

Inspection Report

(Non-negotiable)

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Inspector:	Gao hailin
Inspection location:	Yanchen, Jiangsu province, China;
Date of inspection:	Mar 4, 2022



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1. Background information

SGS order No.:	IN-SUZ-5801-22034-1				
Coordinator:	Linda Yan		Telephone:	(86)051262988251	
Description of commodity					
Type/Model: TSM-545DE19					
Applicant					
QUANTUM MECHANICS PRIVATE LTD					
Seller					
TRINA SOLAR ENERGY DEVELOPMENT PTE LTD					
P/I No.	TED-A11042-2202-XSI-12868-0				
LC NO.	002LCFS220593501 Date of Issue :220228				
PO NO.	N/A				
Others	N/A				
Nature of inspection:	Item	Satisfactory	Non conforming	Rejected	Subject to buyer's evaluation
	Quantity check	●			
	Visual inspection	●			
	Product ID for this batch	●			
	Witness testing	●			
	Document review	●			

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2. Sample description

General information	
Abbreviations	
STC-Standard test environment	FF- Fill factor
Pmax-Maximum power	Imp-Maximum power current
Voc-Open circuit voltage	Isc-Short circuit current
Vmp- Maximum power voltage	Eff.-Module efficiency
EL-Electroluminescence	/
Determine	
The test condition is not suitable for this test product	N/A (Not applicable)
The test sample meets the requirements	P (Pass)
The test sample does not meet the requirements	F (Fail)

3. Instrument

During the inspection, the following instrument calibration status has been checked for inspection:

No.	Name	ID No.	Measuring range	Calibrated (Yes/No/NA)	Certificate NO. (Optional)
1	Tape	TS08173-BL	0~3M	Yes	GFJGJL1001213517121

4. Quantity check

4.1.Reference documents: TED-A11042-2202-XSI-12868-0

Buyer	PI Number	Module Type	Qty (PCS)	Module Power	Power (MW)	LC NO
Quantum Mechanics (Private) Limited	TED-A11042-2202-XSI-12868-0	DE19	1860	545	1.0137	002LCFS220593501

Note: The goods are not on site, the quantity of goods can only be reviewed on the packing list



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5. Visual inspection

5.1 Reference documents: IEC61730-2:2016

6.2. Sample size: 13 pcs.

Serial number:

D04220111002584、 D04220111004608、 D04220111004617

D04220111004683、 D04220111001920、 D04220111003554

D04220111008359、 D04220111007080、 D04220111009219

D04220111007704、 D04220111007350、 D04220111009291、 D04220111007215

According to the requirement, SGS inspector performed visual inspection for the randomly chosen 13 pcs of PV modules in a well illuminated area and 60-80cm distance.

Details as Follows:

Items name	Visual inspection
Technical requirement	<p>IEC61730-2:2016 Photovoltaic (PV) module safety qualification –Part 2: Requirements for testing</p> <p>MST 01 Visual inspection:</p> <p>Carefully inspect each module under an illumination of not less than 1 000 lux for conditions and observations as defined in IEC 61215-1.:</p> <p>a) broken, cracked, or torn external surfaces;</p> <p>b) bent or misaligned external surfaces, including front sheet, back sheet, frames and junction boxes to the extent that the safety of the PV module would be impaired;</p> <p>c) in cemented joints bubbles or delamination with closest distances to each other \leq 2 times the minimum required distance through cemented joint (see Tables 3 and 4 of IEC 61730-1:2016) shall be evaluated as conductive and electrically connected. The shortest distance from and to such bubbles or delamination through insulation material shall in sum not be shorter than the required minimum distance through cemented joint.</p> <p>d) for adhesive bonds other than in c) bubbles or delamination with closest distances to each other \leq 2 times the minimum required creepage distance (see Tables 3 and 4 of IEC 61730-1:2016) shall be evaluated as conductive and electrically connected. The shortest distance from and to such bubbles or delamination through insulation material shall in sum not be shorter than the required minimum creepage distance.</p> <p>e) loss of mechanical integrity to the extent that the safety of the installation and safe operation of the PV module would be impaired;</p> <p>f) if the mechanical integrity depends on lamination or other means of adhesion, the sum of the area of all bubbles shall not exceed 1 % of the total PV module area;</p> <p>g) evidence of any molten or burned component;</p>

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	h) markings not complying with 5.2 of IEC 61730-1:2016 and the durability of markings test (MST 05) at final inspection; i) edges not complying with MST 06 sharp edge test at final inspection.	
Test time	March 4,2022	
Module type	TSM-545DE19	
Sample No.	Visual description	Result
D04220111002584	No major visual defects found	ok
D04220111004608	No major visual defects found	ok
D04220111004617	No major visual defects found	ok
D04220111004683	No major visual defects found	ok
D04220111001920	No major visual defects found	ok
D04220111003554	No major visual defects found	ok
D04220111008359	No major visual defects found	ok
D04220111007080	No major visual defects found	ok
D04220111009219	No major visual defects found	ok
D04220111007704	No major visual defects found	ok
D04220111007350	No major visual defects found	ok
D04220111009291	No major visual defects found	ok
D04220111007215	No major visual defects found	ok



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Defect description	Major
	0
Total Found	0
Maximum allowed	0

Note:

Following visual issues found during the inspection subject to client (user decision) due to no specified regulation in SRO604 program.

Other visual found	Quantity
	0
Total Found	0

The result of visual quality check was satisfactory.

6. Maximum power determination

6.1 Reference documents: IEC61215-2:2016

6.2 Sample size: 13 pcs

According to the requirement, SGS inspector performed maximum power determination for the randomly chosen 13 pcs of PV modules.

Details as Follows:

Items name	Maximum power determination
Technical requirement	<p>IEC61215-2:2016 Terrestrial photovoltaic (PV) modules – Design qualification and type approval –Part 2: Test procedures</p> <p>MQT02 Maximum power determination:</p> <p>a) A radiant source (natural sunlight or a solar simulator class BBA or better in accordance with IEC 60904-9).</p> <p>b) A PV reference device in accordance with IEC 60904-2. If a class BBA simulator or better is used, the reference device shall be a reference module of the same size with the same cell technology to match spectral responsivity. If such a matched reference device is not available one of the following two options need to be followed:</p> <p>1) a Class AAA simulator shall be utilized, or</p>



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	<p>2) the spectral responsivity of the module according to IEC 60904-8 and the spectral distribution of the solar simulator need to be measured and the module data corrected according to IEC 60904-7.</p> <p>c) A suitable mount for supporting the test specimen and the reference device in a plane normal to the radiant beam.</p> <p>d) Apparatus for measuring an I-V curve in accordance with IEC 60904-1.</p>
Test time	March 4, 2022
Module type	TSM-545DE19

The package number	Sample No.	The original power						
		Isc (A)	Voc (V)	PMax(W)	Vpm (V)	Ipm (A)	FF	Tmod(°C)
D04220108005076A007697C19F3	D04220111002584	18.42	38.07	548.21	30.77	17.81	78.17%	25.83
D04220108005156A007697C19F3	D04220111004608	18.46	37.92	549.80	31.21	17.62	78.54%	25.51
D04220108005076A007697C19F3	D04220111004617	18.45	37.97	547.29	30.92	17.70	78.14%	25.25
D04220108005156A007697C19F3	D04220111004683	18.49	38.00	549.26	31.19	17.61	78.18%	25.32
D04220108005156A007697C19F3	D04220111001920	18.45	37.87	548.06	31.11	17.62	78.42%	25.33
D04220108005076A007697C19F3	D04220111003554	18.44	37.96	549.67	31.00	17.73	78.55%	24.77
D04220108005076A007697C19F3	D04220111008359	18.41	38.16	546.54	30.71	17.79	77.81%	26.12
D04220108005076A007697C19F3	D04220111007080	18.44	37.98	547.42	30.89	17.72	78.17%	25.74
D04220108005076A007697C19F3	D04220111009219	18.42	38.10	547.50	30.77	17.79	78.02%	26.12
D04220108005076A007697C19F3	D04220111007704	18.43	38.03	549.47	30.87	17.80	78.40%	26.32
D04220108005076A007697C19F3	D04220111007350	18.42	38.05	545.89	30.73	17.76	77.88%	25.97
D04220108005076A007697C19F3	D04220111009291	18.44	38.08	546.56	30.70	17.80	77.85%	26.13
D04220108005076A007697C19F3	D04220111007215	18.41	38.07	549.02	30.81	17.82	78.32%	25.47



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The package number	Sample No.	Test power						
		Isc (A)	Voc (V)	PMax(W)	Vpm (V)	Ipm (A)	FF	Tmod(°C)
D04220108005076A007697C19F3	D04220111002584	18.61	38.19	548.11	31.18	17.58	77.11%	25.01
D04220108005156A007697C19F3	D04220111004608	18.54	38.03	552.88	31.23	17.71	78.40%	24.98
D04220108005076A007697C19F3	D04220111004617	18.61	38.20	548.10	31.18	17.58	77.11%	25.03
D04220108005156A007697C19F3	D04220111004683	18.55	38.06	553.32	31.25	17.71	78.35%	25.01
D04220108005156A007697C19F3	D04220111001920	18.52	37.93	550.41	31.12	17.68	78.33%	25.00
D04220108005076A007697C19F3	D04220111003554	18.55	37.95	549.15	31.08	17.67	78.00%	24.91
D04220108005076A007697C19F3	D04220111008359	18.61	38.20	547.57	31.17	17.57	77.04%	25.05
D04220108005076A007697C19F3	D04220111007080	18.62	38.19	547.85	31.19	17.57	77.05%	24.94
D04220108005076A007697C19F3	D04220111009219	18.61	38.20	547.83	31.17	17.57	77.06%	25.03
D04220108005076A007697C19F3	D04220111007704	18.58	38.09	548.41	31.06	17.65	77.50%	24.94
D04220108005076A007697C19F3	D04220111007350	18.61	38.21	548.36	31.19	17.58	77.12%	25.10
D04220108005076A007697C19F3	D04220111009291	18.61	38.20	548.20	31.19	17.58	77.12%	25.07
D04220108005076A007697C19F3	D04220111007215	18.61	38.19	548.30	31.20	17.58	77.15%	25.00

Note:

The result of maximum power determination was satisfactory.

