भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
BUREAU OF INDIAN STANDARDS
(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

मानक भवन, 9 बहादुर शाह जफ़र मार्ग, नई दिल्ली - 110002
Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi – 110002
दूरभाष/Phone: +91-11-23230856/2323010131/23233375/23239402
ई-मेल/E-mail: registration@bis.gov.in
वेबसाईट/Website: https://bis.gov.in/, https://www.crsbis.in/BIS/

Our Ref: Registration/CRS 2018-5463/R-72001791 Date:08-01-2019

Subject : Licence Document

Manufacturing Unit :	Australian Premium Solar (India) Pvt. Ltd PLOT NO:-143, ROAD 4A, GIDC- KATHWADA, AHMEDABAD, GUJARAT - 382430, INDIA dhaval@australianpremiumsolar.co.in 8826298278	

Dear Sir,

1.With reference to your Application, we are pleased to inform you that it has been decided to grant you licence as per details given below :

PRODUCT :	Crystalline Silicon Terrestrial Photovoltaic (PV) modules (Poly-Crystalline)
IS NO :	IS 14286 : 2010/ IEC 61215 : 2005, IS/IEC 61730 (PART 1) : 2004 & IS/IEC 61730 (PART 2) : 2004
BRAND :	APS with LOGO
MODEL :	APSAP6-250/60,APSAP6-300/72,APSAP6-255/60,APSAP6-260/60,APSAP6-265/60,APSAP6-270/60,APSAP6-275/60,APSAP6-280/60,APSAP6-285/60,APSAP6-305/72,APSAP6-310/72,APSAP6-315/72,APSAP6-320/72,APSAP6-325/72,APSAP6-330/72,APSAP6-335/72,APSAP6-340/72,APSAP6-345/72,APSAP6-350/72
FACTORY ADDRESS :	Australian Premium Solar (India) Pvt. Ltd PLOT NO:-143, ROAD 4A, GIDC- KATHWADA, AHMEDABAD. GUJARAT--382430, INDIA

2. The licence is being granted for your unit located at the address and for the brand and models mentioned at serial no 1 above.

3. The number assigned to this Licence is **R-72001791** which has been made operative from **02-01-2019** and is valid upto **01-01-2021** The Licence Number should invariably be referred to in your future correspondence.

4. The rights and privileges under the licence shall not be exercised by any other factory / organization at any other location. This licence is not transferable. In the event of shifting of the manufacturing machinery from the registered premises to some other place use of the licence Number shall be stopped and BIS shall be informed.

5. The licensee shall comply with the provisions of the Act, rules and regulations framed there under and as amended from time to time.

6. The licensee shall follow the guidelines for the use of Standard Mark and labeling requirements as per Annex-I.

7. The licensee shall not use the licence in any manner which contravenes the provisions of Act, rules and regulations framed there under and as amended from time to time.

8. Upon expiry of validity, stoppage or suspension or cancellation of licence, you shall discontinue forthwith the self declaration of conformity to the relevant Indian Standard(s) and withdraw all promotional and advertising matter which contains any reference thereto.

9. For renewal of licence, the licensee shall have to apply to BIS three months in advance before expiration of the licence and application form for renewal is available on BIS website.

10. The licence is not transferable. Kindly acknowledge receipt of this letter.

Thanking you,

Yours faithfully,
(Vibha Rani)
Sc. D
Telfax : +91-11-23230856
E-mail: registration@bis.org.in

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Annex - 1

The guidelines for use of Standard Mark for Scheme-C are per 3(1) of BIS (Conformity Assessment) Regulations,2017 are given below:

