

# Compliance Document

No. D 086470 0088 Rev. 01

**Holder of Certificate:** **Ginlong Technologies Co., Ltd.**

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PEOPLE'S REPUBLIC OF CHINA

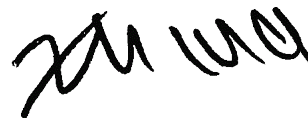
**Product:**

**Converter**  
**Hybrid inverter and AC coupled energy**  
**inverter with storage battery system**

This Compliance document confirms the compliance with the listed standards on a voluntary basis. It refers only to the sample submitted for testing and certification and does not certify the quality or safety of the serial products. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704092103620-01

**Date,** 2022-01-25



( Zhengdong Ma )

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## Model(s):

AC coupled energy inverter: RAI-3K-48ES-5G

Hybrid inverter: RHI-3K-48ES, RHI-3K-48ES-5G, RHI-3K-48ES-5G-NS, RHI-3.6K-48ES, RHI-3.6K-48ES-5G, RHI-3.6K-48ES-5G-NS, RHI-4K-48ES-5G-NS, RHI-4.6K-48ES, RHI-4.6K-48ES-5G, RHI-4.6K-48ES-5G-NS, RHI-5K-48ES, RHI-5K-48ES-5G, RHI-5K-48ES-5G-NS, RHI-6K-48ES-5G, RHI-6K-48ES-5G-NS, S5-EH1P3K-L, S5-EH1P3.6K-L, S5-EH1P4.6K-L, S5-EH1P5K-L, S5-EH1P6K-L

Storage battery system:

US2000 (1-8 pieces)

US3000 (1-8 pieces)

Force -L1 (2-7 pieces)

Force -L2 (2-4 pieces)

US2000C (1-8 pieces)

Phantom-S (1-8 pieces)

US3000C (1-8 pieces)

## Parameters:

Please see the attachment from page 3 to page 9

## Tested according to:

CEI 0-21:2019/V1:2020

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AC coupled energy inverter with storage battery system:		
1) Storage battery system parameters:		
Battery Type:	Li-ion	
Model:	Manufacturer	Piece(s) of battery module recommended
US2000	Pylon Technologies Co., Ltd.	1-8 pieces
US3000	Pylon Technologies Co., Ltd.	1-8 pieces
Force -L1	Pylon Technologies Co., Ltd.	2-7 pieces
Force -L2	Pylon Technologies Co., Ltd.	2-4 pieces
US2000C	Pylon Technologies Co., Ltd.	1-8 pieces
US3000C	Pylon Technologies Co., Ltd.	1-8 pieces
Phantom-S	Pylon Technologies Co., Ltd.	1-8 pieces
BMS firmware version	V4.6	
2) AC coupled energy inverter		
Model name:	RAI-3K-48ES-5G	
a) Battery:		
Battery Type:	Li-ion	
Battery voltage range:	40-60 Vd.c.	
Max. Charge current:	60 Ad.c.	
Max. Discharge current:	60 Ad.c.	
b) AC-Output (Back-up):		
Rated output voltage:	230 Va.c.	
Rated frequency:	50 Hz	
Rated output current:	13 Aa.c.	
Rated output active power:	3000 W	
Rated output apparent power:	3000 VA	
c) AC-Output (Grid Side):		
Rated output voltage:	230 Va.c.	
Rated frequency:	50 Hz	
Rated output current:	13 Aa.c.	
Max. output active power:	3000 W	
Max. output apparent power:	3000 VA	
Power factor:	0.8 leading - 0.8 lagging	
d) AC input:		
Rated input voltage:	230 Va.c.	
Rated frequency:	50 Hz	
Max. input current:	32 Aa.c.	
e) General:		
Protective class:	Class I	
Operation temperature range:	-25...60°C	
Ingress protection:	IP65	
Overvoltage-category:	II (DC), III (MAINS)	

