

# Test Verification of Conformity

Verification Number: 240500712SHA-V1

The product(s) listed is/are evaluated by a Thirty Part Body and deemed to meet the listed harmonized standard(s) listed in below. This Verification of Conformity can be used in support of a claim in meeting the EU/UK Low Voltage Directive (LVD) (2014/35/EU) and mandatory Conformity Marking requirements. And in accordance with the EU/UK law, the claim is the sole obligation of the Manufacturer/Importer.

Applicant Name & Address:	Jiangsu Daybright Intelligent Energy Co.,Ltd No. 223, Jiangjun Avenue, Jiangning District, Nanjing Jiangsu P.R. China, 211106.
Product Description:	Hybrid inverter
Ratings & Principle Characteristics:	See Appendix(Specifications table)
Models/Type References:	HV*-1L-1(*= 1K, 1K5, 2K, 2K5, 3K, 3K6) HV*-1L-X (*= 3K, 3K6, 4K, 4K6, 5K, 5K5, 6K) HV*-1L (*= 4K, 4K6, 5K, 5K5, 6K)
Brand Name:	
Relevant Standards:	IEC/EN 62109-1:2010 IEC/EN 62109-2:2011 the Low Voltage Directive 2014/35/EU
Verification Issuing Office Name & Address:	Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North), Shanghai 200233, China
Date of Tests:	2024-05-15 to 2024-06-17
Test Report Number(s):	240500712SHA-001/002

Additional information in Appendix.

  
Signature

Name: Max Jin

Position: General Manager

Date: 2024-06-27

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# APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 240500712SHA-V1

Manufacturer: Same as applicant

Specifications table					
Model	HV1K-1L-1	HV1K5-1L-1	HV2K-1L-1	HV2K5-1L-1	HV3K-1L-1
<b>PV input</b>					
P pv Max(W)	1500	2300	3000	3800	4500
Vmax PV (Vdc) (absolute Max.)	550	550	550	550	550
Isc PV (absolute Max.) (A)	26	26	26	26	26
Number MPP trackers	1	1	1	1	1
Number input strings	1	1	1	1	1
Max. PV input current / strings (A)	18.5	18.5	18.5	18.5	18.5
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	80-500	90-500	120-500	150-500	170-500
<b>Battery (charge/discharge)</b>					
Battery type	Li-ion/Lead-acid				
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)				
Max charge/discharge Current(A)	25	40	50	63	80
Max charge/discharge Power(W)	1000	1500	2000	2500	3000
<b>AC Grid (input and output)</b>					
Normal AC Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Normal AC Current (A)	4.4	6.6	8.7	10.9	13.1
Max. cont. input/output current (A)	5	7	10	12	14
Rated Power(W)	1000	1500	2000	2500	3000
Rated Apparent Power (VA)	1000	1500	2000	2500	3000
Max. cont. Power (W)	1000	1500	2000	2500	3000
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	3000
Power factor (adjustable)	1.0( -0.8~ +0.8)				
<b>AC Load output (stand alone)</b>					
Normal Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Nominal Current(A)	4.4	6.6	8.7	10.9	13.1
Max. cont. current (A)	5	7	10	12	14
Max. cont. Power (W)	1000	1500	2000	2500	3000
Rated Apparent Power (VA)	1000	1500	2000	2500	3000
Max. cont. Apparent Power (VA)	1000	1500	2000	2500	3000
Power factor	1.0				
<b>Others</b>					
Ingress protection (IP)	IP65				
Protective class	Class I				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated (PV-AC-BAT)				
Overvoltage category	OVC III (AC Main), OVC II (PV)				
Firmware	1.01				

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## APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 240500712SHA-V1

Specifications table				
Model	HV3K6-1L-1	HV3K-1L-X	HV3K6-1L-X	HV4K-1L-X
<b>PV input</b>				
P pv Max(W)	5400	4500	5400	6000
Vmax PV (Vdc) (absolute Max.)	550	550	550	550
Isc PV (absolute Max.) (A)	26	26 x 2	26 x 2	26 x 2
Number MPP trackers	1	2	2	2
Number input strings	1	1/1	1/1	1/1
Max. PV input current / strings (A)	18.5	18.5 x 2	18.5 x 2	18.5 x 2
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	210-500	90-500	110-500	120-500
<b>Battery (charge/discharge)</b>				
Battery type	Li-ion/Lead-acid			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	80	80	80	80
Max charge/discharge Power(W)	3600	3000	3600	4000
<b>AC Grid (input and output)</b>				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	15.7	13.1	15.7	17.4
Max. cont. input/output current (A)	17	14	17	19
Normal Power (W)	3600	3000	3600	4000
Rated Apparent Power (VA)	3600	3000	3600	4000
Max. cont. input/output Power (W)	3600	3000	3600	4000
Max. cont. Apparent Power (VA)	3600	3000	3600	4000
Power factor(adjustable)	1.0( -0.8~ +0.8)			
<b>AC Load output (stand alone)</b>				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current (A)	15.7	13.1	15.7	17.4
Max. cont. current (A)	17	14	17	19
Max. cont. Power (W)	3600	3000	3600	4000
Rated Apparent Power (VA)	3600	3000	3600	4000
Max. cont. Apparent Power (VA)	3600	3000	3600	4000
Power factor	1.0			
<b>Others</b>				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated (PV-AC-BAT)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			
Firmware	1.01			

