV DC)	
Max. PV input power(W)	18000
Max. PV input power (W)	360
Rated PV input voltage (V)	3/(2:1:1)
Number of independent MPPT inputs	100~600
MPPT voltage range (V)	120~500
Start-up voltage (V)	140
Max. PV input current per MPPT (A)	25/15/15
Max. PV short-circuit current input per MPPT (A)	31/19/19
Battery	
Compatible battery type	Lithium-ion/Lead-Acid
Rated battery voltage(V)	48
Battery voltage range(V)	40~60
Max. charge/discharge current(A)	250
Max. charge/discharge power(W)	12000
Force wake up battery from PV function(Y/N)	YES
Grid	
Rated AC voltage(V)	230
Rated AC frequency(Hz)	50/60
Rated AC output current(A)	50
Rated AC output power(W)	11500
Max. AC input current(A)	200
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)
THDI	<3%
Max. continuous AC passthrough current(A)	200
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)	11500
Rated output voltage (V)	230
Rated output current (A)	50
Rated output frequency(Hz)	50/60
Surge power, duration	2Pn, 0.5s
Switching time	20ms
Wave form	Sine wave
THDV	3%
Efficiency	
MPPT efficiency	99.9%
EU efficiency	96.0%
Max. efficiency	97.5%
Max. charge / discharge efficiency	94.0%
Protection	
PV reverse polarity protection	YES
Over current/voltage protection	YES
Anti-islanding protection	YES
AC Short-circuit current protection	YES
Leakage current protection	YES
Ground fault monitoring	YES
Grid monitoring	YES
DC Switch	YES
AC/DC Surge protection	Type III
General	
Dimensions(W*H*D)	490*670*265mm/19.3*26.3*10.4in
Weight	50kg/110.2lbs
Ingress protection rating	IP66
Relative humidity	0~100%
Operating environment temperature range(°C)	-25~60°C, >45°C Derating
Storage temperature range(°C)	-25~60
Display & Communication interface	Touch color screen, RS485/Wi-Fi/CAN
Warranty	5 years
Cooling method	Smart Cooling
Topology	Transformer-less
Altitude (m)	<2000
Noise emission(typical)	<50dB
Standards & Certification	
EMC SANS 211:2010, CISPR 2015+A1:2016, IEC 61000-2-2-2012+A1:2017+A2:2018, Cape Town list, G99, G100, NRS 097-2-1:2017, EN/IEC 62109-1/2, IEC 61683,	