7. Insulation and withstand voltage test

7.1 Reference documents: IEC61215-2:2016

7.2 Sample size: 13 pcs.

According to the requirement, SGS inspector performed insulation test for the randomly chosen 13 pcs of PV modules.

Details as Follows:

Items name	Insulation test
Technical requirement	IEC61215-2:2016 Terrestrial photovoltaic (PV) modules – Design qualification and type approval –Part 2: Test procedures MQT03 Insulation test: a) No dielectric breakdown or surface tracking during 4.3.4 c). b) For modules with an area of less than 0,1 m ² the insulation resistance shall not be less than 400 MΩ. c) For modules with an area larger than 0,1 m ² the measured insulation resistance times the area of the module shall not be less than 40 MΩ·m ² .
Test time	March 4, 2022

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Module type	TSM-545DE19				
Environmental information	TEMP(°C)	25.3°C	Humidity (%)		42%
Sample No.	Withstand voltage		Insulation		Result
	Test voltage (V)	Whether there is breakdown or surface fracture	Test voltage (V)	Resistance value (GΩ)	
D04220111002584	4800	No	1500	40.58GΩ	OK
D04220111004608	4800	No	1500	30.9GΩ	OK
D04220111004617	4800	No	1500	34.54GΩ	OK
D04220111004683	4800	No	1500	29.65GΩ	OK
D04220111001920	4800	No	1500	34.86GΩ	OK
D04220111003554	4800	No	1500	31.85GΩ	OK
D04220111008359	4800	No	1500	31.63GΩ	OK
D04220111007080	4800	No	1500	34.09GΩ	OK
D04220111009219	4800	No	1500	31.69GΩ	OK
D04220111007704	4800	No	1500	30.4GΩ	OK
D04220111007350	4800	No	1500	29.61GΩ	OK
D04220111009291	4800	No	1500	25.82GΩ	OK
D04220111007215	4800	No	1500	33.4GΩ	OK
Remarks	The module area is 2.164135m ² . and the measured resistance shall be ≥500MΩ				

Note:

The result of insulation test was satisfactory.



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8. Continuity test of equipotential bonding

8.1 Reference documents: IEC61730-2:2016

9.2. Sample size: ISO 2859-1 at the sample plan of General inspection S-1, lot size 13pcs.

According to the requirement, SGS inspector performed continuity test of equipotential bonding for the randomly chosen 13pcs of PV modules. Details as Follows:

Items name	Continuity test of equipotential bonding			
Technical requirement	<p>IEC61730-2:2016 Photovoltaic (PV) module safety qualification –Part 2: Requirements for testing</p> <p>MST 13 Continuity test of equipotential bonding: The purpose of this test is to verify the continuous path between accessible conductive parts that are in direct contact with each other (e.g. parts of a metallic frame). The procedure is as follows:</p> <ul style="list-style-type: none"> a) Select the manufacturer's designated point for equipotential bonding and therecommended connection. Attach to one terminal of the constant current supply. b) Select an adjacent (connected) exposed conductive component with the greatest physicaldisplacement from the grounding point and attach to the other terminal of the currentsupply. c) Attach the voltmeter to the two conductive components attached to the current supply inproximity to the current leads. d) Apply a current $250 \% \pm 10 \%$ of the maximum overcurrent protection rating of the PVmodule for a minimum of 2 min. e) Measure the applied current and the resultant voltage drop. f) Reduce the current to zero. g) Repeat for all other accessible conductive parts. h) Repeat the test for all connection(s), terminal(s), and/or wire(s) included or specified by the manufacturer for grounding the PV module. <p>The resistance between the selected exposed conductive component and every other conductive component of the PV module shall be less than 0,1 Ω.</p>			
Test time	March 4, 2022			
Module type	TSM-545DE19			
Environmental information	TEMP (°C)	25.3°C	Humidity (%)	42%

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Sample No.	No.	Current (A)	Grounding resistance (mΩ)	Result
D04220111001920	1	75	0.564mΩ	P
	2	75	0.561mΩ	
	3	75	0.560mΩ	
D04220111002584	1	75	0.566mΩ	P
	2	75	0.565mΩ	
	3	75	0.561mΩ	
D04220111003554	1	75	0.558mΩ	P
	2	75	0.563mΩ	
	3	75	0.562mΩ	
D04220111004608	1	75	0.565mΩ	P
	2	75	0.566mΩ	
	3	75	0.567mΩ	
D04220111004617	1	75	0.563mΩ	P
	2	75	0.568mΩ	
	3	75	0.567mΩ	
D04220111004683	1	75	0.566mΩ	P
	2	75	0.564mΩ	
	3	75	0.565mΩ	



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Sample No.	No.	Current (A)	Grounding resistance (mΩ)	Result
D04220111007080	1	75	0.565mΩ	P
	2	75	0.563mΩ	
	3	75	0.562mΩ	
D04220111007215	1	75	0.567mΩ	P
	2	75	0.568mΩ	
	3	75	0.560mΩ	
D04220111007350	1	75	0.564mΩ	P
	2	75	0.562mΩ	
	3	75	0.564mΩ	
D04220111007704	1	75	0.567mΩ	P
	2	75	0.567mΩ	
	3	75	0.566mΩ	
D04220111008359	1	75	0.567mΩ	P
	2	75	0.567mΩ	
	3	75	0.564mΩ	
D04220111009219	1	75	0.566mΩ	P
	2	75	0.564mΩ	
	3	75	0.565mΩ	



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Sample No.	No.	Current (A)	Grounding resistance (mΩ)	Result
D04220111009291	1	75	0.563mΩ	P
	2	75	0.567mΩ	
	3	75	0.563mΩ	

9. Product ID for this batch

PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111000702	D04220111007808	D04220111020579	D04220111020388	D04220111025635
D04220111001846	D04220111008591	D04220111019498	D04220111020432	D04220111025640
D04220111003708	D04220111005940	D04220111019867	D04220111019860	D04220111024143
D04220111004191	D04220111009989	D04220111019777	D04220111019885	D04220111025675
D04220111004210	D04220111007904	D04220111019788	D04220111020549	D04220111025677
D04220111004231	D04220111006913	D04220111019972	D04220111020334	D04220111025686
D04220111004358	D04220111006903	D04220111019975	D04220111020392	D04220111025553
D04220111002395	D04220111008911	D04220111019628	D04220111021274	D04220111025428
D04220111002419	D04220111013535	D04220111019433	D04220111021278	D04220111024515
D04220111002033	D04220111013827	D04220111020064	D04220111021279	D04220111025503
D04220111002044	D04220111013647	D04220111019986	D04220111021284	D04220111024044
D04220111002052	D04220111013761	D04220111020068	D04220111021287	D04220111023522
D04220111002584	D04220111014054	D04220111019627	D04220111021299	D04220111024257
D04220111004608	D04220111013003	D04220111019542	D04220111020550	D04220111025148
D04220111004617	D04220111013760	D04220111019989	D04220111019751	D04220111025102
D04220111004683	D04220111010314	D04220111019632	D04220111020437	D04220111023954
D04220111005021	D04220111013824	D04220111019774	D04220111021306	D04220111024641
D04220111005181	D04220111009957	D04220111019791	D04220111021311	D04220111023790
D04220111005510	D04220111014180	D04220111019626	D04220111020111	D04220111025152
D04220111005544	D04220111013803	D04220111019350	D04220111020536	D04220111025273
D04220111001920	D04220111011094	D04220111019625	D04220111020443	D04220111025252
D04220111003241	D04220111014023	D04220111019618	D04220111020385	D04220111025514
D04220111003379	D04220111014362	D04220111019398	D04220111020667	D04220111025298



