

SFT-PV-OP-23a (29-August-2019)

# Certificate of Conformity

Certificate Number: CN-PV-190078

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specifications /standards 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 Technology CO.,Ltd

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P. R. China

**Product:** PV Grid inverter

Ratings & Principle Characteristics:

See Appendix to Certificate of Conformity

MODELS: MAX 50KTL3 LV, MAX 60KTL3 LV, MAX 70KTL3 LV, MAX 75KTL3 LV, MAX 80KTL3

LV, MAX 60KTL3 MV, MAX 70KTL3 MV, MAX 80KTL3 MV

Brand Name: Growatt

**Tested according to:** DIN V VDE V0126-1-1:2013.08 Automatic disconnection device between a

generator and the public low-voltage grid

Type approved for Greece

Certificate Issuing

Intertek Testing Services Ltd. Shanghai

Office Name & Address:

2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental

Area, Shanghai, P. R. China

**Test Reports No:** 

191120148GZU-003

Additional information in Appendix.

Signature

**Certification Manager: Grady Ye** 

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Date: 04 December 2019



This is an Appendix to Certificate of Conformity Number: CN-PV-190078.

Ratings & Principle Characteristics:

Model	MAX MAX N		MAX	MAX			
	80KTL3 LV	60KTL3 MV	70KTL3 MV	80KTL3 MV			
Max. PV voltage		1100 d.c.V					
PV voltage range	- 0	200-1000 d.c.V					
PV Isc	32 d.c.A*7	32 d.c.A*6	32 d.	c.A*7			
Max. input current	26 d.c.A*7	26 d.c.A*6	26 d.	c.A*7			
Max. output power	80000W	60000W	70000W	80000W			
Max. apparent power	88800VA	66600VA	77700VA	88800VA			
Nominal output voltage	3W/N/PE 230/400 a.c.V	3W/N/PE or 3W+PE 277/480 a.c.V					
Max. output current	128.8 a.c.A	80.2 a.c.A	93.6 a.c.A	107.0 a.c.A			
Nominal output frequency	1	50	0Hz	1			
Power factor range		0.8Leading	~ 0.8Lagging				
Safety level		Cla	ass I				
Ingress Protection		II.	P65				
Operation Ambient Temperature	-25℃ - +60℃						
Software Version		TI	11.0				



This is an Appendix to Certificate of Conformity Number: CN-PV-190078.

Ratings & Principle Characteristics:

Model	MAX	MAX	MAX	MAX		
	50KTL3 LV	60KTL3 LV	70KTL3 LV	75KTL3 LV		
Max. PV voltage		1100	O d.c.V			
PV voltage range	0	200-10	000 d.c.V			
PV Isc	32 d	.c.A*6	32 d.	c.A*7		
Max. input current	26 d	.c.A*6	26 d.	c.A*7		
Max. output power	50000W	60000W	70000W	75000W		
Max. apparent power	55500VA	66600VA	77700VA	83300VA		
Nominal output voltage		3W/N/PE 2	230/400 a.c.V	1		
Max. output current	80.5 a.c.A	96.6 a.c.A	112.7 a.c.A	120.8 a.c.A		
Nominal output frequency		51	0Hz	0		
Power factor range		0.8Leading	~ 0.8Lagging	/		
Safety level		Class I				
Ingress Protection	IP65					
Operation Ambient Temperature	-25°C - +60°C					
Software Version	TI1.0					



Certificate Number: CN-PV-200032

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specifications /standards 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 TECHNOLOGY CO., LTD

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P. R. China

**Product:** PV Grid inverter

Ratings & Principle Characteristics:

See Appendix to Certificate of Conformity

Models: MIC 750TL-X, MIC 1000TL-X, MIC 1500TL-X, MIC 2000TL-X, MIC 2500TL-X, MIC

3000TL-X, MIC 3300TL-X

**Brand Name:** Growatt

Tested according to: DIN V VDE V 0126-1-1:2013.08

Certificate Issuing Intertek Testing Services Ltd. Shanghai

Office Name & Address: 2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental

Area, Shanghai, P. R. China

**Test Reports No:** 200228032GZU-003

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Additional information in Appendix.

