Ginlong Technologies Co., Ltd.
No. 57 Jintong Road,
Binhai Industrial Park - Xiangshan
Ningbo - Zhejiang Province, 315712 - P.R. China
Tel: (+86) 574 6580 2188 - info@ginlong.com

Dichiarazione di conformità alle prescrizioni della Norma CEI 0-16:2022-03

Declaration of Conformity to Requirements of the Standard CEI 0-16:2022-03

TIPOLOGIA DI APPARATO CUI SI RIFERISCE LA DICHIARAZIONE:

Type of Device to Which This Declaration Refers:

DISPOSITIVO DI INTERFACCIA *Interface Device*	**PROTEZIONE DI INTERFACCIA** *Interface Protection*	**DISPOSITIVO DI CONVERSIONE STATICA** *Static Conversion Device*	**DISPOSITIVO DI GENERAZIONE ROTANTE** *Rotary Generating Device*
Sì/Yes	*Sì/Yes*	*Sì/Yes*	*No*

COSTRUTTORE: *Manufacturer*	**MODELLO DI INVERTER:** *Inverter Model*	**VERSIONE FIRMWARE:** *Firmware Version*	**NUMERO DI FASI (monofase/trifase)** *Number of Phase (Single/Three Phase)*	**POTENZA NOMINALE:** *Rated Power [W]*
Ginlong Technologies Co., Ltd. *No. 57 Jintong Road, Binhai Industrial Park - Xiangshan Ningbo - Zhejiang Province, 315712 - P.R. China*	*Solis-80K-5G*	*32 e superiore/and upper*	*Trifase/Three-Phase*	*80000*
	Solis-100K-5G			*100000*
	Solis-110K-5G			*110000*
	S5-GC80K			*80000*
	S5-GC100K			*100000*
	S5-GC110K			*110000*

NOTA: Il dispositivo è in grado di limitare la Idc allo 0,5% della corrente nominale.
Note: The device is capable to limit Idc to 0.5% of the rated current.

Esaminati i Fascicoli Prove n°CN21ON05 001, emessi dal laboratorio TÜV Rheinland Product Service GmbH con accreditamento DAkkS (D-ZE-14169-01-02)
Ai sensi degli articoli 46 e 47 del DPR 28 Dicembre 2000, n° 445, il sottoscritto Yiming Wang, in qualità di legale rappresentante di Ginlong Technologies Co., Ltd. - No. 57 Jintong Road - Binhai Industrial Park - Xiangshan - Ningbo - Zhejiang Province - China, dichiara che il prodotto indicato è conforme alle prescrizioni CEI-0-16: 2022-03.

Taken into account test report No.CN21ON05 001 issued by test lab TÜV Rheinland certification and Testing(China) Co.,Ltd Guangzhou Branch with DAkkS accreditation (No. D-ZE-14169-01-02)
According with the articles 46 and 47 of Italian DPR 28 December 2000, n° 445, the undersigned Yiming Wang, as legal representative of Ginlong Technologies Co., Ltd. - No. 57 Jintong Road - Binhai Industrial Park - Xiangshan - Ningbo - Zhejiang Province - China, hereby declares that the product complies with the requirements of CEI-0-16: 2022-03

DATA 01/12/2022
DATE 01/12/2022

FIRMA LEGALE RAPPRESENTANTE
SIGNATURE LEGAL REPRESENTATIVE

I hereby certify, that the above is the true signature, subscribed in my presence, of

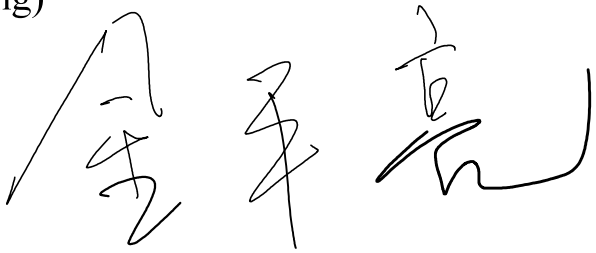
Mr. Yiming Wang, born on April 13, 1981, business address No.57 Jintong Road, Binhai Industrial Park, Xiangshan Ningbo, Zhejiang Province, China, identified himself by submission of his valid government-issued photo identification

Acting on behalf of Ginlong Technologies Co., Ltd. as Chief Executive Officer under the document

Dichiarazioni di conformit_Declaration_of _Comformity_CEI_0-16_2022-03_S5-GC(100-110)K_REV.00.

Grandall Law Firm (Beijing)

December 6, 2022



C E R T I F I C A T E
of Conformity

TÜVRheinland®

Registration No.: AK 50522392 0001

Report No.: CN21ON05 001

Holder:
Ginlong technologies Co., Ltd.
No.57 Jintong Road, Binhai,
(seafront), Industrial Park,
Xiangshan Ningbo
315712 Zhejiang
P.R. China

Product:
PV-Inverter
(Grid-Connected PV Inverter)

Identification:

Type Designation	:	Solis-80K-5G Solis-100k-5G Solis-110K-5G S5-GC80K S5-GC100K S5-GC110K
Serial Number	:	Engineering Samples
Firmware version	:	V32
Remark(s)	:	Refer to report CN21ON05 001 for details.