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111003500	D04220111014020	D04220111019900	D04220111020566	D04220111025162
D04220111003502	D04220111011343	D04220111018826	D04220111019940	D04220111025190
D04220111003523	D04220111014432	D04220111020000	D04220111020279	D04220111023754
D04220111003529	D04220111012636	D04220111020067	D04220111019818	D04220111026791
D04220111003545	D04220111013995	D04220111019988	D04220111020230	D04220111026833
D04220111003547	D04220111010393	D04220111019966	D04220111020444	D04220111027040
D04220111003554	D04220111012945	D04220111019810	D04220111018910	D04220111026879
D04220111003579	D04220111014456	D04220111019638	D04220111020290	D04220111026960
D04220111000824	D04220111011010	D04220111019807	D04220111020027	D04220111026916
D04220111002160	D04220111014442	D04220111019629	D04220111020215	D04220111027064
D04220111002349	D04220111014070	D04220111020268	D04220111019512	D04220111026968
D04220111003825	D04220111014182	D04220111020280	D04220111020632	D04220111027103
D04220111002000	D04220111014081	D04220111020281	D04220111020248	D04220111027038
D04220111003346	D04220111012685	D04220111020306	D04220111019820	D04220111027469
D04220111003347	D04220111011865	D04220111020308	D04220111019847	D04220111027019
D04220111007037	D04220111006016	D04220111020314	D04220111020288	D04220111027007
D04220111007870	D04220111011520	D04220111019795	D04220111019642	D04220111027253
D04220111007268	D04220111013655	D04220111019803	D04220111020647	D04220111027114
D04220111007901	D04220111012512	D04220111019653	D04220111020572	D04220111027292
D04220111007899	D04220111011117	D04220111019654	D04220111019743	D04220111027282
D04220111007488	D04220111014069	D04220111019659	D04220111019595	D04220111026885
D04220111008324	D04220111013663	D04220111020081	D04220111019177	D04220111027254
D04220111007562	D04220111013841	D04220111019806	D04220111020764	D04220111027336
D04220111012538	D04220111013989	D04220111019976	D04220111020770	D04220111027679
D04220111012539	D04220111011220	D04220111019811	D04220111019274	D04220111027271
D04220111011478	D04220111014004	D04220111019655	D04220111019038	D04220111026902
D04220111011481	D04220111013739	D04220111020008	D04220111019410	D04220111027247
D04220111011485	D04220111014068	D04220111019657	D04220111018765	D04220111027267
D04220111009661	D04220111011235	D04220111019437	D04220111018718	D04220111027699
D04220111008945	D04220111012693	D04220111020669	D04220111019520	D04220111027170
D04220111014781	D04220111013849	D04220111020670	D04220111019383	D04220111027137
D04220111014786	D04220111010579	D04220111020683	D04220111019118	D04220111027693
D04220111014802	D04220111005808	D04220111020686	D04220111019264	D04220111027339
D04220111014816	D04220111009967	D04220111020692	D04220111019239	D04220111027018



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111014937	D04220111007026	D04220111020694	D04220111019378	D04220111027700
D04220111014939	D04220111009715	D04220111020708	D04220111017803	D04220111027743
D04220111014947	D04220111012098	D04220111020713	D04220111019346	D04220111029445
D04220111015060	D04220111014613	D04220111020714	D04220111019424	D04220111029464
D04220111008828	D04220111013244	D04220111019663	D04220111018619	D04220111029178
D04220111009096	D04220111012082	D04220111020093	D04220111018727	D04220111029180
D04220111015208	D04220111014093	D04220111019661	D04220111019037	D04220111029482
D04220111015226	D04220111013676	D04220111020751	D04220111018737	D04220111029488
D04220111015235	D04220111013868	D04220111020092	D04220111019255	D04220111029208
D04220111015274	D04220111009970	D04220111020070	D04220111018722	D04220111029209
D04220111015331	D04220111014647	D04220111019808	D04220111019503	D04220111027133
D04220111015455	D04220111014652	D04220111020016	D04220111019513	D04220111026889
D04220111013040	D04220111014657	D04220111018782	D04220111019452	D04220111026857
D04220111013076	D04220111014658	D04220111019798	D04220111018909	D04220111026936
D04220111009188	D04220111014662	D04220111020012	D04220111018612	D04220111027343
D04220111011311	D04220111014669	D04220111020002	D04220111019207	D04220111026820
D04220111015590	D04220111013654	D04220111019813	D04220111018705	D04220111026798
D04220111015598	D04220111007145	D04220111019907	D04220111019028	D04220111027674
D04220111015603	D04220111014686	D04220111020103	D04220111019036	D04220111026786
D04220111015605	D04220111014688	D04220111020014	D04220111018725	D04220111026975
D04220111015782	D04220111014220	D04220111019993	D04220111020282	D04220111026859
D04220111015889	D04220111013649	D04220111019814	D04220111019533	D04220111027745
D04220111015891	D04220111011298	D04220111018625	D04220111020228	D04220111027272
D04220111015903	D04220111013844	D04220111017802	D04220111019861	D04220111027026
D04220111015955	D04220111012046	D04220111019063	D04220111019552	D04220111027252
D04220111015973	D04220111014841	D04220111018260	D04220111020776	D04220111027153
D04220111016028	D04220111012069	D04220111017249	D04220111020778	D04220111027290
D04220111016062	D04220111013588	D04220111018237	D04220111020784	D04220111026961
D04220111016068	D04220111013774	D04220111018203	D04220111020792	D04220111027697
D04220111008597	D04220111014882	D04220111018589	D04220111019515	D04220111026880
D04220111014388	D04220111012043	D04220111018613	D04220111020447	D04220111026866
D04220111016099	D04220111012695	D04220111018226	D04220111020805	D04220111027540
D04220111016130	D04220111011299	D04220111017679	D04220111019894	D04220111027709
D04220111016165	D04220111013964	D04220111018280	D04220111020843	D04220111027435



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111016228	D04220111012072	D04220111018253	D04220111020847	D04220111027760
D04220111016268	D04220111014473	D04220111018249	D04220111020235	D04220111027496
D04220111016288	D04220111014474	D04220111017981	D04220111020250	D04220111027900
D04220111016295	D04220111011004	D04220111018507	D04220111020446	D04220111027822
D04220111016303	D04220111009972	D04220111018541	D04220111019706	D04220111027754
D04220111016388	D04220111013744	D04220111018846	D04220111018777	D04220111026789
D04220111016437	D04220111014311	D04220111018443	D04220111020410	D04220111026917
D04220111016470	D04220111011219	D04220111018592	D04220111018360	D04220111027717
D04220111016514	D04220111013966	D04220111018505	D04220111019554	D04220111027451
D04220111016544	D04220111015617	D04220111019903	D04220111020652	D04220111027466
D04220111016545	D04220111014229	D04220111019666	D04220111020186	D04220111027753
D04220111016558	D04220111011213	D04220111020072	D04220111018800	D04220111027325
D04220111016572	D04220111014558	D04220111019827	D04220111018923	D04220111027732
D04220111013862	D04220111014563	D04220111019670	D04220111020412	D04220111027135
D04220111011345	D04220111013777	D04220111020101	D04220111018795	D04220111027206
D04220111014447	D04220111014576	D04220111020013	D04220111019889	D04220111027198
D04220111011159	D04220111009723	D04220111019675	D04220111019939	D04220111026828
D04220111009752	D04220111014424	D04220111019665	D04220111020562	D04220111027220
D04220111013897	D04220111013998	D04220111019898	D04220111020911	D04220111027324
D04220111013898	D04220111014354	D04220111019836	D04220111020641	D04220111027775
D04220111013899	D04220111008928	D04220111019909	D04220111020409	D04220111027207
D04220111013901	D04220111013860	D04220111019561	D04220111020913	D04220111027477
D04220111013916	D04220111012083	D04220111019696	D04220111017254	D04220111027196
D04220111014117	D04220111015165	D04220111020015	D04220111020910	D04220111026829
D04220111013967	D04220111015172	D04220111020022	D04220111020916	D04220111027447
D04220111011251	D04220111010915	D04220111019697	D04220111019888	D04220111027766
D04220111014129	D04220111013198	D04220111019840	D04220111020039	D04220111027341
D04220111011341	D04220111009716	D04220111019690	D04220111019859	D04220111027525
D04220111016616	D04220111010521	D04220111017166	D04220111019852	D04220111027842
D04220111016637	D04220111014273	D04220111018791	D04220111019857	D04220111027845
D04220111016641	D04220111014052	D04220111020034	D04220111020163	D04220111027209
D04220111016679	D04220111014103	D04220111020120	D04220111020152	D04220111027796
D04220111016688	D04220111014751	D04220111019683	D04220111019717	D04220111027883
D04220111016690	D04220111014754	D04220111019921	D04220111006173	D04220111027777