Signature

**Certification Manager: Grady Ye** 

Date: 14 April 2020



This is an Appendix to Certificate of Conformity Number: CN-PV-200032

Ratings & Principle Characteristics:

Maximum d.c. input voltage: 500 Vdc (for MIC 750TL-X, MIC 1000TL-X, MIC 1500TL-X, MIC 2000TL-X); 550Vdc (MIC 2500TL-X, MIC 3000TL-X, MIC 3300TL-X)

Input voltage range: 50-500Vdc (for MIC 750TL-X, MIC 1000TL-X, MIC1500TL-X, MIC 2000TL-X); 65-550Vdc (MIC 2500TL-X, MIC 3000TL-X, MIC 3300TL-X)

MPPT voltage range (full Load): 65-450Vdc (for MIC 750TL-X);85-450Vdc (MIC 1000TL-X); 130-450Vdc (for MIC 1500TL-X);170-450Vdc (for MIC 2000TL-X);200-500Vdc (for MIC 2500TL-X);250-500Vdc (for MIC 3000TL-X);

Max. input current: 13A

PV Isc: 16A

Nominal output voltage: 230Vac

Max. output current: 3.6A(for MIC 750TL-X);4.8A (for MIC 1000TL-X);7.1A (for MIC 1500TL-X);9.5A (for MIC 2000TL-X);11.9A (for MIC 2500TL-X);14.3A (for MIC 3000TL-X,

MIC 3300TL-X)

Nominal frequency: 50Hz

Nominal. output power: 750W (for MIC 750TL-X);1000W (for MIC 1000TL-X);1500W (for MIC 1500TL-X);2000W (for MIC 2000TL-X);2500W (for MIC 2500TL-X);3000W (for

MIC 3000TL-X);3300W (MIC 3300TL-X)

Max. apparent power: 750VA (for MIC 750TL-X);1000VA (for MIC 1000TL-X);1500VA (for MIC 1500TL-X);2000VA (for MIC 2000TL-X);2500VA (for MIC 2500TL-X);3000VA

(for MIC 3000TL-X);3300VA (MIC 3300TL-X) Power factor range: 0.8leading ~ 0.8lagging

Safety level: Class I

Ingress protection: IP65

Operating temperature range: -25 ~ +60°C

Software Version: GH1.0



Certificate Number: CN-PV-200002

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specifications /standards 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 TECHNOLOGY CO., LTD

> 1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P. R. China

**Product:** PV Grid inverter

**Ratings & Principle Characteristics:** 

See Appendix to Certificate of Conformity

Models: MID 10KTL3-X, MID 12KTL3-X, MID 15KTL3-X, MID 17KTL3-X, MID 20KTL3-X, MID

22KTL3-X, MID 25KTL3-X

Growatt **Brand Name:** 

Tested according to: DIN V VDE V 0126-1-1:2013.08 Automatic disconnecting device

**Certificate Issuing** 

Intertek Testing Services Ltd. Shanghai

Office Name & Address: 2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental

Area, Shanghai, P. R. China

**Test Reports No:** 190416196GZU-001

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Additional information in Appendix.

Signature

**Certification Manager: Grady Ye** 

Date: 14 January 2020



This is an Appendix to Certificate of Conformity Number: CN-PV-200002

Ratings & Principle Characteristics:

Maximum d.c. input voltage: 1100 Vdc Input voltage range:160-1000Vdc

MPPT voltage range (full Load): 280-850 V (for MID 10KTL3-X, MID 12KTL3-X); 420-850 V (for MID 15KTL3-X); 480-850 V (for MID 17KTL3-X, MID 20KTL3-X); 520-850 V (for MID 22KTL3-X, MID 25KTL3-X);

Max. input current: 2×25A (for the models except MID 25KTL3-X) ,25/37.5A (for MID 25KTL3-X)

PV Isc: 2×32A (for the models except MID 25KTL3-X), 32/48A (for MID 25KTL3-X) Nominal output voltage: 3W/N/PE 230V/400Vac

Max. output current: 16.0A (for MID 10KTL3-X); 19.3A (for MID 12KTL3-X); 24.2A (for MID 15KTL3-X); 27.4A (for MID 17KTL3-X); 31.9 A (for MID 20KTL3-X); 35.5A (for MID 22KTL3-X); 40.2 A (for MID 25KTL3-X)