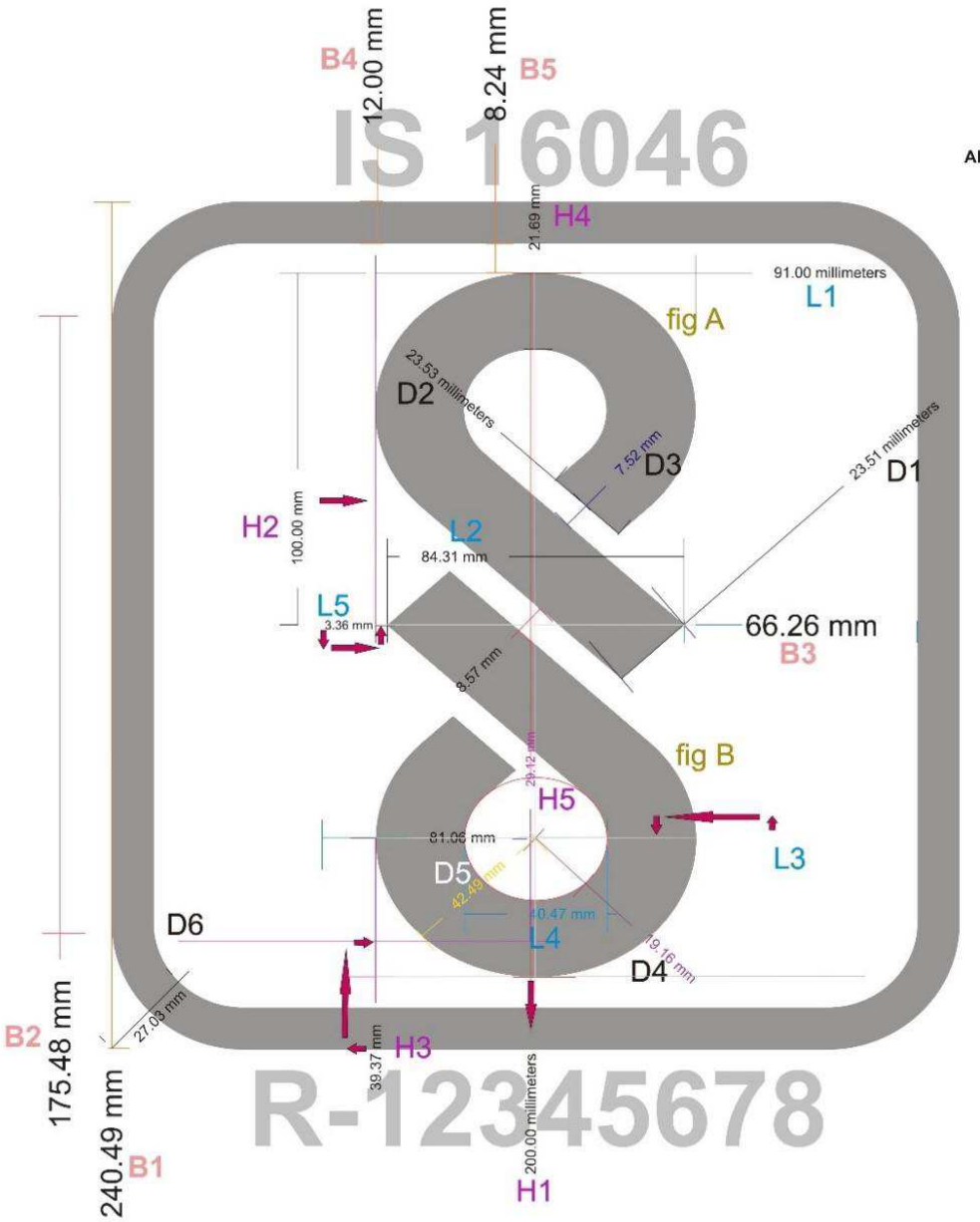
i) The monogram of the "Standard Mark" consists of the pictorial representation, drawn in the exact style as indicated in the figure in the figure in Annexure I. Its photograpic reductin and enlargement is permitted.

ii)The "Standard Mark" can be displayed in single colour or multi-colour as per the details given below. The colour scheme for the Standard Mark to be used in multi colur shall be use as indicated below.

iii) The licensee shall diplay the "Standard Mark" on the article and/or the packaging, as the case may be, in a manner so as to be easily visible. It shall be legible, indelible and non-remobable. Further, the durability of marking shall be as per the provisions of the relevant Indian Standard, wherever applicable. The diplay of IS number, Registration number and words shall not be less than Arial forn size 6.

iv) Any device with a integrated display sceen may present the Standard Mark electronically (e-labelling) in lieu of a physical presentation on the product.

Measurement for the Self Declaration of Conformity(SDoC) mark



All dimensions in Millimeters

H1	200
H2	100
H3	39.3
H4	21.6
H5	17.7
L1	91.0
L2	84.3
L3	25.2
L4	40.4
L5	3.36
D1	23.5
D2	23.5
D3	7.52
D4	19.6
D5	42.4
D6	8.57
B1	240.49
B2	175.48
B3	66.26
B4	12.00
B5	8.24