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PV module model		TSM-545DE19		
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111016691	D04220111014759	D04220111019822	D04220111018823	D04220111027640
D04220111016699	D04220111009760	D04220111019656	D04220111019260	D04220111027410
D04220111016701	D04220111014074	D04220111019688	D04220111019766	D04220111027834
D04220111016722	D04220111013804	D04220111020127	D04220111020867	D04220111027630
D04220111016896	D04220111011521	D04220111020036	D04220111021522	D04220111027860
D04220111016925	D04220111009758	D04220111019837	D04220111021632	D04220111027431
D04220111016927	D04220111013561	D04220111020031	D04220111021708	D04220111027571
D04220111017040	D04220111013785	D04220111020126	D04220111021714	D04220111027751
D04220111017078	D04220111013651	D04220111020017	D04220111021727	D04220111027748
D04220111011069	D04220111009564	D04220111020128	D04220111021730	D04220111027904
D04220111011929	D04220111011305	D04220111020143	D04220111021805	D04220111027199
D04220111011360	D04220111013610	D04220111020330	D04220111021849	D04220111027215
D04220111011071	D04220111014109	D04220111020037	D04220111021865	D04220111027200
D04220111011068	D04220111012737	D04220111019708	D04220111021914	D04220111027804
D04220111011156	D04220111008920	D04220111020125	D04220111021936	D04220111027637
D04220111012125	D04220111011540	D04220111019853	D04220111022084	D04220111026825
D04220111009759	D04220111009700	D04220111020380	D04220111022107	D04220111027749
D04220111011537	D04220111013612	D04220111019707	D04220111022127	D04220111027830
D04220111012458	D04220111011541	D04220111019929	D04220111019343	D04220111027781
D04220111012364	D04220111014364	D04220111020150	D04220111020361	D04220111027808
D04220111010025	D04220111013694	D04220111020154	D04220111020656	D04220111027786
D04220111011566	D04220111014438	D04220111019998	D04220111020653	D04220111030170
D04220111010764	D04220111013656	D04220111020155	D04220111020206	D04220111030185
D04220111010022	D04220111013569	D04220111020049	D04220111020919	D04220111030482
D04220111011576	D04220111013650	D04220111019936	D04220111020408	D04220111028894
D04220111011573	D04220111012398	D04220111019925	D04220111021103	D04220111028569
D04220111009996	D04220111013426	D04220111019851	D04220111021316	D04220111029528
D04220111011961	D04220111011304	D04220111019938	D04220111020767	D04220111028918
D04220111012127	D04220111014331	D04220111019928	D04220111023183	D04220111028804
D04220111011916	D04220111013880	D04220111020164	D04220111023564	D04220111028946
D04220111012421	D04220111013889	D04220111020160	D04220111023933	D04220111029555
D04220111011718	D04220111011547	D04220111020026	D04220111024280	D04220111029527
D04220111011137	D04220111014191	D04220111019720	D04220111024281	D04220111029549
D04220111008157	D04220111013704	D04220111019713	D04220111024287	D04220111029184



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111012450	D04220111009436	D04220111020488	D04220111024223	D04220111028114
D04220111011575	D04220111010060	D04220111020345	D04220111024293	D04220111029756
D04220111013736	D04220111010603	D04220111020169	D04220111023037	D04220111030075
D04220111011387	D04220111008767	D04220111020170	D04220111024440	D04220111030076
D04220111008603	D04220111006221	D04220111019944	D04220111024640	D04220111029548
D04220111011574	D04220111008980	D04220111020038	D04220111024709	D04220111029567
D04220111011681	D04220111009011	D04220111020069	D04220111025709	D04220111029187
D04220111010168	D04220111008860	D04220111020077	D04220111025712	D04220111029580
D04220111011975	D04220111009839	D04220111020171	D04220111025715	D04220111030127
D04220111011579	D04220111009509	D04220111020173	D04220111025717	D04220111030129
D04220111011972	D04220111009862	D04220111020479	D04220111025733	D04220111029676
D04220111011581	D04220111008161	D04220111020501	D04220111025745	D04220111028288
D04220111012256	D04220111009795	D04220111020620	D04220111025780	D04220111028007
D04220111012556	D04220111010404	D04220111020174	D04220111025787	D04220111029533
D04220111011558	D04220111010815	D04220111019923	D04220111025790	D04220111029693
D04220111011497	D04220111009800	D04220111020177	D04220111025791	D04220111029863
D04220111012608	D04220111010167	D04220111020085	D04220111025793	D04220111029871
D04220111011963	D04220111010180	D04220111020502	D04220111025879	D04220111029875
D04220111011582	D04220111008775	D04220111020167	D04220111025881	D04220111029888
D04220111011545	D04220111009622	D04220111020505	D04220111025882	D04220111029897
D04220111010408	D04220111010808	D04220111020087	D04220111025890	D04220111029587
D04220111012563	D04220111008166	D04220111020351	D04220111025895	D04220111029694
D04220111012200	D04220111009857	D04220111020498	D04220111026003	D04220111028745
D04220111011786	D04220111009141	D04220111020320	D04220111026005	D04220111029595
D04220111012201	D04220111010410	D04220111020365	D04220111026025	D04220111029606
D04220111010800	D04220111008998	D04220111020244	D04220111026027	D04220111029544
D04220111011846	D04220111008897	D04220111020191	D04220111026031	D04220111028970
D04220111011501	D04220111010185	D04220111019887	D04220111026042	D04220111029639
D04220111012205	D04220111007576	D04220111020354	D04220111026045	D04220111029703
D04220111013457	D04220111009004	D04220111020188	D04220111026054	D04220111029705
D04220111011148	D04220111009647	D04220111020363	D04220111026055	D04220111027596
D04220111012404	D04220111009827	D04220111020517	D04220111026061	D04220111028761
D04220111012204	D04220111007579	D04220111019737	D04220111026066	D04220111028419
D04220111011991	D04220111008593	D04220111020226	D04220111026068	D04220111028019



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111011398	D04220111010039	D04220111020359	D04220111026075	D04220111027955
D04220111011978	D04220111011019	D04220111020493	D04220111026079	D04220111028327
D04220111012038	D04220111007513	D04220111020197	D04220111026087	D04220111028065
D04220111011967	D04220111009529	D04220111019724	D04220111026093	D04220111027068
D04220111011588	D04220111005895	D04220111020194	D04220111026095	D04220111028027
D04220111010616	D04220111007577	D04220111020475	D04220111026097	D04220111028770
D04220111012332	D04220111008165	D04220111020515	D04220111026114	D04220111028429
D04220111011586	D04220111007703	D04220111020370	D04220111026136	D04220111027625
D04220111011590	D04220111009826	D04220111019850	D04220111026142	D04220111027858
D04220111011407	D04220111010473	D04220111020622	D04220111026155	D04220111028579
D04220111011969	D04220111010806	D04220111019726	D04220111026164	D04220111028323
D04220111011506	D04220111010105	D04220111020516	D04220111026175	D04220111028070
D04220111012183	D04220111010797	D04220111020373	D04220111026187	D04220111028453
D04220111011840	D04220111009181	D04220111020376	D04220111026199	D04220111027623
D04220111011659	D04220111009056	D04220111019947	D04220111026205	D04220111028440
D04220111011982	D04220111009009	D04220111020538	D04220111026209	D04220111027406
D04220111012560	D04220111009480	D04220111020377	D04220111026210	D04220111027569
D04220111012172	D04220111010876	D04220111019744	D04220111026215	D04220111027515
D04220111011411	D04220111011186	D04220111017790	D04220111026217	D04220111027621
D04220111012214	D04220111010977	D04220111019294	D04220111026222	D04220111028504
D04220111011505	D04220111010796	D04220111017987	D04220111026223	D04220111028162
D04220111011704	D04220111014361	D04220111017240	D04220111026224	D04220111027648
D04220111012169	D04220111012744	D04220111018850	D04220111026236	D04220111027893
D04220111012837	D04220111014077	D04220111017992	D04220111026237	D04220111027591
D04220111011419	D04220111013581	D04220111018256	D04220111026239	D04220111029630
D04220111012869	D04220111013560	D04220111019171	D04220111026247	D04220111029011
D04220111012180	D04220111013566	D04220111019305	D04220111026259	D04220111029713
D04220111012141	D04220111007660	D04220111018661	D04220111026280	D04220111029743
D04220111009832	D04220111014078	D04220111019387	D04220111026293	D04220111029739
D04220111011375	D04220111014076	D04220111017817	D04220111026304	D04220111029301
D04220111011999	D04220111011947	D04220111018647	D04220111026317	D04220111028198
D04220111012014	D04220111013664	D04220111017988	D04220111026322	D04220111029020
D04220111011422	D04220111013713	D04220111017773	D04220111026338	D04220111029290
D04220111011429	D04220111013626	D04220111019128	D04220111026339	D04220111029313