Nominal frequency: 50/60 Hz

Max. output power: 10000W (for MID 10KTL3-X); 12000W (for MID 12KTL3-X);15000W (for MID 15KTL3-X); 17000W (for MID 17KTL3-X); 20000W (for MID 20KTL3-X); 25000W (for MID 25KTL3-X)

Max. apparent power: 11100VA (for MID 10KTL3-X); 13300VA (for MID 12KTL3-X); 16600VA (for MID 15KTL3-X); 18800VA (for MID 17KTL3-X); 22000VA (for MID 20KTL3-X); 24400VA (for MID 22KTL3-X); 27700VA (for MID 25KTL3-X)

20K1E3 NJ, 24400VA (101 WIID 22K1E3 NJ, 27700VA (10

Power factor range: 0.8leading ~ 0.8lagging

Safety level: Class I Ingress protection: IP65

Operating temperature range: -25 ~ +60°C

Software Version: TJ1.0



Certificate Number: CN-PV-200099

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specifications /standards 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 TECHNOLOGY CO., LTD

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P. R. China

**Product:** PV Grid inverter

Ratings & Principle Characteristics:

See Appendix to Certificate of Conformity

Models: MID 17KTL3-X1, MID 20KTL3-X1, MID 22KTL3-X1, MID 25KTL3-X1,

MID 30KTL3-X, MID 33KTL3-X, MID 36KTL3-X, MID 40KTL3-X

Brand Name: GROWATT

**Tested according to:** DIN V VDE V 0126-1-1:2013.08 Automatic disconnecting device

Certificate Issuing Intertorum Office Name & Address: 2/F (W

Intertek Testing Services Ltd. Shanghai

2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental

Area, Shanghai, P. R. China

**Test Reports No:** 200426141GZU-001

Additional information in Appendix.

Signature

**Certification Manager: Grady Ye** 

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Date: 03 August 2020



This is an Appendix to Certificate of Conformity Number: CN-PV-200099

Ratings & Principle Characteristics:

Model	MID 17KTL3- X1	MID 20KTL3- X1	MID 22KTL3- X1	MID 25KTL3- X1		
Max.PV voltage		1100	Vdc			
PV voltage range		200V – 1	000Vdc			
Max.input current		26A	*3			
PV Isc	e0 0	32A	*3			
Nominal output voltage	3W/N/PE, 230/400Vac					
Nominal output Frequency	50Hz					
Max.output current	28.5A	33.3A	36.7A	41.9A		
Max.output power	17000W	20000W	22000W	25000W		
Max.apparent power	18800VA 22000VA 24200VA 27700VA					
Power factor range	- 0	0.8Leading –	0.8 lagging			
Safety level	- 4	Clas	s I			
Ingress Protection		IP 6	56			
Operation Ambient Temperature	-25°C - +60°C					
Software Version		DM:	1.0			



This is an Appendix to Certificate of Conformity Number: CN-PV-200099

Ratings & Principle Characteristics:

Model		MID 30KTL3-X	MID 33KTL3-X	MID 36KTL3-X	MID 40KTL3-X			
Max.PV	voltage		1100Vdc					
PV volta	ge range		200V – 1	1000Vdc				
Max.inp	ut current	26	A*3	26	\*4			
PV Isc		32/	<b>A*3</b>	32/	\*4			
Nominal voltage	output	7 .	3W/N/PE 2	230/400Vac				
Nominal Frequen		50Hz						
Max.out	put current	50.5A	55.5A	60.0A	66.6A			
Max.out	put power	30000W	33000W	36000W	40000W			
Max.app power	arent	33300VA	36600VA	39600VA	44000VA			
Power fa	actor range	_ ^	0.8Leading -	- 0.8 lagging	6			
Safety le	vel		Cla	ss I				
Ingress F	Protection	IP 66						
Operation Tempera	on Ambient ature	-25°C - +60°C						
Software	eversion		DIV	11.0				



Certificate Number: 181016135GZU-001

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. This certificate is part of the full test report<s> and should be read in conjunction with it;