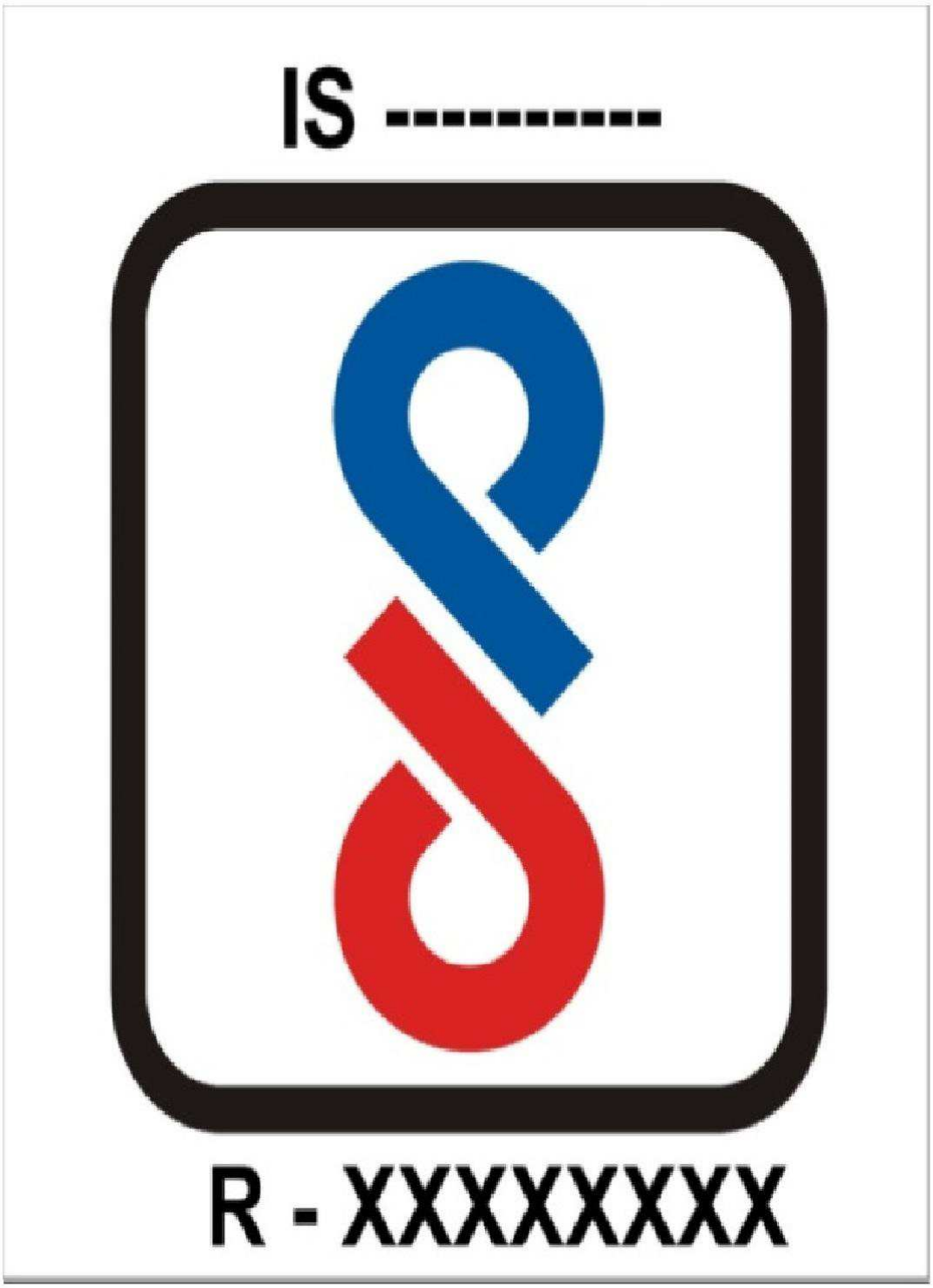
For multicolour Standard Mark the colour scheme shall be - Red, Blue and Black.

a) For printing purposes, colours shall be "Oriental Blue" and "Monopol Red" as per IS 1222:1992. 'Ink, duplicating for twin cylinder rotary machines (third revision)'

b) For sign board purposes, colurs shall be "French Blue" (No.166) Red" (No.537) as per IS 5:1994 "Colours for ready mixed paints and enamels (fourth revision)".

For single colour Standard Mark, there is no restriction in the choice of the colour.

The font style and size used is Arial-85 pt.