Tested acc. to: CEI 0-16:2019

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body

TÜV Rheinland LGA Products GmbH Nürnberg Certifizierungsstelle TÜV Rheinland®

Date 29.10.2021

Weichun LI

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

TÜV Rheinland (China) Ltd.
Member of TÜV Rheinland Group

TÜVRheinland®
Precisely Right.

Ginlong technologies Co., Ltd.
Zhang Kun

No.57 Jintong Road, Binhai,
(seafront), Industrial Park,
Xiangshan Ningbo
315712 Zhejiang
P.R. China

Date : 29.10.2021
Our ref. : Tianxin 01
Your ref.: Kun Zhang

Ref : AK Certificate of Conformity

Type of Equipment : Grid-Connected PV Inverter
Model Designation : See Certificate
Certificate No. : AK 50522392 0001
Report No. : CN21ON05 001

Dear Zhang Kun,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body

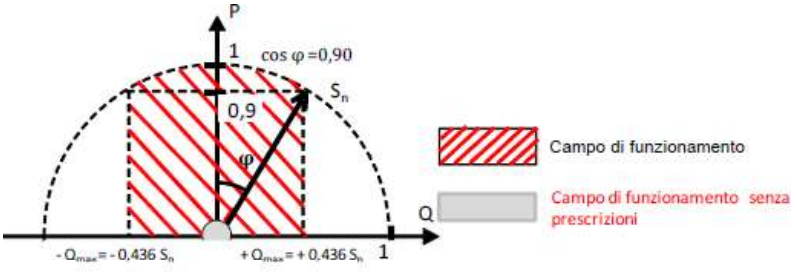
Weichun Li

CC: Ginlong technologies Co., Ltd.

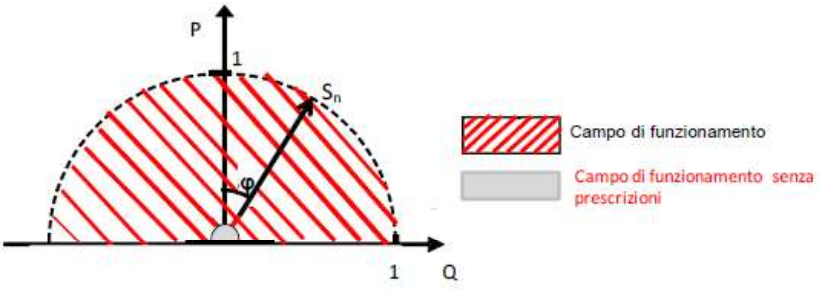
Enclosure

TÜV Rheinland (China) Ltd.
莱茵检测认证服务（中国）有限公司
Unit 707, AVIC Bldg., No. 10B, Central Road, East 3rd Ring Road, Chaoyang District, Beijing, 100022, P.R.China
北京市朝阳区东三环中路乙10号 艾维克大厦707室 邮编：100022
Tel: (8610)6566 6660
Fax: (8610)6566 6667
e-mail: info@bj.chn.tuv.com
Internet: http://www.chn.tuv.com

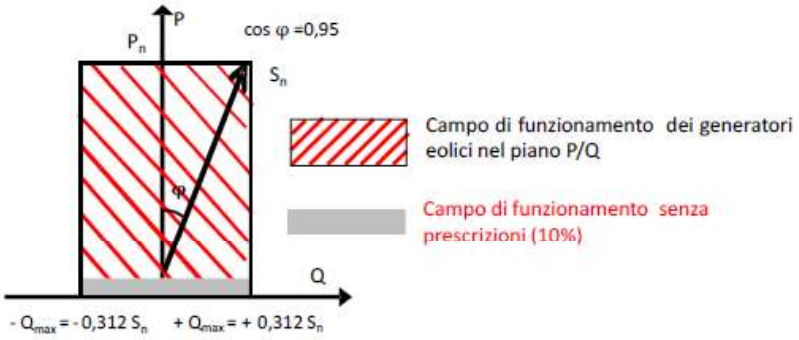
N.6.1 Verifica della capability di erogazione della potenza reattiva ***/reactive power production capability***	
Ambient temperature (°C) .....:	25 °C
Humidity (RH %) .....:	40 %
Instrumentation list.....:	See table "Measurement equipment and instrumentation"
Uncertainty .....:	See table "Metodi di prova/Testing methods"
Potenza massima dell'impianto di destinazione: *Maximum power of the destination plant:*	☐ PV plant < 400 KW *(see picture 1A)* ☒ PV plant ≥ 400 KW *(see picture 1B)* ☐ Wind generator *(see picture 1C)*



Picture 1A



Picture 1B



Picture 1C

For each of the 11 levels of active power, 1 values of inductive reactive power and 1 values of capacitive reactive power must be recorded, as averaged values in 1 min, based on the measurements at the fundamental frequency in a window of 200ms.

