Certificate of Conformity

Certificate Number: CN-PV-210190

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 Name & Address:	Shenzhen SOFARSOLAR Co., Ltd. 401, Building 4, AnTongDa Industrial Park, District 68, XingDong Community, XinAn Street, BaoAn District, Shenzhen, China
Product Description:	Solar Grid-tied Inverter
Ratings & Principle Characteristics:	See Annex to Certificate of Conformity
Models/Type References:	SOFAR 3KTLM-G3, SOFAR 3.6KTLM-G3, SOFAR 4KTLM-G3, SOFAR 4.6KTLM-G3, SOFAR 5KTLM-G3, SOFAR 5KTLM-G3-A SOFAR 6KTLM-G3
Brand Name:	SOFAR SOLAR
Specification/Standard:	EN 50549-1: 2019, Requirements for generating plants to be connected in parallel with distribution networks Part 1: Connection to a LV distribution network - Generating plants up to and including Type B Type approval for type A and with deviations according to the Romania (The technical requirements for connection to the electrical networks of public Ordinul 208_201)
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
Test Report Number:	210120057GZU-001

Additional information in Appendix.

Signature

Certification Manager: Grady Ye
Date: 31 August 2021

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210190

MODEL	SOFAR 3KTLM-G3	SOFAR 3.6KTLM-G3	SOFAR 4KTLM-G3	SOFAR 4.6KTLM-G3
Input (DC)				
Max. input voltage	600V			
Start-up voltage	90V			
Rated input voltage	380V			
MPPT operating voltage range	80V~550V			
Full power MPPT voltage range	200V~500V			
Max. input MPPT current	15A/15A			
Max. input short circuit current per MPPT	22.5A/22.5A			
Output (AC)				
Rated power	3000W	3680W	4000W	4600W
Max. AC power	3300VA	3680VA	4400VA	4600VA
Rated output current	13.6A	16A	18.2A	21A
Max output current	15A	16A	20A	23A
Nominal grid voltage	230Vac			
Nominal frequency	50Hz/60Hz			
Power factor	1default(+/-0.8 adjustable)			
Ambient temperature range	-30~+60℃			
Degree of protection	IP65			
Cooling	Natural			
Software version	V000001			

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210190

MODEL	SOFAR 5KTLM-G3	SOFAR 5KTLM-G3-A	SOFAR 6KTLM-G3
Input (DC)			
Max. input voltage	600V		
Start-up voltage	90V		
Rated input voltage	380V		
MPPT operating voltage range	80V~550V		
Full power MPPT voltage range	210V~500V		260V~500V
Max. input MPPT current	15A/15A		
Max. input short circuit current per MPPT	22.5A/22.5A		
Output (AC)			
Rated power	5000W	5000W	6000W
Max. AC power	5500VA	5000VA	6000VA
Rated output current	22.7A	21.7A	27.3A
Max output current	25A	21.7A	29A
Nominal grid voltage	230Vac		
Nominal frequency	50Hz/60Hz		
Power factor	1default(+/-0.8 adjustable)		
Ambient temperature range	-30~+60℃		
Degree of protection	IP65		
Cooling	Natural		
Software version	V000001		

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-210190

Interface protection settings according to EN 50549-1:2019 with deviation of Romania			
Parameter	Max. disconnection time	Min. operate time	Trip value
Undervoltage threshold stage 1 [27 <]	100s	0.1s (0.1 s steps)	Trip value Config. from 0.2 to 1 Un (0.01 Un steps)
Undervoltage threshold stage 2 [27 <<]	5s	0.1s (0.05 s steps)	Trip value Config. from 0.2 to 1 Un (0.01 Un steps)
Overvoltage threshold stage 1 [59 >]	100s	0.1s (0.1 s steps)	Trip value Config. from 1.0 to 1.2 Un (0.01 Un steps)
Overvoltage threshold stage 2 [59>>]	5s	0.1s (0.05 s steps)	Trip value Config. from 1.0 to 1.3 Un (0.01 Un steps)
Overvoltage 10 min mean protection	Trip time Config≤ 3s not adjustable Time delay setting = 0 ms		Trip value Config. from 1.0 to 1.15Un (0.01 Un steps)
Underfrequency threshold stage 1 [81 <]	100s	0.1s (0.1s steps)	Trip value Config. from 47.0 to 50.0Hz (0.1Hz steps)
Underfrequency threshold stage 2 [81 <<]	5s	0.1s (0.05 s steps)	Trip value Config. from 47.0 to 50.0Hz (0.1Hz steps)
Overfrequency threshold stage 1 [81 >]	100s	0.1s (0.1s steps)	Trip value Config. from 50.0 to 52.0Hz (0.1Hz steps)
Overfrequency threshold stage 2 [81 >>]	5s	0.1s (0.05 s steps)	Trip value Config. from 50.0 to 52.0Hz (0.1Hz steps)
Starting to and reconnection settings for voltage		50%-120% adjustable, 90%Un≤ U≤1.10Un default	
Starting to generate electrical power for frequency		47Hz – 52Hz adjustable, 47.5Hz≤ U≤51Hz default	
Reconnection settings for frequency		47Hz – 52Hz adjustable, 47.5Hz≤ U≤51Hz default	
Observation time		10s-300s adjustable, 60s default	
Active power increase gradient		6%-3000%/min adjustable, 10%/min default	
Permanent DC injection		0.5% of rated inverter output	
Loss of mains according t0 EN 62116		Within 2s	