Applicant Name & Address: Shenzhen Growatt New Energy Technology Co.,Ltd

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District,

Shenzhen, P.R.China

Product Description: PV Grid inverter

Ratings & Principle See Annex to Test Certificate of Conformity

Characteristics:

MIN 2500TL-X, MIN 3000TL-X, MIN 3600TL-X, MIN 4200TL-X, MIN 4600TL-X,

MIN 5000TL-X, MIN 6000TL-X

MIN 2500TL-XH, MIN 3000TL-XH, MIN 3600TL-XH, MIN 4200TL-XH,

MIN 4600TL-XH, MIN 5000TL-XH, MIN 6000TL-XH

Relevant Standards DIN V VDE V 0126-1-1:2013.08

Automatic disconnecting device

Certificate Issuing Office: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou

Science City, GETDD, Guangzhou, China

Date of Tests: 16 Oct 2018 to 21 Feb 2019

Test Report Number(s): 181016135GZU-001

Additional information in Appendix.

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Signature

Models:

Name: Grady Ye
Position: Manager
Date: 27 Feb 2019

intertek



This is an Annex to Certificate of Conformity with Certificate/Report Number(s): 181016135GZU-001;

Ratings and principal characteristics

Model	MIN 2500TL-	MIN 3000TL-	MIN 3600TL-	- MIN 4200TL-	
May DV voltago	500 (			0 d.c.V	
Max.PV voltage					
PV voltage range	80-500			550 d.c.V	
PV Isc		16 d.c.			
Max.input current		12.5 d.c			
Max.output power	2500W	3000W	3600W	4200W	
Max.apparent power	2500VA	3000VA	3600VA	4200VA	
Nominal output voltage		230 a.c.V			
Max.output current	11.3 a.c.A	13.6 a.c.A	16 a.c.A	19 a.c.A	
Nominal output Frequency		50/60	Hz		
Power factor range		0.8Leading – 0	0.8 lagging		
Safety level		Class	i I		
Ingress Protection		IP 6	5		
Operation Ambient Temperature		- <b>25</b> ℃ - +	-60℃		
Model	MIN 4600TL-X	MIN 5000	TL-X	MIN 6000TL-X	
Max.PV voltage		550 d.	c.V		
PV voltage range		80-550	d.c.V		
PV Isc		16 d.c.	A*2		
Max.input current		12.5 d.c	.A*2		
Max.output power	4600W	4600W 5000W 6000W			
Max.apparent power	4600VA 5000VA 6000VA				
Nominal output voltage	230 a.c.V				
Max.output current	20.9 a.c.A	22.7	' a.c.A	27.2 a.c.A	



This is an Annex to Certificate of Conformity with Certificate/Report Number(s): 181016135GZU-001;

Ratings and principal characteristics

Nominal output Frequency	50/60Hz				
Power factor range		0.8Leading – 0	0.8 lagging		
Safety level		Class	5 I		
Ingress Protection		IP 6	5		
Operation Ambient Temperature		-25℃ - +	- <b>60</b> ℃		
Model	MIN 2500TL- XH	MIN 3000TL- XH	MIN 3600TL- XH	MIN 4200TL- XH	
Max.PV voltage	500 d	.c.V	550	d.c.V	
PV voltage range	80-500	d.c.V	80-55	0 d.c.V	
PV Isc		16 d.c.	A*2		
Max.input current		12.5 d.c	.A*2		
Max. DC voltage		480 d.	c.V		
DC voltage range		350-480	d.c.V		
Max. DC current		10 d.c	c.A		
Max.output power	2500W	3000W	3600W	4200W	
Max.apparent power	2500VA	3000VA	3600VA	4200VA	
Nominal output voltage		230 a.	c.V		
Max.output current	11.3 a.c.A	13.6 a.c.A	16 a.c.A	19 a.c.A	
Nominal output Frequency		50/60Hz			
Power factor range		0.8Leading – 0.8 lagging			
Safety level	Class I				
Ingress Protection	IP 65				
Operation Ambient Temperature		- <b>25</b> ℃ - +	- <b>60</b> ℃		



This is an Annex to Certificate of Conformity with Certificate/Report Number(s): 181016135GZU-001;