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Hybrid inverter with storage battery system:				
1) Storage battery system parameters:				
Battery Type:	Li-ion			
Model:	Manufacturer	Piece(s) of battery module recommended		
US2000	Pylon Technologies Co., Ltd.	1-8 pieces		
US3000	Pylon Technologies Co., Ltd.	1-8 pieces		
Force -L1	Pylon Technologies Co., Ltd.	2-7 pieces		
Force -L2	Pylon Technologies Co., Ltd.	2-4 pieces		
US2000C	Pylon Technologies Co., Ltd.	1-8 pieces		
US3000C	Pylon Technologies Co., Ltd.	1-8 pieces		
Phantom-S	Pylon Technologies Co., Ltd.	1-8 pieces		
BMS firmware version	V4.6			
2) Hybrid inverter:				
Model name	RHI-3K-48ES	RHI-3.6K-48ES	RHI-4.6K-48ES	RHI-5K-48ES
a) PV input parameters:				
Max. Input Voltage:	600 Vd.c.			
MPP Voltage Range:	90-520 Vd.c.			
Max. Input Current:	2×11 Ad.c.			
Isc PV:	2×17,2 Ad.c.			
b) Battery parameters:				
Battery Type:	Li-Ion			
Battery Voltage Range:	42-58 Vd.c.			
Max. Charge Current:	62,5 Ad.c.			
Max. Discharge Current:	62,5 Ad.c.			
c) AC-Output (Back-up) parameters:				
Rated Output Voltage:	230 Va.c.			
Rated Output Frequency:	50 Hz			
Rated Output Current:	13 Aa.c.			
Rated Output Power:	3000 W			
d) AC-Output (Grid Side) parameters:				
Rated Output Voltage:	230 Va.c.			
Rated Output Frequency:	50 Hz			
Rated Output Power:	3000 W	3600 W	4600 W	5000 W
Max. Apparent Output Power:	3300VA	4000VA	4600VA	5500VA
Max. Output Current:	15,7 Aa.c.	17,3 Aa.c.	23 Aa.c.	23,9 Aa.c.
Model name	RHI-3K-48ES	RHI-3.6K-48ES	RHI-4.6K-48ES	RHI-5K-48ES
Power Factor(adj.):	0,8(lagging)...0,8(leading)			
e) AC input parameters:				
Rated Voltage:	230 Va.c.			
Current (Maximum Continuous):	23,9 Aa.c.			
Rated Frequency:	50 Hz			
f) General:				
Operating Temperature Range:	-25 °C...+60 °C			
Protective Class:	I			
Ingress Protection:	IP65			
Overvoltage Category:	II(PV), III(MAINS)			
Inverter Topology:	Non-isolated			

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Model name	RHI-3K-48ES	RHI-3.6K-48ES	RHI-4.6K-48ES	RHI-5K-48ES
Power Factor(adj.):	0,8(lagging)...0,8(leading)			
e) AC input parameters:				
Rated Voltage:	230 Va.c.			
Current (Maximum Continuous):	23,9 Aa.c.			
Rated Frequency:	50 Hz			
f) General:				
Operating Temperature Range:	-25 °C...+60 °C			
Protective Class:	I			
Ingress Protection:	IP65			
Overvoltage Category:	II(PV), III(MAINS)			
Inverter Topology:	Non-isolated			

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2) Hybrid inverter:			
Model name	RHI-3K-48ES-5G, RHI-3K-48ES-5G-NS	RHI-3.6K-48ES-5G, RHI-3.6K-48ES-5G-NS	RHI-4K-48ES-5G-NS
a) PV input parameters:			
Max. Input Voltage:	600 Vd.c.		
MPP Voltage Range:	90-520 Vd.c.		
Max. Input Current:	2×11 Ad.c.		
Isc PV:	2×17,2 Ad.c.		
b) Battery parameters:			
Battery Type:	Li-ion / Lead-acid		
Battery Voltage Range:	42-58 Vd.c.		
Max. Charge Current:	62,5 Ad.c.		
Max. Discharge Current:	62,5 Ad.c.		
c) AC-Output (Back-up) parameters:			
Rated Output Voltage:	230 Va.c.		
Rated Output Frequency:	50 Hz		
Rated Output Current:	13 Aa.c.		
Rated Output Power:	3000 W		
d) AC-Output (Grid Side) parameters:			
Rated Output Voltage:	230 Va.c.		
Rated Output Frequency:	50 Hz		
Rated Output Power:	3000 W	3600 W	3600 W
Max. Apparent Output Power:	3300VA	4000VA	4000VA
Max. Output Current:	15,7 Aa.c.	17,3 Aa.c.	17,3 Aa.c.
Power Factor(adj.):	0,8(lagging)...0,8(leading)		
e) AC input parameters:			
Rated Voltage:	230 Va.c.		
Current (Maximum Continuous):	26,1 Aa.c.		
Rated Frequency:	50 Hz		
f) General:			
Operating Temperature Range:	-25 °C...+60 °C		
Protective Class:	I		
Ingress Protection:	IP65		
Overvoltage Category:	II(PV), III(MAINS)		
Inverter Topology:	Non-isolated		

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2) Hybrid inverter:			
Model name	RHI-4.6K-48ES-5G, RHI-4.6K-48ES-5G-NS	RHI-5K-48ES-5G, RHI-5K-48ES-5G-NS	RHI-6K-48ES-5G, RHI-6K-48ES-5G-NS
a) PV input parameters:			
Max. Input Voltage:	600 Vd.c.		
MPP Voltage Range:	90-520 Vd.c.		
Max. Input Current:	2×11 Ad.c.		
Isc PV:	2×17,2 Ad.c.		
b) Battery parameters:			
Battery Type:	Li-ion / Lead-acid		
Battery Voltage Range:	42-58 Vd.c.		
Max. Charge Current:	100 Ad.c.		
Max. Discharge Current:	100 Ad.c.		
c) AC-Output (Back-up) parameters:			
Rated Output Voltage:	230 Va.c.		
Rated Output Frequency:	50 Hz		
Rated Output Current:	22 Aa.c.		
Rated Output Power:	5000 W		
d) AC-Output (Grid Side) parameters:			
Rated Output Voltage:	230 Va.c.		
Rated Output Frequency:	50 Hz		
Rated Output Power:	4600 W	5000 W	6000 W
Max. Apparent Output Power:	4600VA	5500VA	6600 VA
Max. Output Current:	23 Aa.c.	23,9 Aa.c.	30Aa.c.
Power Factor(adj.):	0,8(lagging)...0,8(leading)		
e) AC input parameters:			
Rated Voltage:	230 Va.c.		
Current (Maximum Continuous):	26,1 Aa.c.		
Rated Frequency:	50 Hz		
f) General:			
Operating Temperature Range:	-25 °C...+60 °C		
Protective Class:	I		
Ingress Protection:	IP65		
Overvoltage Category:	II(PV), III(MAINS)		
Inverter Topology:	Non-isolated		