IS ----------
R - XXXXXXXX

भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
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Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi-110002
दूरभाष Phones : 2323 0131 / 2323 3375 / 2323 9402
वेबसाईट Website : www.bis.org.in, www.bis.gov.in

Our Ref: Registration/ R-72001791

Dated: 13-12-2019

REQUEST ID: ONC-000555

Subject: Change in Address & Management composition of manufacturing unit

MANUFACTURING UNIT:
AUSTRALIAN PREMIUM SOLAR (INDIA) PVT. LTD
TAJPUR, NH-08, TA:PRANTIJ
DIST.: SABARKANTHA-383205
dhaval@australianpremiumsolar.co.in
7622023249

Dear Sir,

This has reference to BIS licence(s) held by your company as given in the table below & further reference to your request regarding change in address & management composition of the manufacturer unit:

On the basis of documents submitted by the firm, the following changes have been made in the scope of licence:

Licence No.	CRS 2018-5463/R-72001791
Old Address details:	PLOT NO:-143, ROAD 4A, GIDC- KATHWADA AHMEDABAD-382430, GUJARAT-INDIA 8826298278
New Address details:	TAJPUR, NH-08, T.A:- PRATIJ TAJPUR, TA: PRATIJ DIST: SABARKANTHA :383205 7622023249
Addition in management composition details:	CHIMABHAI RANCHHODBHAI PATEL (DIRECTOR) SAVITABEN CHIMANBHAI PATEL (DIRECTOR)
Date of decision	25-11-2019

Other terms and conditions of the licence remain the same.

Thanking you,

Yours faithfully,

13/12/2019

(L.S.CHAUHAN)
Scientist-C (Reg. Deptt.)
Telefax : +91-11-2323 0856
E-mail: registration@bis.org.in

भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
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दूरभाष/Phone: +91-11-23230856/2323010131/23233375/23239402
ई-मेल/E-mail: registration@bis.gov.in
वेबसाईट/Website: https://bis.gov.in/, https://www.crsbis.in/BIS/

Our Ref: REGISTRATION /CRS-2018-5463/R-72001791

Dated: 2020-12-28 14:52:26

RENEWAL ID : 9286

Subject : RENEWAL OF LICENCE R-72001791 AS PER IS 14286 : 2010/ IEC 61215 : 2005, IS/IEC 61730 (Part 1) : 2004 & IS/IEC 61730 (Part 2) : 2004

Australian Premium Solar (India) Pvt. Ltd
Tajpur, NH-08, TA:Prantij, Dist.: Sabarkantha
GUJARAT, India, 383205

Dear Sir/Madam,

With reference to your online application dated 28-12-2020 for renewal of the above mentioned licence; this is to inform you that the same has been renewed from **02-01-2021** to **01-01-2023**.

It may be noted that the said licence granted under clause (b) of sub section (2) of section 13 of the Act shall *expire* at the end of the period for which it is granted unless renewed or its renewal is deferred. You are, therefore, requested to apply for next renewal to BIS within three months before the expiration of the licence.

Thanking you.

Yours faithfully,

Registration Department
Bureau of Indian Standards,
9, Bahadur Shah Zafar Marg,
New Delhi-110002.
Telfax : +91-11-23230856
E-mail: registration@bis.gov.in

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भारतीय मानक ब्यूरो
(उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय, भारत सरकार)
BUREAU OF INDIAN STANDARDS
(Ministry of Consumer Affairs, Food & Public Distribution, Govt. of India)

मानक भवन, 9 बहादुर शाह जफ़र मार्ग, नई दिल्ली – 110002
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ई–मेल/E-mail: registration@bis.gov.in
वेबसाईट/Website: https://bis.gov.in/, https://www.crsbis.in/BIS/

Our Ref: REGISTRATION /CRS-2018-5463/R-72001791

Dated: 2022-12-08 11:09:21

RENEWAL ID : 17789

Subject : RENEWAL OF LICENCE R-72001791 AS PER IS 14286 : 2010/ IEC 61215 : 2005, IS/IEC 61730 (Part 1) : 2004 & IS/IEC 61730 (Part 2) : 2004

Australian Premium Solar (India) Pvt. Ltd
Tajpur, NH-08, TA:Prantij, Dist.: Sabarkantha
GUJARAT, India, 383205

Dear Sir/Madam,

With reference to your online application dated 08-12-2022 for renewal of the above mentioned licence; this is to inform you that the same has been renewed from **02-01-2023** to **01-01-2025**.

It may be noted that the said licence granted under clause (b) of sub section (2) of section 13 of the Act shall *expire* at the end of the period for which it is granted unless renewed or its renewal is deferred. You are, therefore, requested to apply for next renewal to BIS within three months before the expiration of the licence.

Thanking you.

Yours faithfully,

Registration Department
Bureau of Indian Standards,
9, Bahadur Shah Zafar Marg,
New Delhi-110002.
Telfax : +91-11-23230856
E-mail: registration@bis.gov.in

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To verify authentication of letter, kindly scan the QR code on this letter.