Ratings and principal characteristics

Model	MIN 4600TL-XH	MIN 5000TL-XH	MIN 6000TL-XH			
Max.PV voltage		550 d.c.V	•			
PV voltage range		80-550 d.c.V				
PV Isc	0.0	16 d.c.A*2				
Max.input current		12.5 d.c.A*2				
Max. DC voltage		480 d.c.V				
DC voltage range		350-480 d.c.V				
Max. DC current		10 d.c.A				
Max.output power	4600W	5000W	6000W			
Max.apparent power	4600VA	5000VA	6000VA			
Nominal output voltage	230 a.c.V					
Max.output current	20.9 a.c.A	22.7 a.c.A	27.2 a.c.A			
Nominal output Frequency		50/60Hz				
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	AL1.0 for MIN 7	AL1.0 for MIN TL-XH series, AK 1.0 for MIN TL-X series				



Certificate Number: CN-PV-200089

On the basis of the tests undertaken, the samples of the below product have been found to comply with the requirements of the referenced specifications /standards 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 TECHNOLOGY CO., LTD

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District, Shenzhen, P. R. China

**Product:** PV Grid inverter

Ratings & Principle Characteristics:

See Appendix to Certificate of Conformity

**Models:** MOD 3000TL3-X, MOD 4000TL3-X, MOD 5000TL3-X,

MOD 6000TL3-X, MOD 7000TL3-X, MOD 8000TL3-X, MOD 9000TL3-X, MOD 10KTL3-X, MOD 11KTL3-X, MOD 12KTL3-X, MOD 15KTL3-X

Brand Name: GROWATT

**Tested according to:** DIN V VDE V 0126-1-1:2013.08 Automatic disconnecting device

Certificate Issuing Intertek Testing Services Ltd. Shanghai

Office Name & Address: 2/F (West Side), No. 707, Zhangyang Road, Free Trade Experimental

Area, Shanghai, P. R. China

**Test Reports No:** 200427166GZU-001

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Additional information in Appendix.

**Signature** 

**Certification Manager: Grady Ye** 

Date: 21 Jul 2020



This is an Appendix to Certificate of Conformity Number: CN-PV-200089

Ratings & Principle Characteristics:

Model	MOD 3000TL3- MOD 4000TL3		MOD 5000TL3-	MOD 6000TL3-			
	Х	X	X	Х			
Max. PV		1100	OVdc				
voltage							
PV voltage		140 – 1	.000Vdc				
range							
PV Isc		2*:	16A				
Max. input current		2*:	13A				
Max. output	3000 W	3000 W 4000 W 5000 W 6000					
Max. apparent power	3300 VA	4400 VA	5500 VA	6600 VA			
Nominal output voltage		3W/N/PE 2	230/400Vac				
Max. output current	5.0A 6.7A 8.3A 10.0A						
Nominal output frequency		50	Hz				
Power factor range		0.8Leading t	o 0.8Lagging				
Safety level		Cla	ss I				
Ingress protection	IP66						
Operation ambient temperature	-25°C ~ +60°C						
Software Version	1	DL	1.0				



This is an Appendix to Certificate of Conformity Number: CN-PV-200089.

Ratings & Principle Characteristics:

Model	MOD 7000TL3-	MOD 8000TL3-	MOD 9000TL3- MOD 10KTL3-X			
	X	Х	Х			
Max. PV voltage		1100	OVdc			
PV voltage range		140 – 1	000Vdc			
PV Isc		2*1	16A			
Max. input current		2*1	13A			
Max. output power	7000 W	7000 W 8000 W 9000 W				
Max. apparent power	7700 VA	8800 VA	9900 VA	11000 VA		
Nominal output voltage		3W/N/PE 230/400Vac				
Max. output current	11.7A	13.3A	15.0A	16.7A		
Nominal		0 0	9	0		
output frequency		50	Hz	0		
Power factor range		0.8Leading t	o 0.8Lagging			
Safety level		Class I				
Ingress protection	IP66					
Operation ambient temperature	-25°C ~ +60°C					
Software Version	7	DL	1.0			



This is an Appendix to Certificate of Conformity Number: CN-PV-200089.