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111011597	D04220111013888	D04220111018641	D04220111026340	D04220111029771
D04220111010695	D04220111012650	D04220111018344	D04220111026358	D04220111029029
D04220111011414	D04220111011932	D04220111019301	D04220111026366	D04220111028642
D04220111012006	D04220111013564	D04220111018229	D04220111026369	D04220111029600
D04220111012207	D04220111011050	D04220111018313	D04220111026376	D04220111029081
D04220111012011	D04220111013241	D04220111017787	D04220111026381	D04220111029014
D04220111013081	D04220111012474	D04220111017991	D04220111026396	D04220111029752
D04220111012017	D04220111013799	D04220111019115	D04220111026421	D04220111029778
D04220111012280	D04220111013710	D04220111017826	D04220111026425	D04220111029051
D04220111012188	D04220111012492	D04220111018669	D04220111026442	D04220111029793
D04220111012199	D04220111011217	D04220111018327	D04220111026447	D04220111030052
D04220111012179	D04220111011152	D04220111019184	D04220111026468	D04220111029784
D04220111013471	D04220111010038	D04220111019126	D04220111026472	D04220111029974
D04220111011609	D04220111011070	D04220111017990	D04220111026496	D04220111029783
D04220111011935	D04220111011385	D04220111019299	D04220111026509	D04220111029060
D04220111011216	D04220111009440	D04220111018636	D04220111026510	D04220111029970
D04220111010837	D04220111013156	D04220111018671	D04220111026549	D04220111029502
D04220111011625	D04220111013295	D04220111019134	D04220111026555	D04220111029680
D04220111012186	D04220111011587	D04220111019400	D04220111026557	D04220111029788
D04220111012191	D04220111017168	D04220111019095	D04220111026563	D04220111029022
D04220111009870	D04220111017134	D04220111018638	D04220111026572	D04220111029330
D04220111013467	D04220111008033	D04220111018967	D04220111026581	D04220111030066
D04220111011606	D04220111011351	D04220111019397	D04220111026583	D04220111029100
D04220111012007	D04220111012482	D04220111018704	D04220111026601	D04220111029373
D04220111011621	D04220111011489	D04220111019124	D04220111026627	D04220111029062
D04220111011618	D04220111015104	D04220111018660	D04220111026631	D04220111029278
D04220111012604	D04220111015318	D04220111019146	D04220111026640	D04220111028536
D04220111013470	D04220111015434	D04220111019163	D04220111026654	D04220111028560
D04220111012022	D04220111015744	D04220111018978	D04220111026655	D04220111027925
D04220111011773	D04220111016267	D04220111018691	D04220111026669	D04220111027941
D04220111013481	D04220111016297	D04220111019188	D04220111026671	D04220111028421
D04220111009893	D04220111016320	D04220111019348	D04220111026679	D04220111028145
D04220111013475	D04220111016520	D04220111018672	D04220111026685	D04220111027529
D04220111012434	D04220111016567	D04220111018880	D04220111026693	D04220111028462



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111011888	D04220111014403	D04220111019391	D04220111026702	D04220111028076
D04220111012507	D04220111014411	D04220111018573	D04220111026707	D04220111028227
D04220111009895	D04220111014176	D04220111019380	D04220111026717	D04220111028515
D04220111012198	D04220111016587	D04220111018977	D04220111026720	D04220111027961
D04220111010215	D04220111016601	D04220111018654	D04220111026739	D04220111028071
D04220111011273	D04220111016604	D04220111019308	D04220111026741	D04220111028229
D04220111011815	D04220111016605	D04220111018701	D04220111026743	D04220111027995
D04220111013476	D04220111016607	D04220111019386	D04220111026746	D04220111027917
D04220111011444	D04220111016608	D04220111018707	D04220111026750	D04220111028255
D04220111012633	D04220111016716	D04220111018374	D04220111026751	D04220111027977
D04220111011775	D04220111016789	D04220111018972	D04220111026754	D04220111027978
D04220111011551	D04220111016907	D04220111019649	D04220111026756	D04220111028564
D04220111011610	D04220111016968	D04220111020240	D04220111026764	D04220111028314
D04220111011974	D04220111016978	D04220111020511	D04220111026767	D04220111028576
D04220111011878	D04220111017007	D04220111020513	D04220111026774	D04220111028455
D04220111010969	D04220111017009	D04220111020481	D04220111023208	D04220111028519
D04220111011428	D04220111017011	D04220111020263	D04220111023854	D04220111027805
D04220111011443	D04220111017016	D04220111020208	D04220111024207	D04220111028241
D04220111012575	D04220111017053	D04220111020617	D04220111024203	D04220111028874
D04220111012911	D04220111017056	D04220111020378	D04220111025443	D04220111027947
D04220111007907	D04220111017058	D04220111019322	D04220111025457	D04220111029294
D04220111013493	D04220111017059	D04220111020413	D04220111025463	D04220111027778
D04220111011884	D04220111017060	D04220111020503	D04220111025465	D04220111029342
D04220111009915	D04220111017062	D04220111020183	D04220111025468	D04220111029300
D04220111012525	D04220111013409	D04220111020184	D04220111025284	D04220111029823
D04220111012054	D04220111012712	D04220111020523	D04220111025321	D04220111028201
D04220111011885	D04220111011640	D04220111020546	D04220111025324	D04220111030068
D04220111012853	D04220111012080	D04220111020532	D04220111025329	D04220111029025
D04220111013511	D04220111014862	D04220111020028	D04220111025118	D04220111029010
D04220111013977	D04220111014863	D04220111020200	D04220111025127	D04220111029353
D04220111012299	D04220111015539	D04220111020270	D04220111025145	D04220111028180
D04220111010659	D04220111014489	D04220111019995	D04220111025154	D04220111029764
D04220111013120	D04220111013845	D04220111020342	D04220111024658	D04220111029937
D04220111013990	D04220111014525	D04220111020272	D04220111025520	D04220111027821



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111012067	D04220111014549	D04220111020122	D04220111025523	D04220111029999
D04220111012602	D04220111013712	D04220111019846	D04220111025171	D04220111029833
D04220111014426	D04220111017173	D04220111020254	D04220111025172	D04220111030001
D04220111014002	D04220111017305	D04220111020417	D04220111025181	D04220111030020
D04220111013509	D04220111017549	D04220111020104	D04220111023453	D04220111029052
D04220111014143	D04220111018311	D04220111020419	D04220111025527	D04220111029059
D04220111012643	D04220111017781	D04220111020629	D04220111025534	D04220111029978
D04220111012071	D04220111018322	D04220111020274	D04220111025535	D04220111029980
D04220111013815	D04220111017591	D04220111019815	D04220111023448	D04220111029971
D04220111014008	D04220111017765	D04220111020520	D04220111023643	D04220111029137
D04220111010902	D04220111018979	D04220111020024	D04220111023975	D04220111029077
D04220111013825	D04220111019421	D04220111020522	D04220111024208	D04220111027099
D04220111011760	D04220111019217	D04220111020275	D04220111024307	D04220111029307
D04220111013812	D04220111019910	D04220111020276	D04220111024471	D04220111030010
D04220111014001	D04220111019916	D04220111020917	D04220111024355	D04220111029410
D04220111013737	D04220111019957	D04220111020921	D04220111023927	D04220111029803
D04220111012208	D04220111020059	D04220111020922	D04220111024774	D04220111030094
D04220111012060	D04220111020119	D04220111020925	D04220111024909	D04220111029507
D04220111014150	D04220111020857	D04220111020927	D04220111024913	D04220111029415
D04220111011767	D04220111020874	D04220111020928	D04220111024925	D04220111029843
D04220111012311	D04220111020881	D04220111020938	D04220111023480	D04220111029367
D04220111014434	D04220111021338	D04220111020958	D04220111025020	D04220111029419
D04220111014014	D04220111021340	D04220111020416	D04220111025032	D04220111029084
D04220111013802	D04220111021451	D04220111021194	D04220111024786	D04220111029824
D04220111013529	D04220111021607	D04220111021001	D04220111022368	D04220111029158
D04220111014430	D04220111021611	D04220111021007	D04220111023184	D04220111028557
D04220111014366	D04220111019621	D04220111020635	D04220111024568	D04220111029159
D04220111011757	D04220111018809	D04220111019845	D04220111025049	D04220111028865
D04220111013821	D04220111018796	D04220111020243	D04220111025081	D04220111029947
D04220111008359	D04220111019461	D04220111020556	D04220111025548	D04220111028364
D04220111007080	D04220111018987	D04220111021017	D04220111025558	D04220111028060
D04220111009219	D04220111019521	D04220111021019	D04220111025406	D04220111028368
D04220111007704	D04220111018802	D04220111021228	D04220111025076	D04220111027987
D04220111007350	D04220111018790	D04220111021233	D04220111025405	D04220111028533