For details information on BIS, consult the e-BIS Portal (www.manakonline. in).
Please use BIS CARE APP for verification of ISI-marked goods and hallmarked gold jewellery.

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Australian Premium Solar (India) Pvt. Ltd.
Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha,
383205, Gujarat
India

is authorized to provide the product mentioned below with the mark as illustrated:

Description of product (details see Annex 2):

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

Valid until: 2027-02-24

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC 61701:2011 / EN 61701:2012 Severity 6.
Registered No.:	44 780 22 406749 - 031
Manufacturer:	see Annex 1
Test Report No.:	492011937.001
File No.:	PVP08087/21P-02

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Essen, 2022-02-25

Please also pay attention to the information stated overleaf.

TÜV NORD CERT GmbH
Am TÜV 1
Fon +49 (0)201 825 5120
D-45307 Essen
Fax +49 (0)201 825 3209
www.tuev-nord-cert.de
prodcert@tuev-nord.de

Manufacturer:

Manufacturer:	**Australian Premium Solar (India) Pvt. Ltd.** Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha, 383205, Gujarat, India
Factory inspection report no.:	862010589.001

Remark:

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Description of product(s):

Module types:	**PV Modules with 6" Poly-crystalline Silicon Solar Cells:** 72 cells: APSAP6-xxx/72 (xxx = 330 - 350, in increment of 5) 66 cells: APSAP6-xxx/66 (xxx = 300 - 320, in increment of 5) 60 cells: APSAP6-xxx/60 (xxx = 275 - 290, in increment of 5)
Maximum system voltage:	1000V
Fuse rating:	15A
Application class:	Class A
Electrical protection class:	Class II

Remark:
For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

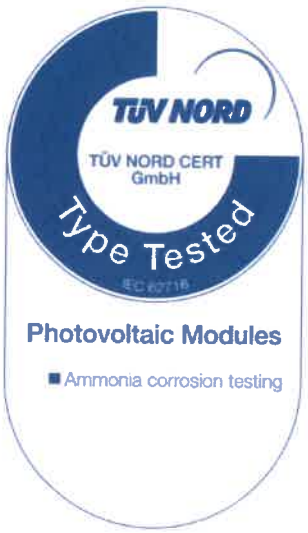
TÜV NORD CERT GmbH
Certification Body
Consumer Products

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Australian Premium Solar (India) Pvt. Ltd.
Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha,
383205, Gujarat
India

is authorized to provide the product mentioned below with the mark as illustrated:



Description of product (details see Annex 2):

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

-

Valid until: 2027-02-24

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC 62716:2013 / EN 62716:2013 + AC:2014.
Registered No.:	44 780 22 406749 - 032
Manufacturer:	see Annex 1
Test Report No.:	492011938.001
File No.:	PVP08087/21P-03

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Essen, 2022-02-25

Please also pay attention to the information stated overleaf.

TÜV NORD CERT GmbH
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D-45307 Essen
Fax +49 (0)201 825 3209
www.tuev-nord-cert.de
prodcert@tuev-nord.de

Manufacturer:

Manufacturer:	**Australian Premium Solar (India) Pvt. Ltd.** Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha, 383205, Gujarat, India
Factory inspection report no.:	862010589.001

Remark:
Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Am TÜV 1 • D-45307 Essen • Fon +49 (0)201 825 5120 • Fax +49 (0)201 825 3209 • Email: prodcert@tuev-nord.de

Description of product(s):

Module types:	**PV Modules with 6" Poly-crystalline Silicon Solar Cells:** 72 cells: APSAP6-xxx/72 (xxx = 330 - 350, in increment of 5) 66 cells: APSAP6-xxx/66 (xxx = 300 - 320, in increment of 5) 60 cells: APSAP6-xxx/60 (xxx = 275 - 290, in increment of 5)
Maximum system voltage:	1000V
Fuse rating:	15A
Application class:	Class A
Electrical protection class:	Class II

Remark:
For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

TÜV NORD CERT GmbH
Certification Body
Consumer Products

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Australian Premium Solar (India) Pvt. Ltd.
Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha,
383205, Gujarat
India

is authorized to provide the product mentioned below with the mark as illustrated:

Description of product (details see Annex 2):

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

TÜV NORD CERT GmbH
Type Tested

Valid from: 2022-02-25
Valid until: 2027-02-24

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	P12.4-AA-04 Rev. 00 (IEC 60068-2-68:1994 modified)
Remark:	Test Method Lc1; Dust concentration: 5±0.5g/m³; Wind velocity: 20±2m/s; Test duration: 4 hours each side.
Registered No.:	44 780 22 406749 - 033
Manufacturer:	see Annex 1
Test Report No.:	492011939.001
File No.:	PVP08087/21P-04

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Essen, 2022-02-25

Please also pay attention to the information stated overleaf.