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## APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 240500712SHA-V1

Specifications table				
Model	HV4K6-1L-X	HV5K-1L-X	HV5K5-1L-X	HV6K-1L-X
<b>PV input</b>				
P pv Max(W)	6900	7500	8300	9000
Vmax PV (Vdc) (absolute Max.)	550	550	550	550
Isc PV (absolute Max.) (A)	26 x 2	26 x 2	26 x 2	26 x 2
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1
Max. PV input current / strings (A)	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	130-500	150-500	160-500	170-500
<b>Battery (charge/discharge)</b>				
Battery type	Li-ion/Lead-acid			
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)			
Max charge/discharge Current(A)	80	80	80	80
Max charge/discharge Power(W)	4600	4800	4800	4800
<b>AC Grid (input and output)</b>				
Normal AC Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Normal AC Current (A)	20	21.8	24	26.1
Max. cont. input/output current (A)	22	23	26	28
Normal Power (W)	4600	5000	5500	6000
Rated Apparent Power (VA)	4600	5000	5500	6000
Max. cont. input/output Power (W)	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4600	5000	5500	6000
Power factor(adjustable)	1.0( -0.8~ +0.8)			
<b>AC Load output (stand alone)</b>				
Normal Voltage (VAC)	L/N/PE, 230Vac			
Frequency (Hz)	50			
Nominal Current(A)	20	21.8	24	26.1
Max. cont. current (A)	22	23	26	28
Max. cont. Power (W)	4600	5000	5500	6000
Rated Apparent Power (VA)	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4600	5000	5500	6000
Power factor	1.0			
<b>Others</b>				
Ingress protection (IP)	IP65			
Protective class	Class I			
Temperature (°C)	-25°C to +60°C (Derating 45°C)			
Inverter Isolation	Non-isolated (PV-AC-BAT)			
Overvoltage category	OVC III (AC Main), OVC II (PV)			
Firmware	1.01			

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## APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 240500712SHA-V1

Specifications table					
Model	HV4K-1L	HV4K6-1L	HV5K-1L	HV5K5-1L	HV6K-1L
<b>PV input</b>					
P pv Max(W)	6000	6900	7500	8300	9000
Vmax PV (Vdc) (absolute Max.)	550	550	550	550	550
Isc PV (absolute Max.) (A)	26 x 2	26 x 2	26 x 2	26 x 2	26 x 2
Number MPP trackers	2	2	2	2	2
Number input strings	1/1	1/1	1/1	1/1	1/1
Max. PV input current / strings (A)	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2	18.5 x 2
MPPT voltage range (Vdc)	80-500	80-500	80-500	80-500	80-500
Vdc range @ full power (Vdc)	120-500	130-500	150-500	160-500	170-500
<b>Battery (charge/discharge)</b>					
Battery type	Li-ion/Lead-acid etc.				
Battery Normal Voltage (Range) (Vdc)	51.2V (40-60V)				
Max charge/discharge Current(A)	120	120	120	120	120
Max charge/discharge Power(W)	4000	4600	5000	5500	6000
<b>AC Grid (input and output)</b>					
Normal AC Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Normal AC Current (A)	17.4	20	21.8	24	26.1
Max. cont. input/output current (A)	19	22	23	26	28
Rated Power(W)	4000	4600	5000	5500	6000
Rated Apparent Power (VA)	4000	4600	5000	5500	6000
Max. cont. Power (W)	4000	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4000	4600	5000	5500	6000
Power factor (adjustable)	1.0( -0.8~ +0.8)				
<b>AC Load output (stand alone)</b>					
Normal Voltage (VAC)	L/N/PE, 230Vac				
Frequency (Hz)	50				
Nominal Current(A)	17.4	20	21.8	24	26.1
Max. cont. current (A)	19	22	23	26	28
Max. cont. Power (W)	4000	4600	5000	5500	6000
Max. cont. Apparent Power (VA)	4000	4600	5000	5500	6000
Power factor	1.0				

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Specifications table					
Model	HV4K-1L	HV4K6-1L	HV5K-1L	HV5K5-1L	HV6K-1L
Others					
Ingress protection (IP)	IP65				
Protective class	Class I				
Temperature (°C)	-25°C to +60°C (Derating 45°C)				
Inverter Isolation	Non-isolated (PV - AC - BAT)				
Overvoltage category	OVC III (AC Main), OVC II (PV)				
Firmware	1.01				

Signature



Name: Max Jin

Position: General Manager

Date: 2024-06-27

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