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111009291	D04220111018785	D04220111021236	D04220111023988	D04220111028825
D04220111007215	D04220111019524	D04220111021043	D04220111024950	D04220111028921
D04220111007736	D04220111018787	D04220111021045	D04220111025515	D04220111028792
D04220111007394	D04220111018931	D04220111020223	D04220111025256	D04220111027379
D04220111007953	D04220111019593	D04220111020212	D04220111024849	D04220111028330
D04220111007360	D04220111018927	D04220111021255	D04220111025571	D04220111028115
D04220111008176	D04220111018805	D04220111021269	D04220111025574	D04220111028553
D04220111006114	D04220111018799	D04220111021273	D04220111025575	D04220111028444
D04220111007495	D04220111019601	D04220111020542	D04220111025579	D04220111028080
D04220111007701	D04220111018784	D04220111020548	D04220111025585	D04220111028890
D04220111008544	D04220111019439	D04220111020555	D04220111025592	D04220111028693
D04220111008315	D04220111018760	D04220111020338	D04220111025600	D04220111028118
D04220111007320	D04220111019509	D04220111021050	D04220111025403	D04220111028885
D04220111008498	D04220111019599	D04220111021051	D04220111025538	D04220111028924
D04220111007951	D04220111019614	D04220111021073	D04220111025542	D04220111028733
D04220111007395	D04220111019420	D04220111020436	D04220111025128	D04220111027092
D04220111008356	D04220111019440	D04220111019749	D04220111025904	D04220111029547
D04220111008847	D04220111018580	D04220111021080	D04220111025916	D04220111028380
D04220111009053	D04220111018786	D04220111021091	D04220111025919	D04220111027085
D04220111007942	D04220111020455	D04220111021093	D04220111025923	D04220111028119
D04220111007404	D04220111017555	D04220111020107	D04220111025925	D04220111028055
D04220111008322	D04220111019566	D04220111020277	D04220111025930	D04220111028387
D04220111006294	D04220111020462	D04220111020533	D04220111025932	D04220111028486
D04220111007197	D04220111020467	D04220111020396	D04220111025937	D04220111028445
D04220111007422	D04220111019555	D04220111020394	D04220111025938	D04220111029626
D04220111006965	D04220111019438	D04220111021109	D04220111025949	D04220111029107
D04220111007072	D04220111018793	D04220111021110	D04220111025965	D04220111029755
D04220111005777	D04220111018925	D04220111021112	D04220111025967	D04220111030125
D04220111009097	D04220111020048	D04220111021118	D04220111025973	D04220111028945
D04220111008657	D04220111020041	D04220111020530	D04220111025801	D04220111030115
D04220111010133	D04220111018808	D04220111020428	D04220111025806	D04220111028916
D04220111007946	D04220111018789	D04220111021129	D04220111025807	D04220111028563
D04220111007774	D04220111018667	D04220111021146	D04220111025808	D04220111029845
D04220111007659	D04220111018801	D04220111019716	D04220111025810	D04220111029153



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PV module model	TSM-545DE19			
Module ID	Module ID	Module ID	Module ID	Module ID
D04220111009349	D04220111019215	D04220111020340	D04220111025814	D04220111030105
D04220111006093	D04220111019568	D04220111020420	D04220111025823	D04220111028998
D04220111009620	D04220111019951	D04220111021160	D04220111025975	D04220111030013
D04220111008539	D04220111019615	D04220111021178	D04220111025983	D04220111029965
D04220111008533	D04220111019773	D04220111020438	D04220111025984	D04220111030055
D04220111007187	D04220111019502	D04220111019933	D04220111025613	D04220111029381
D04220111009062	D04220111019429	D04220111020337	D04220111025842	D04220111029429
D04220111007939	D04220111020545	D04220111020439	D04220111025844	D04220111029407
D04220111007510	D04220111019971	D04220111020666	D04220111025366	D04220111029142

10. Photos



1. Cargo in warehouse



2. Cargo in warehouse



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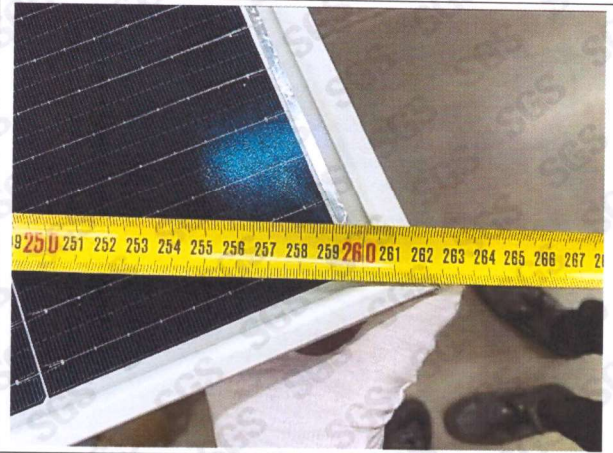
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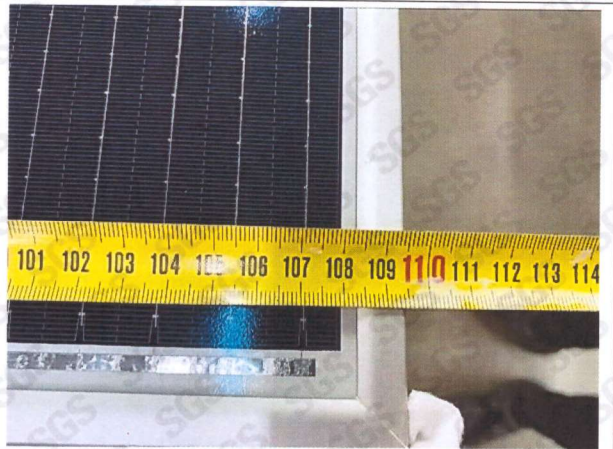
15. Size check



16. Size check



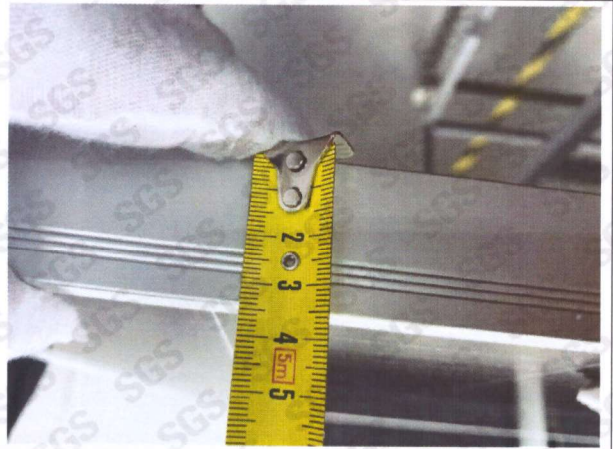
17. Size check



18. Size check



19. Size check



20. Size check



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21. J-Box



22. J-Box



23. J-Box- connector



24. J-Box- connector



25. J-Box- connector



26. J-Box- connector



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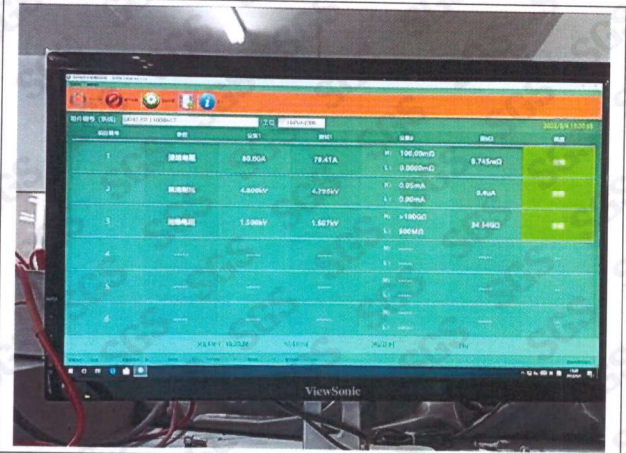
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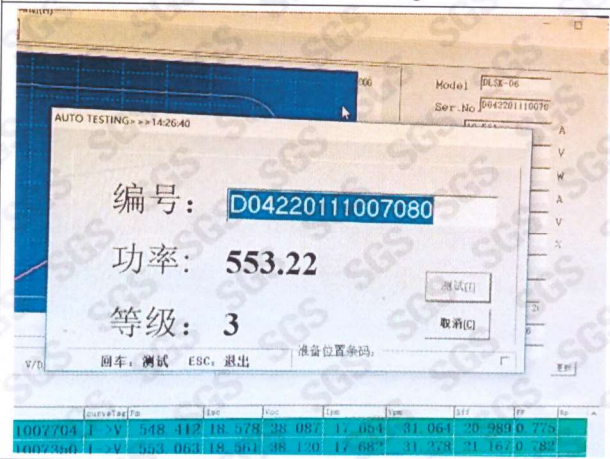
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN.Doccheck@sgs.com