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Fax +49 (0)201 825 3209
www.tuev-nord-cert.de
prodcert@tuev-nord.de

Manufacturer:

Manufacturer:	**Australian Premium Solar (India) Pvt. Ltd.** Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha, 383205, Gujarat, India
Factory inspection report no.:	862010589.001

Remark:

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Description of product(s):

Module types:	**PV Modules with 6" Poly-crystalline Silicon Solar Cells:** 72 cells: APSAP6-xxx/72 (xxx = 330 - 350, in increment of 5) 66 cells: APSAP6-xxx/66 (xxx = 300 - 320, in increment of 5) 60 cells: APSAP6-xxx/60 (xxx = 275 - 290, in increment of 5)
Maximum system voltage:	1000V
Fuse rating:	15A
Application class:	Class A
Electrical protection class:	Class II

Remark:
For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Am TÜV 1 • D-45307 Essen • Fon +49 (0)201 825 5120 • Fax +49 (0)201 825 3209 • Email: prodcert@tuev-nord.de

TÜV NORD (Hangzhou) Co., Ltd.

Room 217, Building 17, No.57,
Kejiyuan Road, Baiyang Street,
HEDA, Hangzhou, Zhejiang
Province, China, 310019

Phone: +86 (0) 571 8538 6989
Fax: +86 (0) 571 8538 6986

hzpcert@tuv-nord.com
www.tuv-nord.com/cn

Test Report
No. TRPVP08087/21P/01

Panfile Parameters Measurement

Applicant: **Australian Premium Solar (India) Pvt. Ltd.**
Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha, 383205, Gujarat, India

File No.: PVP08087/21P-01

Designed: Dec. 8th. 2021 by: Keira Hao
(Project Engineer)

Reviewed: Dec. 8th. 2021 by: Bella Lin
(Technical Certifier)

List of contents

1. Setting of tasks

According to the inquiry of the applicant, perform related measurements to determine parameters for creating panfile to be used in PVsyst.

2. Basis for testing

IEC 60904-1:2020	Photovoltaic devices - Part 1: Measurement of photovoltaic current-voltage characteristics.
IEC 60904-3:2019	Photovoltaic devices - Part 3: Measurement principles for terrestrial photovoltaic (PV) solar devices with reference spectral irradiance data.
IEC 60904-9:2007	Photovoltaic devices - Part 9: Solar simulator performance requirements.
IEC 60904-9:2020	Photovoltaic devices - Part 9: Classification of solar simulator characteristics
IEC 61215-2:2016	Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part2: Test procedures
IEC 60891:2009	Photovoltaic devices - Procedures for temperature and irradiance corrections to measured I-V characteristics
IEC 61853-1:2011	Photovoltaic (PV) module performance testing and energy rating - Part 1: Irradiance and temperature performance measurements and power rating.

3. Test location

Changzhou HuaYang Inspection and Testing Technology Co., Ltd.

No.8 Lanxiang Road, Wujin Economic Development Zone

Changzhou, Jiangsu, P.R. China

4. Measurement method description

4.1 Maximum power determination

The test is performed in accordance with the IEC 61215-2:2016.

4.2 Temperature coefficient

The test is performed in accordance with the IEC 60891:2009. The purpose of this test is to determine the temperature coefficient of double glass modules. Only the temperature coefficient of the front side will be measured.

4.3 Maximum power output under different temperature and irradiance level

Irradiance	Spectrum	Module temperature			
W/m^2	-	15°C	25°C	50°C	75°C
1100	AM1.5	N/A			
1000	AM1.5				
800	AM1.5				
600	AM1.5				
400	AM1.5				N/A
200	AM1.5			N/A	N/A
100	AM1.5			N/A	N/A

5. Samples

Sample #	Module type	Sample S/N	Dimension (l x w x h) [mm]	Remark
1	APSAP6-335/72	93359001-021325288	1985 x 1000 x 35	4.1, 4.2, 4.3

6. Test results

6.1 Maximum power determination

Test date [MM/DD/YYYY]..... :			12/01/2021			
Module temperature [°C] ..... :			25			
Irradiance [W/m²] ..... :			1000			
Sample #	Voc [V]	Vmpp [V]	Isc [A]	Impp [A]	Pmpp [W]	FF [%]
1	46.59	38.18	9.34	8.80	336.0	77.27

Supplementary information:
The tests are performed according to requirement of client application.
The measurements were performed with a pulsed solar simulator class AAA according to IEC 60904-9:2007.