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2) Hybrid inverter:			
Model name	S5-EH1P3K-L	S5-EH1P3.6K-L	S5-EH1P4.6K-L
a) PV input parameters:			
Max. Input Voltage:	600 Vd.c.	600 Vd.c.	600 Vd.c.
MPP Voltage Range:	90-520 Vd.c.	90-520 Vd.c.	90-520 Vd.c.
Max. Input Current:	2×15 Ad.c.	2×15 Ad.c.	2×15 Ad.c.
Isc PV:	2×22,5 Ad.c.	2×22,5 Ad.c.	2×22,5 Ad.c.
b) Battery parameters:			
Battery Type:	Li-ion / Lead-acid	Li-ion / Lead-acid	Li-ion / Lead-acid
Battery Voltage Range:	42-58 Vd.c.	42-58 Vd.c.	42-58 Vd.c.
Max. Charge Current:	62,5 Ad.c.	62,5 Ad.c.	100 Ad.c.
Max. Discharge Current:	62,5 Ad.c.	62,5 Ad.c.	100 Ad.c.
c) AC-Output (Back-up) parameters:			
Rated Output Voltage:	230 Va.c.	230 Va.c.	230 Va.c.
Rated Output Frequency:	50 Hz	50 Hz	50 Hz
Rated Output Current:	13,5 Aa.c.	13,5 Aa.c.	22 Aa.c.
Rated Output Power:	3000 W	3000 W	5000 W
d) AC-Output (Grid Side) parameters:			
Rated Output Voltage:	230 Va.c.	230 Va.c.	230 Va.c.
Rated Output Frequency:	50 Hz	50 Hz	50 Hz
Model name	S5-EH1P3K-L	S5-EH1P3.6K-L	S5-EH1P4.6K-L
Rated Output Power:	3000 W	3600 W	4600 W
Max. Apparent Output Power:	3300VA	4000VA	4600VA
Max. Output Current:	15 Aa.c.	18,5 Aa.c.	21 Aa.c.
Power Factor(adj.):	0,8(lagging)...0,8(leading)		
e) AC input parameters:			
Rated Voltage:	230 Va.c.		
Current (Maximum Continuous):	20,5 Aa.c.	25 Aa.c.	31,5 Aa.c.
Rated Frequency:	50 Hz		
f) General:			
Operating Temperature Range:	-25 °C...+60 °C		
Protective Class:	I		
Ingress Protection:	IP65		
Overvoltage Category:	II(PV), III(MAINS)		
Inverter Topology:	Non-isolated		



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Model name	S5-EH1P5K-L	S5-EH1P6K-L
a) PV input parameters:		
Max. Input Voltage:	600 Vd.c.	
MPP Voltage Range:	90-520 Vd.c.	
Max. Input Current:	2×15 Ad.c.	
Isc PV:	2×22,5 Ad.c.	
b) Battery parameters:		
Battery Type:	Li-ion / Lead-acid	
Battery Voltage Range:	42-58 Vd.c.	
Max. Charge Current:	100 Ad.c.	
Max. Discharge Current:	100 Ad.c.	
c) AC-Output (Back-up) parameters:		
Rated Output Voltage:	230 Va.c.	
Rated Output Frequency:	50 Hz	
Rated Output Current:	22 Aa.c.	
Rated Output Power:	5000 W	
d) AC-Output (Grid Side) parameters:		
Rated Output Voltage:	230 Va.c.	
Rated Output Frequency:	50 Hz	
Rated Output Power:	5000 W	6000 W
Max. Apparent Output Power:	5500VA	6600 VA
Max. Output Current:	25 Aa.c.	30 Aa.c.
Power Factor(adj.):	0,8(lagging)...0,8(leading)	
e) AC input parameters:		
Rated Voltage:	230 Va.c.	
Current (Maximum Continuous):	34,5 Aa.c.	
Rated Frequency:	50 Hz	
f) General:		
Operating Temperature Range:	-25 °C...+60 °C	
Protective Class:	I	
Ingress Protection:	IP65	
Overvoltage Category:	II(PV), III(MAINS)	
Inverter Topology:	Non-isolated	