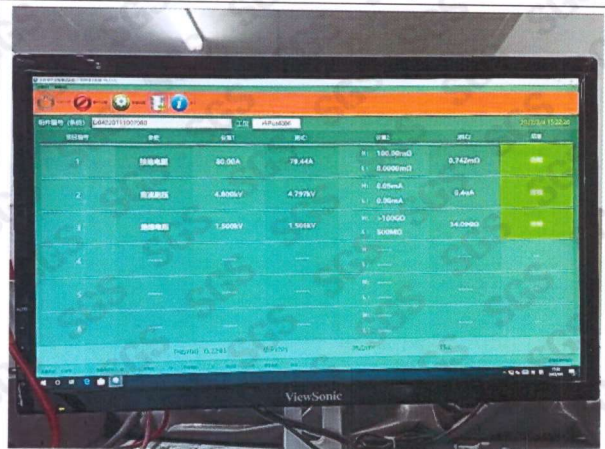
27. Witness testing



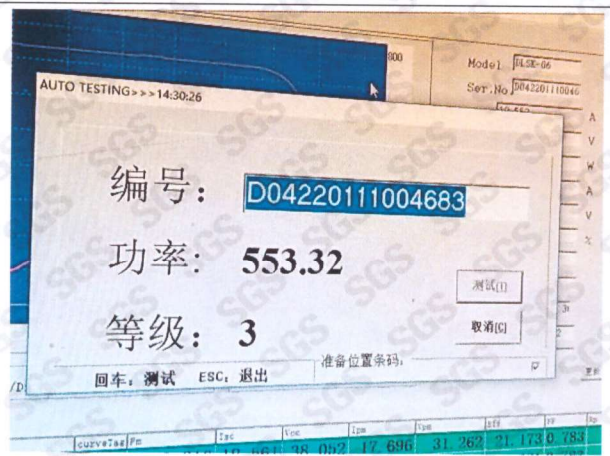
28. Witness testing



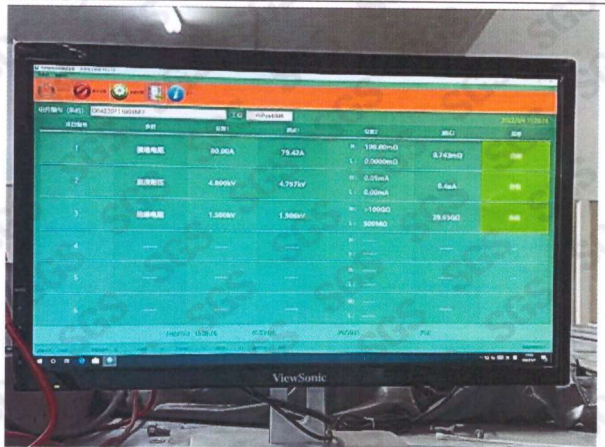
29. Witness testing



30. Witness testing



31. Witness testing



32. Witness testing

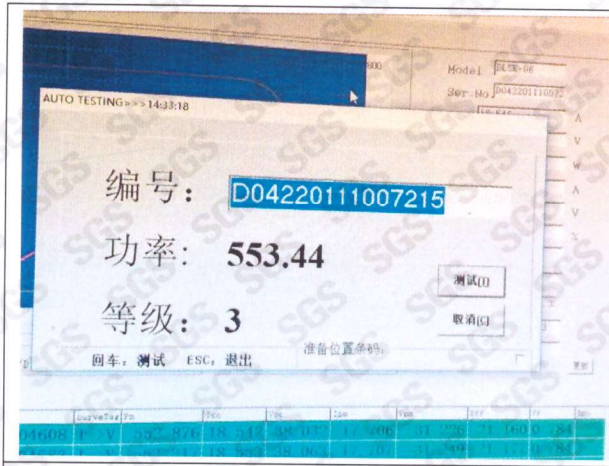


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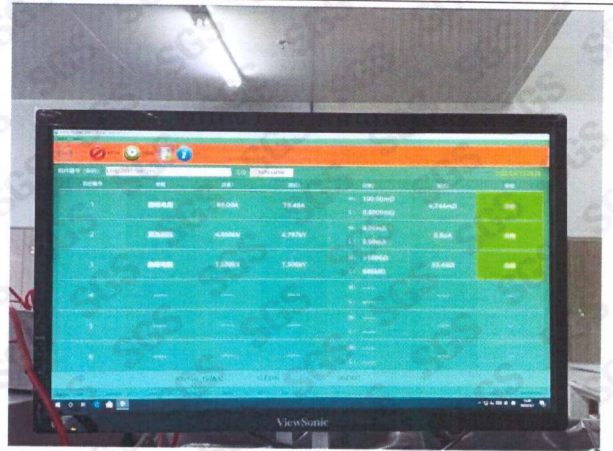
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33. Withstand voltage test



34. Withstand voltage test

11. Timesheet

Name/Date	Time	Description	Hours
Gao hailin/ Mar. 4, 2022	9:00~18:30	Travelling+ Working	9.5h
	20:00~22:00	Report	2 h
Total			11.5h

Note: Both traveling time and reporting time are included.

THIS REPORT ONLY REFLECTED OUR ACTUAL FINDINGS. THE INSPECTION WAS DONE TO THE BEST OF OUR KNOWLEDGE AND ABILITY AND WITH DUE CARE. THE FINDINGS ARE VALID AS FOR TIME AND PLACE OF INSPECTION.

Issued by:	<i>Gao hailin</i>	Reviewed by:	<i>Linda Yan</i>	Approved by:	<i>[Signature]</i>
Title or position:	Inspector	Title or position:	Coordinator	Title or position:	Section Head
Date:	Mar. 4, 2022	Date:	Mar. 5, 2022	Date:	Mar. 15, 2022

End of Report

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GENERAL CONDITIONS OF SERVICE

1. GENERAL

- (a) Unless otherwise agreed in writing or except where they are at variance with (i) the regulations governing services performed on behalf of governments, government bodies or any other public entity or (ii) the mandatory provisions of local law, all offers or services and all resulting contractual relationship(s) between any of the affiliated companies of SGS SA or any of their agents (each a "Company") and Client (the "Contractual Relationship(s)") shall be governed by these general conditions of service (hereinafter the "General Conditions").
- (b) The Company may perform services for persons or entities (private, public or governmental) issuing instructions (hereinafter, the "Client").
- (c) Unless the Company receives prior written instructions to the contrary from Client, no other party is entitled to give instructions, particularly on the scope of the services or the delivery of reports or certificates resulting therefrom (the "Reports of Findings"). Client hereby irrevocably authorises the Company to deliver Reports of Findings to a third party where so instructed by Client or, at its discretion, where it implicitly follows from circumstances, trade custom, usage or practice.

2. PROVISION OF SERVICES

- (a) The Company will provide services using reasonable care and skill and in accordance with Client's specific instructions as confirmed by the Company or, in the absence of such instructions:
- (1) the terms of any standard order form or standard specification sheet of the Company; and/or
 - (2) any relevant trade custom, usage or practice; and/or
 - (3) such methods as the Company shall consider appropriate on technical, operational and/or financial grounds.
- (b) Information stated in Reports of Findings is derived from the results of inspection or testing procedures carried out in accordance with the instructions of Client, and/or our assessment of such results on the basis of any technical standards, trade custom or practice, or other circumstances which should in our professional opinion be taken into account.
- (c) Reports of Findings issued further to the testing of samples contain the Company's opinion on those samples only and do not express any opinion upon the lot from which the samples were drawn.
- (d) Should Client request that the Company witness any third party intervention, Client agrees that the Company's sole responsibility is to be present at the time of the third party's intervention and to forward the results, or confirm the occurrence, of the intervention. Client agrees that the Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied, the qualifications, actions or omissions of third party personnel or the analysis results.
- (e) Reports of Findings issued by the Company will reflect the facts as recorded by it at the time of its intervention only and within the limits of the instructions received or, in the absence of such instructions, within the limits of the alternative parameters applied as provided for in clause 2(a). The Company is under no obligation to refer to, or report upon, any facts or circumstances which are outside the specific instructions received or alternative parameters applied.
- (f) The Company may delegate the performance of all or part of the services to an agent or subcontractor and Client authorises Company to disclose all information necessary for such performance to the agent or subcontractor.
- (g) Should Company receive documents reflecting engagements contracted between Client and third parties or third party documents, such as copies of sale contracts, letters of credit, bills of lading, etc., they are considered to be for information only, and do not extend or restrict the scope of the services or the obligations accepted by the Company.
- (h) Client acknowledges that the Company, by providing the services, neither takes the place of Client or any third party, nor releases them from any of their obligations, nor otherwise assumes, abridges, abrogates or undertakes to discharge any duty of Client to any third party or that of any third party to Client.
- (i) All samples shall be retained for a maximum of 3 months or such other shorter time period as the nature of the sample permits and then returned to Client or otherwise disposed of at the Company's discretion after which time Company shall cease to have any responsibility for such samples. Storage of samples for more than 3 months shall incur a storage charge payable by Client. Client will be billed a handling and freight fee if samples are returned. Special disposal charges will be billed to Client if incurred.

3. OBLIGATIONS OF CLIENT

The Client will:

- (a) ensure that sufficient information, instructions and documents are given in due time (and, in any event not later than 48 hours prior to the desired intervention) to enable the required services to be performed;
- (b) procure all necessary access for the Company's representatives to the premises where the services are to be performed and take all necessary steps to eliminate or remedy any obstacles to, or interruptions in, the performance of the services;
- (c) supply, if required, any special equipment and personnel necessary for the performance of the services;
- (d) ensure that all necessary measures are taken for safety and security of working conditions, sites and installations during the performance of services and will not rely, in this respect, on the Company's advice whether required or not;
- (e) inform Company in advance of any known hazards or dangers, actual or potential, associated with any order or samples or testing including, for example, presence or risk of radiation, toxic or noxious or explosive elements or materials, environmental pollution or poisons;
- (f) fully exercise all its rights and discharge all its liabilities under any relevant sales or other contract with a third party and at law.

