

Certificate of Conformity

Certificate Number: CN-PV-230066

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. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacturer(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant:	TSUNESS Co., Ltd No. 2266, Taiyang Road, High-speed Rail New Town, Xiangcheng District, Suzhou City, Jiangsu Province, 215133, P.R. China
Product:	Microinverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	TSOL-MS300, TSOL-MS350, TSOL-MS400, TSOL-MS600, TSOL-MS700, TSOL-MS800
Brand Name<s>:	TSUN
Product Complies with:	EN 50549-1:2019 Requirements for the connection of generation equipment in parallel with public distribution networks PSE: 18 Dec 2018, requirements of general application resulting from Commission Regulation (EU)2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (NC RfG)
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2 nd 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 No.<s>:	221101454SHA-001

Additional information in Appendix.

Signature



Certification Manager: Qiao Qiao
Date: 28 February 2023



PRD N° 306B

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230066

Ratings & Principle Characteristics:

Specifications table			
Model	TSOL-MS300	TSOL-MS350	TSOL-MS400
<i>Input Data (DC)</i>			
Vmax PV (Vdc)	60	60	60
Isc PV (absolute Max.) (A)	15	20	20
Number of MPP Trackers	1	1	1
Number of Input Strings	1	1	1
Max. PV Input Current(A)	12.5	13.3	14
MPPT Voltage Range (Vdc)	16-60	16-60	16-60
<i>Output Data (AC)</i>			
Nominal Output Voltage(V)	L/N/PE 230Vac		
Nominal Frequency (Hz)	50Hz		
Max. Continuous Output Current(A)	1.45	1.59	2
Nominal Continuous Output Power (kW)	0.3	0.35	0.4
Max. Continuous Output Power (kVA)	0.3	0.35	0.4
Power factor /(default)	-0.8~+0.8		
<i>Others</i>			
Protective Class	Class I		
Ingress Protection (IP)	IP 67		
Operating Ambient Temperature Range (°C)	-40°C to +65°C		
Type Of Isolation	<input type="checkbox"/> Non-isolated <input checked="" type="checkbox"/> High frequency isolated		
Over Voltage Category	OVC III (AC Main), OVC II (PV)		
Dimension (mm)	178mm * 153mm * 28mm		
Weight (kg)	1.98kg		
Firmware Version	Software Version: V1.0		

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

APPENDIX: Certificate of Conformity

This is an Appendix to Certificate of Conformity Number: CN-PV-230066

Ratings & Principle Characteristics:

Specifications table			
Model	TSOL-MS600	TSOL-MS700	TSOL-MS800
<i>Input Data (DC)</i>			
Vmax PV (Vdc)	60	60	60
Isc PV (absolute Max.) (A)	2*15	2*20	2*20
Number of MPP Trackers	2	2	2
Number of Input Strings	1/1	1/1	1/1
Max. PV Input Current(A)	2X12.5	2X13.3	2X14
MPPT Voltage Range (Vdc)	16-60	16-60	16-60
<i>Output Data (AC)</i>			
Nominal Output Voltage(V)	L/N/PE 230Vac		
Nominal Frequency (Hz)	50Hz		
Max. Continuous Output Current(A)	3	3.19	4
Nominal Continuous Output Power (kW)	0.6	0.7	0.8
Max. Continuous Output Power (kVA)	0.6	0.7	0.8
Power factor /(default)	-0.8~+0.8		
<i>Others</i>			
Protective Class	Class I		
Ingress Protection (IP)	IP 67		
Operating Ambient Temperature Range (°C)	-40°C to +65°C (>50°C derating)		
Type Of Isolation	<input type="checkbox"/> Non-isolated <input checked="" type="checkbox"/> High frequency isolated		
Over Voltage Category	OVC III (AC Main), OVC II (PV)		
Dimension (mm)	250mm * 170mm * 28mm		
Weight (kg)	3kg		
Firmware Version	Software Version: V1.0		

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.