

# Certificate of Conformity

Certificate Number: CN-PV-220055

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:**

Shenzhen Growatt New Energy Co., Ltd.  
4-13/F, Building A, Sino-German (Europe) Industrial Park, Hangcheng Ave, Bao'an District, Shenzhen, China

**Product:**

Energy Storage System

**Ratings & Principle**

See appendix of Certificate of Conformity

**Characteristics:**

**Model:**

Inverter conversion device:  
MIN 2500TL-XH, MIN 3000TL-XH, MIN 3600TL-XH, MIN 4200TL-XH, MIN 4600TL-XH, MIN 5000TL-XH, MIN 6000TL-XH  
MIN 2500TL-XA, MIN 3000TL-XA, MIN 3600TL-XA, MIN 4200TL-XA, MIN 4600TL-XA, MIN 5000TL-XA, MIN 6000TL-XA  
Batteries and BMS - Battery Management System  
Battery module model: ARK 5.1XH-A1, ARK 7.6XH-A1, ARK 10.2XH-A1, ARK 12.8XH-A1, ARK 15.3XH-A1, ARK 17.9XH-A1  
Battery pack: ARK 2.5H-A1  
High voltage control model: BDC 95045-A1

**Brand Name:**

GROWATT

**Product Complies with:**

CEI 0-21:2019 +V1:2020: Reference technical rules for the connection of active and passive users to the LV electrical Utilities

**Certificate Issuing Office**

Intertek Testing Services Ltd. Shanghai

**Name & Address:**

West Area, 2<sup>nd</sup> Floor, No. 707, Zhangyang Road  
China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China  
Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012

**Test Report Number:**

220225005GZU-001

Additional information in Appendix

Signature



PRD N° 306B

**Certification Manager: Grady Ye**

**Date: 14 March. 2022**

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## APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-220055

<b>Test item description .....</b>	Energy Storage system
Trade Mark .....	GROWATT
Manufacturer .....	Same as applicant
Model/Type reference .....	Inverter conversion device: MIN 2500TL-XH, MIN 3000TL-XH, MIN 3600TL-XH, MIN 4200TL-XH, MIN 4600TL-XH, MIN 5000TL-XH, MIN 6000TL-XH, MIN 2500TL-XA, MIN 3000TL-XA, MIN 3600TL-XA, MIN 4200TL-XA, MIN 4600TL-XA, MIN 5000TL-XA, MIN 6000TL-XA Brands: GROWATT Batteries and BMS - Battery Management System Battery module model: ARK 5.1XH-A1, ARK 7.6XH-A1, ARK 10.2XH-A1, ARK 12.8XH-A1, ARK 15.3XH-A1, ARK 17.9XH-A1 Battery pack: ARK 2.5H-A1 High voltage control model: BDC 95045-A1 Brands: GROWATT
Inverter Firmware Version .....	AL1.0
Number of phases .....	Single-phase
Nominal Power .....	2500W (MIN 2500TL-XH/XA), 3000W (MIN 3000TL-XH/XA) 3600W (MIN 3600TL-XH/XA), 4200W (MIN 4200TL-XH/XA) 4600W (MIN 4600TL-XH/XA), 5000W (MIN 5000TL-XH), 6000W (MIN 6000TL-XH/XA)
Type .....	Bidirectional
CUS (useful capacity of the storage system) .....	4.608KWh ~ 16.128KWh
Psn (nominal discharge power) .....	2500W (MIN 2500TL-XH/XA), 3000W (MIN 3000TL-XH/XA) 3600W (MIN 3600TL-XH/XA), 4200W (MIN 4200TL-XH/XA) 4600W (MIN 4600TL-XH/XA), 5000W (MIN 5000TL-XH/XA), 6000W (MIN 6000TL-XH/XA)
Pcn (nominal charge power) .....	2500W (MIN 2500TL-XH/XA), 3000W (MIN 3000TL-XH/XA) 3600W (MIN 3600TL-XH/XA), 4200W (MIN 4200TL-XH/XA) 4600W (MIN 4600TL-XH/XA), 5000W (MIN 5000TL-XH/XA, MIN 6000TL-XH/XA)
Psmax (maximum discharge power) :	Same as above
Pcmax (maximum charge power) .....	Same as above
BMS Firmware Version .....	VC1.0