6.2 Measurement of temperature coefficients

Test date [MM/DD/YYYY]..... :		12/03/2021
Irradiance [W/m^2]..... :		Corrected to 1000
Module temperature [°C] / high - low... :		55.0 - 25.0
Sample #	Item	Measured [%/°C]
1	α	0.036
	β	-0.255
	γ	-0.352
Supplementary information: α- Current temperature coefficient β - Voltage temperature coefficient γ - power temperature coefficient		

6.3 Maximum power output under different temperature and irradiance level

Sample 1

Test date [MM/DD/YYYY].....:			12/03/2021			
Module temperature [°C] .....:			Corrected to 15			
Corrected Irradiance [W/m²]	Voc [V]	Vmpp [V]	Isc [A]	Impp [A]	Pmpp [W]	FF [%]
100	43.45	36.81	0.89	0.87	32.0	82.28
200	44.75	37.60	1.87	1.78	67.0	80.31
400	45.88	38.19	3.74	3.58	136.9	79.70
600	46.65	38.76	5.55	5.29	205.1	79.26
800	47.22	39.15	7.35	6.98	273.1	78.74
1000	47.67	39.65	9.13	8.61	341.2	78.35
1100	N/A	N/A	N/A	N/A	N/A	N/A

Test date [MM/DD/YYYY].....:			12/03/2021			
Module temperature [°C] .....:			Corrected to 25			
Corrected Irradiance [W/m²]	Voc [V]	Vmpp [V]	Isc [A]	Impp [A]	Pmpp [W]	FF [%]
100	42.85	36.18	0.90	0.87	31.3	81.21
200	43.54	36.65	1.90	1.80	65.9	79.53
400	44.77	37.02	3.83	3.64	134.9	78.66
600	45.57	37.457	5.68	5.40	202.1	78.12
800	46.11	37.73	7.54	7.14	269.2	77.48
1000	46.59	38.18	9.34	8.80	336.0	77.27
1100	49.65	38.43	9.62	9.61	369.3	77.32

Test date [MM/DD/YYYY].....:			12/03/2021			
Module temperature [°C] .....:			Corrected to 50			
Corrected Irradiance [W/m²]	Voc [V]	Vmpp [V]	Isc [A]	Impp [A]	Pmpp [W]	FF [%]
100	N/A	N/A	N/A	N/A	N/A	N/A
200	N/A	N/A	N/A	N/A	N/A	N/A
400	42.09	33.71	3.81	3.70	124.6	77.72
600	42.58	34.09	5.72	5.47	186.6	76.57
800	43.13	34.55	7.61	7.19	248.6	75.69
1000	43.67	35.04	9.45	8.85	310.1	75.16

1100	44.09	35.33	10.31	9.64	340.3	74.85

Test date [MM/DD/YYYY].....:			12/03/2021			
Module temperature [°C] .....:			Corrected to 75			
Corrected Irradiance [W/m^2]	Voc [V]	Vmpp [V]	Isc [A]	Impp [A]	Pmpp [W]	FF [%]
100	N/A	N/A	N/A	N/A	N/A	N/A
200	N/A	N/A	N/A	N/A	N/A	N/A
400	N/A	N/A	N/A	N/A	N/A	N/A
600	39.72	30.27	5.77	5.52	167.1	72.91
800	40.35	30.73	7.63	7.24	222.5	72.30
1000	40.80	31.31	9.48	8.88	277.9	71.87
1100	40.96	31.65	10.40	9.59	303.5	71.29

Relative efficiency under different Irradiance at 25°C

Irradiance [W/m^2]	100	200	400	600	800	1000	1100
Pmmp [W] (Scaled results)	33.6	67.2	134.4	201.6	268.8	336.0	369.6
Pmmp [W] (Lab results)	31.3	65.9	134.9	202.1	269.2	336.0	369.3
Relative efficiency [%]	-6.85	-1.93	0.37	0.25	0.15	0	-0.08

Supplementary information:

Scaled results: $Pmmp\ (Scaled\ results) = \frac{Irradiance}{1000W/m^2} \times Pmmp\ at\ 1000W/m^2$

Relative efficiency = $\frac{Pmmp\ (Lab\ results) - Pmmp\ (Scaled\ results)}{Pmmp\ (Scaled\ results)}$