4. FEES AND PAYMENT

- (a) Fees not established between the Company and Client at the time the order is placed or a contract is negotiated shall be at the Company's standard rates (which are subject to change) and all applicable taxes shall be payable by Client.
- (b) Unless a shorter period is established in the invoice, Client will promptly pay not later than 30 days from the relevant invoice date or within such other period as may be established by the Company in the invoice (the "Due Date") all fees due to the Company failing which interest will become due at a rate of 1.5% per month (or such other rate as may be established in the invoice) from the Due Date up to and including the date payment is actually received.
- (c) Client shall not be entitled to retain or defer payment of any sums due to the Company on account of any dispute, counter claim or set off which it may allege against the Company.
- (d) Company may elect to bring action for the collection of unpaid fees in any court having competent jurisdiction.
- (e) Client shall pay all of the Company's collection costs, including attorney's fees and related costs.
- (f) In the event any unforeseen problems or expenses arise in the course of carrying out the services the Company shall endeavour to inform Client and shall be entitled to charge additional fees to cover extra time and cost necessarily incurred to complete the services.
- (g) If the Company is unable to perform all or part of the services for any cause whatsoever outside the Company's control including failure by Client to comply with any of its obligations provided for in clause 3 above the Company shall nevertheless be entitled to payment of:
- (1) the amount of all non-refundable expenses incurred by the Company; and
 - (2) a proportion of the agreed fee equal to the proportion of the services actually carried out.

5. SUSPENSION OR TERMINATION OF SERVICES

The Company shall be entitled to immediately and without liability either suspend or terminate provision of the services in the event of:

- (a) failure by the Client to comply with any of its obligations hereunder and such failure is not remedied within 10 days that notice of such failure has been notified to Client; or
- (b) any suspension of payment, arrangement with creditors, bankruptcy, insolvency, receivership or cessation of business by Client.

6. LIABILITY AND INDEMNIFICATION

(a) Limitation of Liability:

- (1) The Company is neither an insurer nor a guarantor and disclaims all liability in such capacity. Clients seeking a guarantee against loss or damage should obtain appropriate insurance.
 - (2) Reports of Findings are issued on the basis of information, documents and/or samples provided by, or on behalf of, Client and solely for the benefit of Client who is responsible for acting as it sees fit on the basis of such Reports of Findings. Neither the Company nor any of its officers, employees, agents or subcontractors shall be liable to Client nor any third party for any actions taken or not taken on the basis of such Reports of Findings nor for any incorrect results arising from unclear, erroneous, incomplete, misleading or false information provided to the Company.
 - (3) The Company shall not be liable for any delayed, partial or total non-performance of the services arising directly or indirectly from any event outside the Company's control including failure by Client to comply with any of its obligations hereunder.
 - (4) The liability of the Company in respect of any claim for loss, damage or expense of any nature and howsoever arising shall in no circumstances exceed a total aggregate sum equal to 10 times the amount of the fee paid in respect of the specific service which gives rise to such claim or US\$20,000 (or its equivalent in local currency), whichever is the lesser.
 - (5) The Company shall have no liability for any indirect or consequential loss including without limitation loss of profits, loss of business, loss of opportunity, loss of goodwill and cost of product recall. It shall further have no liability for any loss, damage or expenses arising from the claims of any third party (including, without limitation, product liability claims) that may be incurred by the Client.
 - (6) In the event of any claim, Client must give written notice to the Company within 30 days of discovery of the facts alleged to justify such claim and, in any case, the Company shall be discharged from all liability for all claims for loss, damage or expense unless suit is brought within one year from:
 - (i) The date of performance by the Company of the service which gives rise to the claim; or
 - (ii) The date when the service should have been completed in the event of any alleged non-performance.
- (b) Indemnification: Client shall guarantee, hold harmless and indemnify the Company and its officers, employees, agents or subcontractors against all claims (actual or threatened) by any third party for loss, damage or expense of whatsoever nature including all legal expenses and related costs and howsoever arising relating to the performance, purported performance or non-performance, of any services.

7. MISCELLANEOUS

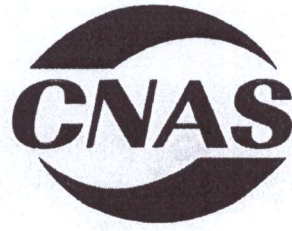
- (a) If any one or more provisions of these General Conditions are found to be illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.
- (b) During the course of providing the services and for a period of one year thereafter Client shall not directly or indirectly entice, encourage or make any offer to Company's employees to leave their employment with the Company.
- (c) Use of the Company's corporate name or registered marks for advertising purposes is not permitted without the Company's prior written authorisation.

8. GOVERNING LAW, JURISDICTION AND DISPUTE RESOLUTION

Unless specifically agreed otherwise, all disputes arising out or in connection with Contractual Relationship(s) hereunder shall be governed by the substantive laws of Switzerland exclusive of any rules with respect to conflicts of laws and be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said rules. The arbitration shall take place in Paris (France) and be conducted in the English language.

9. SPECIAL CONDITION

Notwithstanding the provisions of clause 8 above, and providing that the Company and Client have their registered offices in China, all disputes arising out of or in connection with Contractual Relationship(s) hereunder shall be governed by the substantive laws of China, exclusive of any rules with respect to conflicts of laws and be finally settled under the Rules of Shanghai Arbitration Center by one or more arbitrators appointed in accordance with the said Rules, each party to bear its own costs. The arbitration shall take place in Shanghai and be conducted in the Chinese language.



**China National Accreditation Service for Conformity Assessment
INSPECTION BODY ACCREDITATION CERTIFICATE**

(Registration No. CNAS IB0058)

SGS-CSTC Standards Technical Services Co., Ltd.

16/F., Century Yuhui Mansion, No.73, Fucheng Road,

Haidian District, Beijing, China

Is accredited in accordance with ISO/IEC 17020:2012 General Criteria for the Operation of Various Types of Bodies Performing Inspection(CNAS-CI01 Accreditation Criteria for the competence of Inspection Bodies) as Type A inspection body for the competence to undertake inspection services as described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule forms an integral part of this certificate.

Date of Issue: 2016-12-14

Date of Expiry: 2023-02-10

Date of Initial Accreditation: 2006-02-13

Signed on behalf of China National Accreditation Service for Conformity Assessment

China National Accreditation Service for Conformity Assessment(CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) and the Asia Pacific Laboratory Accreditation Cooperation Mutual Recognition Arrangement (APLAC MRA). The validity of the certificate can be checked on CNAS website at <http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml>



China National Accreditation Service for Conformity Assessment
LABORATORY ACCREDITATION CERTIFICATE
(Registration No. CNAS L3038)

TUV Rheinland (Shanghai) Co., Ltd.

1/F. of No.10, No.153/165/177/178/179/182/189/192/198, Lane 777,

Guangzhong West Road, Jing'an District, Shanghai, China

is accredited in accordance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence to undertake the service described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule form an integral part of this certificate.

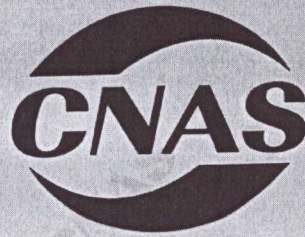
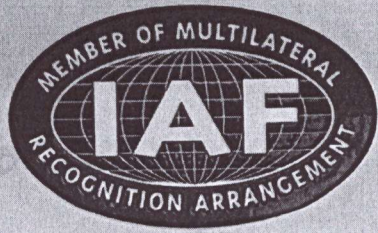
Date of Issue: 2017-11-16

Date of Expiry: 2023-11-18

Date of Initial Accreditation: 2007-04-20

Signed on behalf of China National Accreditation Service for Conformity Assessment

China National Accreditation Service for Conformity Assessment(CNAS) is authorized by Certification and Accreditation Administration of the People' s Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) and the Asia Pacific Laboratory Accreditation Cooperation Mutual Recognition Arrangement (APLAC MRA). The validity of the certificate can be checked on CNAS website at <http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml>



China National Accreditation Service for Conformity Assessment

PRODUCT CERTIFICATION BODY ACCREDITATION CERTIFICATE

(Registration No. CNAS C033-P)

SGS-CSTC Standards Technical Services Co. Ltd.

16F Century Yuhui Mansion No.73, Fucheng Road, Beijing, P. R. China, 100036

to ISO/IEC 17065:2012 Conformity Assessment - Requirements for Bodies Certifying Products, Processes and Services (CNAS-CC02) for the competence to undertake the product certification service as described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule forms an integral part of this certificate.

Date of Issue: 2020-11-24

Date of Expiry: 2025-11-23

Date of Initial Accreditation: 2009-01-12

Signed on behalf of China National Accreditation Service for Conformity Assessment

China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is a signatory of the International Accreditation Forum Multilateral Recognition Arrangement (IAF MLA) and the Asia Pacific Accreditation Cooperation Mutual Recognition Arrangement (APAC MRA). The validity of the certificate can be checked on CNAS website at <http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml>.