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Battery		CUS (useful capacity of the storage system)	
Basic Model	Manufacturer	Capacity of per battery module (kWh)	Number of Battery pack
ARK 5.1XH-A1	Shenzhen Growatt New Energy Co., Ltd.	4.608	2
ARK 7.6XH-A1		6.912	3
ARK 10.2XH-A1		9.216	4
ARK 12.8XH-A1		11.52	5
ARK 15.3XH-A1		13.82	6
ARK 17.9XH-A1		16.128	7
<p>Note:</p> <ol style="list-style-type: none"> <li>Batteries are not integrated within the inverter, and shall be installed according to local regulation.</li> <li>The ARK high voltage battery system is composed if a high voltage controller BDC 95045-A1 and 2 to 7 battery packs ARK 2.5H-A1 in series.</li> </ol>			



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Model	MIN 2500TL-XH MIN 2500TL-XA	MIN 3000TL-XH MIN 3000TL-XA	MIN 3600TL-XH MIN 3600TL-XA	MIN 4200TL-XH MIN 4200TL-XA
Max.PV voltage	500 d.c.V (excluding XA series)		550 d.c.V (excluding XA series)	
PV voltage range	70-500 d.c.V (excluding XA series)		70-550 d.c.V (excluding XA series)	
PV Isc	16.9 d.c.A*2 (excluding XA series)			
Max.input current	13.5 d.c.A*2 (excluding XA series)			
Max. DC voltage	550 d.c.V			
DC voltage range	360-550 d.c.V			
Max. DC current	17 d.c.A			
Type of battery	Lithium battery			
Capacity of battery	5.12kWh~35.84kWh			
Nominal input / output power	2500/2500W	3000/3000W	3600/3600W	4200/4200W
Max. apparent power	2500VA	3000VA	3600VA	4200VA
Nominal output voltage	230 a.c.V			
Nominal input/output current	11.3/11.3 a.c.A	13.6/13.6 a.c.A	16/16 a.c.A	19/19 a.c.A
Nominal Frequency	50Hz			
Power factor range	0.8Leading – 0.8 lagging			
Safety level	Class I			
Ingress Protection	IP 65			
Operation Ambient Temperature	-25 °C - +60 °C			
Software version	AL 1.0			

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Model	MIN 4600TL-XH MIN 4600TL-XA	MIN 5000TL-XH MIN 5000TL-XA	MIN 6000TL-XH MIN 6000TL-XA
Max.PV voltage	550 d.c.V (excluding XA series)		
PV voltage range	70-550 d.c.V (excluding XA series)		
PV Isc	16.9 d.c.A*2 (excluding XA series)		
Max.input current	13.5 d.c.A*2 (excluding XA series)		
Max. DC voltage	550 d.c.V		
DC voltage range	360-550 d.c.V		
Max. DC current	17 d.c.A		
Type of battery	Lithium battery		
Capacity of battery	5.12kWh~35.84kWh		
Nominal input/output power	4600/4600W	5000/5000W	5000/6000W
Max. apparent power	4600VA	5000VA	6000VA
Nominal voltage	230 a.c.V		
Nominal input/output current	20.9/20.9 a.c.A	22.7/22.7 a.c.A	22.7/27.2 a.c.A
Nominal Frequency	50Hz		
Power factor range	0.8Leading – 0.8 lagging		
Safety level	Class I		
Ingress Protection	IP 65		
Operation Ambient Temperature	-25°C - +60°C		
Software version	AL 1.0		

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**Verification of certificate with test report: 220225005GZU-001**

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: Shenzhen Growatt New Energy Co., Ltd.

Apparatus type: Energy Storage System

Model: Inverter conversion device:

MIN 2500TL-XH, MIN 3000TL-XH, MIN 3600TL-XH, MIN 4200TL-XH, MIN 4600TL-XH, MIN 5000TL-XH, MIN 6000TL-XH;

MIN 2500TL-XA, MIN 3000TL-XA, MIN 3600TL-XA, MIN 4200TL-XA, MIN 4600TL-XA, MIN 5000TL-XA, MIN 6000TL-XA

Battery pack: ARK 2.5H-A1

Brands: GROWATT

Batteries and BMS - Battery Management System

Battery module model: ARK 2.5H-A1

High voltage control model: BDC 95045-A1

Brands: GROWATT

Inverter Firmware Version: AL1.0

BMS Firmware Version for system: VC1.0

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

Having assessed the test report 220225005GZU-001 Issued by laboratory:

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

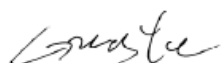
Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2. Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China

In compliant with ISO/IEC 17025:2017

Accreditation number: IAS TL-395

Having examined the ISO 9001 certificate of the manufacturer No: 02421Q32012223R0M, issued by: UNIVERSAL CERTIFICATION CENTRE CO., LTD.

The indicated products above are complied with CEI 0-21:2019 +V1:2020: Reference technical rules for the connection of active and passive users to the LV electrical Utilities



**Signature**

**Name: Grady Ye**

**Dated: 14 March 2022**

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