

Certificate of Conformity

Certificate Number: CN-PV-210205

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specification/standard at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture. The manufacturer shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant Name & Address:	Guangzhou Sanjing Electric Co., Ltd. No.9, Lizhishan Road, Science City, Guangzhou High-tech Zone, Guangdong, P.R.China
Product Description:	Energy Storage System
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Models/Type References:	Inverter conversion device: H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-4.6K-S2, H1-5K-LS2, H1-5K-S2, H1-6K-LS2, H1-6K-S2 Batteries and BMS - Battery Management System See appendix of Certificate of Conformity
Brand Name:	SAJ
Tested according to:	CEI 0-21:2019-04: Reference technical rules for the connection of active and passive users to the LV electrical Utilities
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China Accredited by China National Accreditation Service for Conformity Assessment (CNAS C058-P) in accordance with ISO/IEC 17065:2012
Test Report Number:	190619145GZU-001, Revision 2: 02 Sep 2021
Certification procedure: SMS-PV-OP-19 Product certification scheme type: Type test Additional information in Appendix	



Signature

Certification Manager: Grady Ye

Date: 09 September 2021



中国认可
产品
PRODUCT
CNAS C058-P

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210205

Model/Type reference..... :	Inverter conversion device: H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-4.6K-S2, H1-5K-LS2, H1-5K-S2, H1-6K-LS2, H1-6K-S2 Brands: SAJ Batteries and BMS - Battery Management System 1 Battery model: B1-5.1-48 Control model: the first module will work as controller Brands: SAJ Batteries and BMS - Battery Management System 2 Battery model: US2000 Control model: 2P15S Brands: PYLONTECH Batteries and BMS - Battery Management System 3 Battery model: B4850 is basic module, the extensional model: PowerDepot H2.5 (make up of 1 basic module B4850) PowerDepot H5.0 (make up of 2 basic module B4850) Powerbox F -2.5 (make up of 1 basic module B4850) Powerbox F -5.0 (make up of 2 basic module B4850) Powerbox F -7.5 (make up of 3 basic module B4850) Powerbox F -10.0 (make up of 4 basic module B4850) Control model: the first module will work as controller Brands: Dyness Batteries and BMS - Battery Management System 4 Battery model: LS 48V 2.4 kWh Brands: Turbo Energy
Inverter Firmware Version..... :	Display board: V2.081; Control board: V1.311
Number of phases	Single-phase
Nominal Power	3000W (H1-3K-S2) 3680W (H1-3.6K-S2) 4000W (H1-4K-S2) 4600W (H1-4.6K-LS2, H1-4.6K-S2) 5000W (H1-5K-LS2, H1-5K-S2) 6000W (H1-6K-LS2, H1-6K-S2)
Type..... :	Bidirectional
CUS (useful capacity of the storage system)	See following table
Psn (nominal discharge power)	See following table
Pcn (nominal charge power)	See following table
Psmax (maximum discharge power)	See following table

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Pcmax (maximum charge power) : See following table
BMS Firmware Version See following table

Battery		CUS (useful capacity of the storage system)	
Model	Manufacturer	Capacity of per battery module (kWh)	Number of Max modules recommended by the manufacturer
B1-5.1-48	SAJ	5.12	8
US2000	PYLONTECH	2.4	8
B4850	Dyness	2.4	12
LS 48V 2.4 kWh	Turbo Energy	2.4	12

Note: batteries are not integrated within the inverter, and shall be installed according to local regulation.

Brand		SAJ		Dyness/ Turbo Energy			PYLONTECH		
Model		B1-5.1-48		B4850/ LS 48V 2.4 kWh			US2000		
Number of modules		1	2 to 8	1	2	3 to 12	1	2	3 to 8
Psn	H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-5K-LS2, H1-6K-LS2,	3000W	3000W	2400W	3000W	3000W	2400W	3000W	3000W
	H1-4.6K-S2,	3000W	4600W	2400W	4600W	4600W	2400W	4600W	4600W
	H1-5K-S2, H1-6K-S2	3000W	5000W	2400W	4800W	5000W	2400W	4800W	5000W
Pcn	H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-5K-LS2, H1-6K-LS2,	3000W	3000W	2400W	3000W	3000W	2400W	3000W	3000W
	H1-4.6K-S2,	3000W	4600W	2400W	4600W	4600W	2400W	4600W	4600W
	H1-5K-S2, H1-6K-S2	3000W	5000W	2400W	4800W	5000W	2400W	4800W	5000W

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P _{smax}	H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-5K-LS2, H1-6K-LS2,	3000W	3000W	2400W	3000W	3000W	2400W	3000W	3000W
	H1-4.6K-S2,	3000W	4600W	2400W	4600W	4600W	2400W	4600W	4600W
	H1-5K-S2, H1-6K-S2	3000W	5000W	2400W	4800W	5000W	2400W	4800W	5000W
P _{cmax}	H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-5K-LS2, H1-6K-LS2,	3000W	3000W	2400W	3000W	3000W	2400W	3000W	3000W
	H1-4.6K-S2,	3000W	4600W	2400W	4600W	4600W	2400W	4600W	4600W
	H1-5K-S2, H1-6K-S2	3000W	5000W	2400W	4800W	5000W	2400W	4800W	5000W
BMS Firmware Version		V1142		POWER_Protect_1 _201027DPBM(2)_1			V2.4		