Operator .....:	Allen Hu
Supervisor .....:	Tobias Yang
Test Date .....:	14.06.2021

N.6.1.1 Modalità di esecuzione e registrazione della prova applicabile a generatori statici
/ test execution and recording modes (applicable to static generators)

The DUT is set so that it can absorb (inductive behavior) and deliver (capacitive behavior) the maximum reactive power available in each of the active power bins (0%, 10%, …, 100%).
The input power is set such that the DUT can deliver the maximum active power.

The maximum absorption capability (Q min) and delivery (Qmax) of reactive power resulting from the sequence of the above measures and that for Q = 0 has to be documented in tabular form.
The test is passed successfully if the detected value of maximum reactive power, reported in a P-Q diagram, is external or at least coincident with the perimeter of the minimum capability of Picture 1B.

For each measured point, a maximum deviation of reactive power AQ ≤ ± 2.5% of the rated apparent power is allowed.
Values are measured as 1-min average.

Table 6.1.1a: Maximum capability P-Q (Q=0)

Power-Bin	Active power		Reactive Power		DC Power		Power Factor
	[W]	p.u.	[VA]	p.u.	[W]	p.u.	
0% ±5%	2179.2	1.98	1158.8	1.05	2201.0	2.00	0.999
10% ±5%	10897.3	9.91	1263.9	1.15	11006.3	10.01	0.999
20% ±5%	21864.6	19.88	1465.6	1.33	22083.2	20.08	0.999
30% ±5%	33823.6	30.75	1586.5	1.44	34161.8	31.06	0.999
40% ±5%	44700.2	40.64	1716.0	1.56	45147.2	41.04	0.999
50% ±5%	55610.5	50.56	1876.2	1.71	56166.6	51.06	0.999
60% ±5%	66512.9	60.47	1980.5	1.80	67178.0	61.07	0.999
70% ±5%	77433.2	70.39	-938.6	-0.85	78207.5	71.10	0.999
80% ±5%	88326.2	80.30	-2448.6	-2.23	89209.5	81.10	0.999
90% ±5%	99217.2	90.20	-2647.3	-2.41	100209.4	91.10	0.999
100% ±5%	109933.3	99.94	-2812.1	-2.56	111032.6	100.94	0.999

Table 6.1.1b: Maximum capability P-Q (Q=Qmax|$_{cap}$)

Power-Bin	Active power		Reactive Power		**Capability limit for reactive power (picture 1B +/- 2.5%Sn)**	DC Power		Power Factor
	[W]	p.u.	[VA]	p.u.		[W]	p.u.	
0% ±5%	1060.6	0.96	108365.2	98.51	-1.49	1071.2	0.97	0.008
10% ±5%	10359.6	9.42	108332.1	98.48	-1.52	10463.2	9.51	0.009
20% ±5%	21831.1	19.85	108502.0	98.64	-1.36	22049.4	20.04	0.196
30% ±5%	32225.2	29.30	108457.2	98.60	-1.40	32547.5	29.59	0.285
40% ±5%	43616.0	39.65	108205.7	98.37	-1.63	44052.2	40.05	0.373
50% ±5%	54159.6	49.24	108307.4	98.46	-1.54	54701.2	49.73	0.446
60% ±5%	54347.1	49.41	108239.5	98.40	-1.60	54890.6	49.90	0.448
70% ±5%	54330.6	49.39	108156.8	98.32	-1.68	54873.9	49.89	0.448
80% ±5%	54013.4	49.10	108358.9	98.51	-1.49	54553.5	49.59	0.445
90% ±5%	54366.9	49.42	108172.7	98.34	-1.66	54910.6	49.92	0.449
100% ±5%	53879.9	48.98	108467.1	98.61	-1.39	54418.7	49.47	0.444

Table 6.1.1c: Maximum capability P-Q (Q=Qmax\|ind)

Power-Bin	Active power		Reactive Power		Capability limit for reactive power (picture 1B +/- 2.5%Sn)	DC Power		Power Factor
	[W]	p.u.	[VA]	p.u.		[W]	p.u.	
0% ±5%	663.2	0.60	-108629.1	-98.75	1.25	669.8	0.61	0.007
10% ±5%	10339.5	9.40	-108637.0	-98.76	1.24	10442.9	9.49	0.094
20% ±5%	21187.4	19.26	-108699.1	-98.82	1.18	21399.3	19.45	0.189
30% ±5%	32092.4	29.17	-108686.0	-98.81	1.19	32413.3	29.47	0.281
40% ±5%	40454.8	36.78	-108737.3	-98.85	1.15	40859.3	37.14	0.347
50% ±5%	40356.3	36.69	-108784.4	-98.89	1.11	40759.9	37.05	0.347
60% ±5%	45754.4	41.59	-109486.3	-99.53	0.47	46211.9	42.01	0.385
70% ±5%	45783.5	41.62	-109563.4	-99.60	0.40	46241.3	42.04	0.386
80% ±5%	45844.3	41.68	-109567.2	-99.61	0.39	46302.7	42.09	0.388
90% ±5%	45688.7	41.54	-109579.2	-99.62	0.38	46145.6	41.95	0.385
100% ±5%	45568.3	41.43	-109435.3	-99.49	1.25	46024.0	41.84	0.387