Ratings & Principle Characteristics:

Model	MOD 11KTL3-X	MOD 12KTL3-X	MOD 13KTL3-X	MOD 15KTL3-X		
Max. PV voltage		1100Vdc				
PV voltage range		140 – 1	.000Vdc			
PV Isc	2*16A		16/32A			
Max. input current	2*13A		13/26A			
Max. output power	11000 W	12000 W 13000 W 15000 V				
Max. apparent power	12100 VA	13200 VA	14300 VA	16500 VA		
Nominal output voltage	3W/N/PE 230/400Vac					
Max. output current	18.3A	20.0A	21.7A	25.0A		
Nominal output frequency		50	Hz			
Power factor range		0.8Leading t	to 0.8Lagging	1		
Safety level		Cla	iss I	f -		
Ingress protection		IP66				
Operation ambient temperature	-25°C ~ +60°C					
Software Version		DL	1.0			



Certificate Number: 180711108GZU-001

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. This certificate is part of the full test report<s> and should be read in conjunction with it;

Applicant Name & Address: SHENZHEN GROWATT NEW ENERGY TECHNOLOGY CO., LTD

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28,

GuangHui Road, LongTeng Community, Shiyan Street, Baoan District,

Shenzhen, P.R.China

Product Description: PV Grid inverter

Ratings & Principle See Annex to Certificate of Conformity Characteristics:

Models: Growatt 3000-S, Growatt 2500-S, Growatt 2000-S,

Growatt 1500-S, Growatt 1000-S, Growatt 750-S

Relevant Standards DIN V VDE V 0126-1-1:2013.08 Automatic disconnecting device

Certificate Issuing Office: Same as Intertek Legal Entity

Date of Tests: 12 Jul 2018 – 31 Aug 2018

Test Report Number(s): 180711108GZU-001

Additional information in Appendix.

/ suste

Signature

Name: Grady Ye
Position: Manager

**Issuing Office: Intertek Legal Entity: Intert** 

**Testing Services Shenzhen Ltd.** 

**Guangzhou Branch** 

Date: 03 Sep 2018



This is an Annex to Certificate of Conformity with certificate/Report Number(s): 180711108GZU-001. The issuing office is Intertek Legal Entity as above.

Ratings and principal characteristics

Model	Growatt 3000-S	Growatt 2500-S	Growatt 2000-S	Growatt 1500-S	Growatt 1000-S	Growatt 750-S	
			Input			<u> </u>	
Max. DC input Voltage:	550Vdc	550Vdc 500Vdc 450Vdc					
Max. input current:	13A	12A	11A	10A	10A	11A	
DC input range:	70-550Vdc	70-500Vdc	1	70-450Vdc		50- 450Vdc	
			Output	1			
Nominal AC output voltage:		230Vac					
Nominal frequency:		-	50	Hz	0		
AC output power:	3000VA	2500VA	2000VA	1600VA	1000VA	750VA	
Nominal AC output current:	13A	10.8A	8.7A	6.9A	4.3A	3.3A	
Power factor:	0.8 Leading to 0.8 Lagging						
Ingress protection:	IP65						
Protection Class:	Class I						
Operation Ambient Temp.:		-25°C to +60°C					



Certificate Number: 171114063GZU-003

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. This certificate is part of the full test report<s> and should be read in conjunction with it;

Applicant Name & Address: SHENZHEN GROWATT NEW ENERGY TECHNOLOGY CO., LTD

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District,

Shenzhen, P.R.China

Product Description: PV Grid inverter

Ratings & Principle See Annex to Certificate of Conformity Characteristics:

Models: Growatt 3000 TL3-S, Growatt 4000 TL3-S, Growatt 5000 TL3-S,

Growatt 6000 TL3-S, Growatt 7000 TL3-S, Growatt 8000 TL3-S Growatt 9000 TL3-S, Growatt 10000 TL3-S, Growatt 11000 TL3-S

Growall 9000 1L5-5, Growall 10000 1L5-5, Growall 11000 1L5-5

Relevant Standards DIN V VDE V 0126-1-1:2013.08 Automatic disconnecting device

Certificate Issuing Office: Same as Intertek Legal Entity

Date of Tests: 14 Nov., 2017 – 27 April., 2018

Test Report Number(s): 161118021GZU-004 dated 31 Mar., 2017 & Revision 1:27 Oct., 2017 &

Revision 1: 13 Jun., 2018

Additional information in Appendix.