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**Ratings &
Principle
Characteristics:**

Model	H1-3K-S2	H1-3.6K-S2	H1-4K-S2	H1-4.6K-S2 H1-4.6K-LS2	H1-5K-S2 H1-5K-LS2	H1-6K-S2 H1-6K-LS2
Max.PV voltage [V]	600V					
PV voltage range [V]	90-550					
PV Isc [A]	15 /15					
Max.input current [A]	12.5 / 12.5					
Battery parameters						
Rated DC voltage [V]	48					
DC voltage range [V]	42 – 58.5					
Max. Charging / discharging current [A]	60/60			60/60 (H1-4.6K-LS2) 100/100 (H1-4.6K-S2)	60/60 (H1-5K-LS2, H1-6K-LS2) 100/100 (H1-5K-S2, H1-6K-S2)	
Grid parameters						
Rated Output Power [W]	3000	3680	4000	4600	5000	6000
Max.Output Power [VA]	3000	3680	4000	4600	5000	6000
Rated Output Current [A]	13.1	16.0	17.4	20.0	21.8	26.1
Max Output Current [A]	14.4	16.0	19.2	20.9	24.0	26.1
Nominal Frequency	50Hz					
Power factor range	0.8Leading – 0.8 lagging					
AC Output [Back-up Mode]						
Rated Output Power [W]	3000			3000(H1-4.6K-LS2) 4600(H1-4.6K-S2)	3000 (H1-5K-LS2, H1-6K-LS2) 5000(H1-5K-S2, H1-6K-S2)	
Output Voltage [V]	230					
Output Frequency [Hz]	50/60					
Safety level	Class I					
Ingress Protection	IP 65					
Operation Ambient Temperature	-25°C - +60°C					

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Verification of certificate with test report: 190619145GZU-001, Revision 2: 02 Sep 2021

TYPE OF APPARATUS:

(the static converters in systems with capacity up to 11.08 kW)

DISCONNECTION DEVICE	INTERFACE PROTECTION DEVICE	DEVICE FOR CONVERSION	ROTATING GENERATOR DEVICE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Manufacturer: Guangzhou Sanjing Electric Co., Ltd.

Apparatus type: Energy Storage System

Model: Inverter conversion device:

H1-3K-S2, H1-3.6K-S2, H1-4K-S2, H1-4.6K-LS2, H1-4.6K-S2,
H1-5K-LS2, H1-5K-S2, H1-6K-LS2, H1-6K-S2

Brands: SAJ

Batteries and BMS - Battery Management System 1

Battery model: B1-5.1-48

Control model: the first module will work as controller

Brands: SAJ

Batteries and BMS - Battery Management System 2

Battery model: US2000

Control model: 2P15S

Brands: PYLONTECH

Batteries and BMS - Battery Management System 3

Battery model: B4850 is basic module, the extensional model:

PowerDepot H2.5 (make up of 1 basic module B4850)

PowerDepot H5.0 (make up of 2 basic module B4850)

Powerbox F -2.5 (make up of 1 basic module B4850)

Powerbox F -5.0 (make up of 2 basic module B4850)

Powerbox F -7.5 (make up of 3 basic module B4850)

Powerbox F-10.0 (make up of 4 basic module B4850)

Control model: the first module will work as controller

Brands: Dyness

Batteries and BMS - Battery Management System 4

Battery model: LS 48V 2.4 kWh

Brands: Turbo Energy

Inverter Firmware Version: Display board: V2.081; Control board: V1.311

BMS Firmware Version for system: V1142 (for BMS system 1); V2.4 (for BMS system 2);

POWER_Protect_1_201027DPBM(2)_1 (for BMS system 3)

Number of phases: Single-phase

Nominal power: See certificate for each model

Type: Bidirectional

CUS (useful capacity of the storage system): See certificate

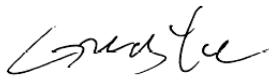
Remark: The devices are capable to limit I_{dc} to 0.5% of the rated grid current

Verification of certificate with test report: 190619145GZU-001, Revision 2: 02 Sep 2021

Having assessed the test report 190619145GZU-001 Issued by laboratory:
Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2. Caipin Road, Science
City, GETDD, Guangzhou, Guangdong, China
In compliant with ISO/IEC 17025:2017
Accreditation number: CNAS L0220

Having examined the ISO 9001 certificate of the manufacturer No: U0019Q50075RIM issued by:
Zhongjian Certification Co., Ltd

The indicated products above are complied with CEI 0-21:2019-04: Reference technical rules for the
connection of active and passive users to the LV electrical Utilities



Signature

Name: Grady Ye

Date: 09 September, 2021