Signature

Name: Grady Ye
Position: Manager

Issuing Office: Intertek Legal Entity: Intertek

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**Testing Services Shenzhen Ltd.** 

**Guangzhou Branch** 

Date: 14 Jun 2018



This is an Annex to Certificate of Conformity with certificate/Report Number(s): 161118021GZU-004 dated 31 Mar., 2017 & Revision 1:27 Oct., 2017 & Revision 1: 13 Jun., 2018. The issuing office is Intertek Legal Entity as above.

Ratings and principal characteristics

MODEL	Growatt 8000 TL3-S	Growatt 9000 TL3-S	Growatt 10000 TL3- S	Growatt 11000 TL3- S	Growatt 7000 TL3-S
Max PV voltage			1000Vdc		
Voltage range			160-1000Vdc		
MPPT voltage	360-850	400-850	450-	-850	320-850
PV Isc	16A/16A				
Max power	8.8KVA	9.9KVA	11.0KVA	12.1KVA	7.7KVA
Max output current	3*13.3A	3*15A	3*16.7A	3*18.3A	3*11.7A
Output voltage		3W/N	N/PE 230Vac/4	00Vac	
Nominal Frequency			50Hz	V	
Power Factor		0.8 Le	eading to 0.8 La	agging	
Ambient Temperature	-25℃ - +60℃				
Protection Degree	IP65				
Protection Class			Class I		

- ...



This is an Annex to Certificate of Conformity with certificate/Report Number(s): 161118021GZU-004 dated 31 Mar., 2017 & Revision 1:27 Oct., 2017 & Revision 1: 13 Jun., 2018. The issuing office is Intertek Legal Entity as above.

Ratings and principal characteristics

MODEL	Growatt 3000 TL3-S	Growatt 4000 TL3-S	Growatt 5000 TL3-S	Growatt 6000 TL3-S
Max PV voltage	1000Vdc			
Voltage range	140-1000Vdc			
MPPT voltage	160-800	200-800	250-800	290-800
PV Isc	16A/16A			
Max power	3.0KVA	4.0KVA	5.0KVA	6.0KVA
Max output current	3*4.5A	3*6.1A	3*7.6A	3*9.1A
Output voltage	3W/N/PE 230Vac/400Vac			
Nominal Frequency	50Hz			
Power Factor	0.8 Leading to 0.8 Lagging			
Ambient Temperature	- <b>25</b> ℃ - +60℃			
Protection Degree	IP65			
Protection Class	Class I			



Certificate No.: 1788AP1127N010001

Equipment: PV grid inverter

Brand Name:

Growatt

Test Model No.: Growatt 12000 TL3, Growatt 12000 TL3-S,

Growatt 13000 TL3-S, Growatt 15000 TL3-S

Applicant: Shenzhen Growatt New Energy Technology Co., Ltd

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28, GuangHui Road, LongTeng Community, Shiyan Street, Baoan District,

Shenzhen, P.R.China

Report No.: PVDE171127N010-1

#### Use in accordance with regulations:

Power generation systems connected to the low-voltage distribution network.

At the time of issue of this certificate the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

#### Applied rules and standards

DIN VDE 0126-1-1 (VDE V 0126-1-1):2013-08

Automatic disconnection device between a generator and the public low-voltage grid

Name: Ted Wu
Senior Manager/ PV Inverter Team

Date: 2018-05-10

This document shall not be reproduced, except in full, without the written approval of
Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch.
Information given in this document is related to the tested specimen of the described electrical sample.



Verification Number: 180314093GZU-002

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. This verification is part of the full test report<s> and should be read in conjunction with it; This verification replaces previous verification number 160816043G7U-001 dated: 27-Oct-2016

Applicant Name & Address:

SHENZHEN GROWATT NEW ENERGY TECHNOLOGY CO., LTD

1st East & 3rd Floor of Building A, Building B, Jiayu Industrial Park, #28,

GuangHui Road, LongTeng Community, Shiyan Street, Baoan District,

Shenzhen, P.R.China

**Product Description:** 

PV Grid inverter

Ratings & Principle

See Annex to Test Verification of Conformity

Characteristics:

Growatt 17000TL3-S, Growatt 17000TL3-SE, Growatt 20000TL3-S,

Growatt 20000TL3-SE, Growatt 25000TL3-S, Growatt 25000TL3-SE,

Growatt 30000TL3-S, Growatt 30000TL3-SE, Growatt 33000TL3-S,

Growatt 33000TL3-SE, Growatt 40000TL3-NS, Growatt 40000TL3-NSE,

Growatt 50000TL3-S, Growatt 50000TL3-SE

Relevant Standards

DIN V VDE V 0126-1-1:2013.08 Automatic disconnecting device

Verification Issuing Office:

Same as Intertek Legal Entity

intertek

Date of Tests:

14 Mar., 2018 - 20 May., 2018

Test Report Number(s):

160816043GZU-001 and Revision 1:31 May., 2018

Additional information in Appendix.

Signature

Name:

**Grady Ye** 

Position:

Manager

**Issuing Office: Intertek Legal Entity: Intertek** 

Testing Services Shenzhen Ltd.

**Guangzhou Branch** 

Date:

05 Jun 2018



#### **APPENDIX: Test Verification of Conformity**

This is an Annex to Test Verification of Conformity with Verification/Report Number(s): 160816043GZU-004 and Revision 1:31 May., 2018. The issuing office is Intertek Legal Entity as above.

Ratings and principal characteristics

MODEL	Growatt	Growatt	Growatt	Growatt	
WODEL	30000TL3-S,	33000TL3-S,	40000TL3-NS,	50000TL3-S,	
	Growatt	Growatt	Growatt	Growatt	
	30000TL3-SE	33000TL3-SE	40000TL3-NSE	50000TL3-SE	
Max PV voltage	1000Vdc				
Voltage range	200-1000Vdc				
MPPT voltage	450-800Vdc		540-800Vdc	645-850Vdc	
Max input current	34A/34A	A 38A/38A			
PV Isc	64A/64A				
Max power	33.3KVA	36.6KVA	44.4KVA	53.3KVA	
Max AC output current	3*48A	3*54A	3*64A	3*64A	
Output voltage				3W/PE, 480Vac	
Nominal	50Hz				
Frequency					
Power Factor	0.8 Leading to 0.8 Lagging				
Ambient	-25°C - +60°C				
Temperature					
Protection	IP65				
Degree /	Sept.				

Signature

Name:

Grady Ye

Position:

Manager

Issuing Office: Intertek Legal Entity: Intertek Testing

Services Shenzhen Ltd. Guangzhou

intertek

**Branch** 

Date:

05 Jun 2018



### **APPENDIX: Test Verification of Conformity**

This is an Annex to Test Verification of Conformity with Verification/Report Number(s): 160816043GZU-001 and Revision 1:31 May., 2018.. The issuing office is Intertek Legal Entity as above.

Ratings and principal characteristics

	- immedia		OF COOTI 2 C		
MODEL	Growatt 17000TL3-S,	Growatt 20000TL3-S,	Growatt 25000TL3-S,		
	Growatt 17000TL3-SE	Growatt 20000TL3-SE	Growatt 25000TL3-SE		
Max PV voltage	1000Vdc				
Voltage range	200-1000Vdc				
MPPT voltage	400-800Vdc				
(full load)					
Max input	37.5/37.5A				
current					
PV Isc	45A/45A				
Max power	18.8KVA	22.2KVA	27.7KVA		
Output voltage	3W/N/PE 230Vac/400Vac				
Max output	3×27.5 A	3×32.2	3×40.3		
current					
Nominal		50Hz			
Frequency	the same of the same				
Power Factor	0.8 Leading to 0.8 Lagging				
Ambient		-25℃ - +60℃			
Temperature	1100				
Protection /	WEIN OLD	IP65			
Degree /	18				

Signature

Name:

**Grady Ye** 

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Position:

Manager

**Issuing Office: Intertek Legal Entity: Intertek Testing** 

Services Shenzhen Ltd. Guangzhou

intertek

**Branch** 

Date:

05 Jun 2018