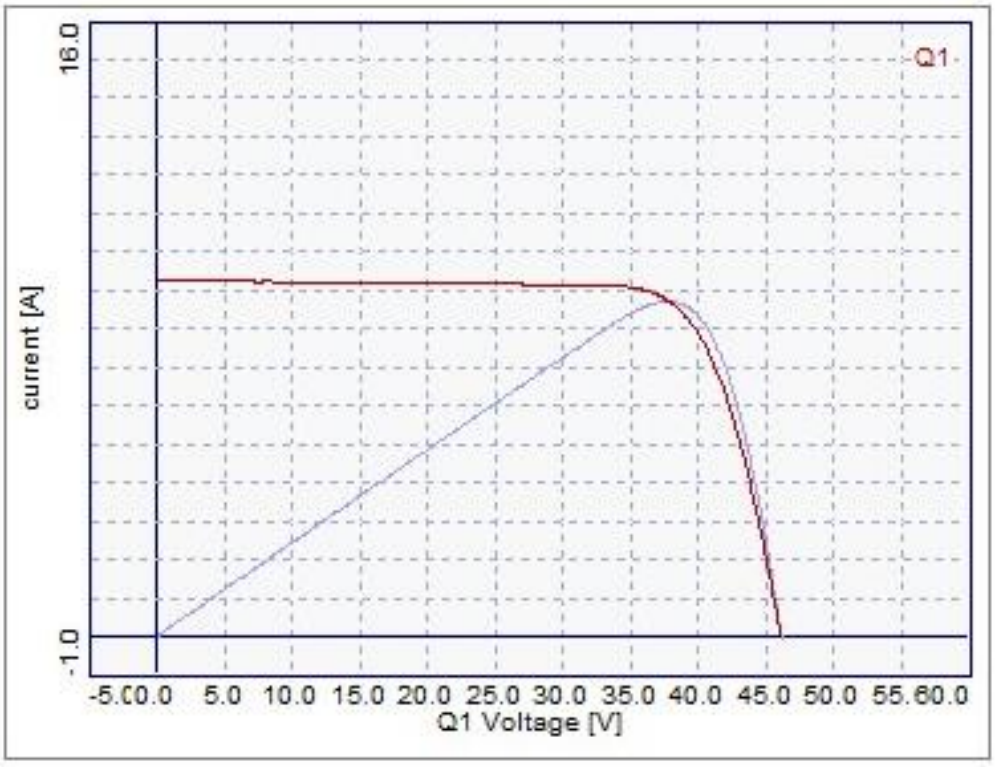
Annex 1: List of measurement equipment

No.	Equipment	Identification	Next calibration date
1	Pulsed solar simulator	HYJC-YS-021	03/25/2022
2	High temperature chamber	HYJS-YS-123	09/08/2022

Annex 2: Statement of the estimated uncertainty of the test results

The total measuring uncertainty of Pmpp is ≤ 2.12%
The total measuring uncertainty of Isc is ≤ 2.26%
The total measuring uncertainty of Voc is ≤ 0.98%

Annex 3: IV measurement characteristics



Sample 1#

CERTIFICATE

TÜV NORD CERT GmbH
herewith declares that

Australian Premium Solar (India) Pvt. Ltd.
Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha, 383205, Gujarat
India

is authorized to provide the product mentioned below with the mark as illustrated:

Description of product (details see Annex 2):

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

Valid from: 2022-05-20
Valid until: 2027-05-19

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	P12.4-AA-02 Rev. 00 (IEC TS 62804-1:2015 modified)
Remark:	Test temperature: 85°C; Relative humidity: 85%; Test duration: 96 hours.
Registered No.:	44 780 22 406749 - 089
Manufacturer:	see Annex 1
Test Report No.:	492012025.001
File No.:	PVP08087/21P-05

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Essen, 2022-05-20

Please also pay attention to the information stated overleaf.

TÜV NORD CERT GmbH Am TÜV 1 D-45307 Essen www.tuev-nord-cert.de
Fon +49 (0)201 825 5120 Fax +49 (0)201 825 3209 prodcert@tuev-nord.de

Manufacturer:

Manufacturer:	**Australian Premium Solar (India) Pvt. Ltd.** Nr. GEB Substation, N.H. No.8, At-Tajpur, Ta-Prantij, Dist-Sabarkantha, 383205, Gujarat, India
Factory inspection report no.:	862010589.001

Remark:
Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

TÜV NORD CERT GmbH
Certification Body
Consumer Products

Am TÜV 1 • D-45307 Essen • Fon +49 (0)201 825 5120 • Fax +49 (0)201 825 3209 • Email: prodcert@tuev-nord.de

Description of product(s):

Module types:	**PV Modules with 6" Poly-crystalline Silicon Solar Cells:** 72 cells: APSAP6-xxx/72 (xxx = 330 - 350, in increment of 5) 66 cells: APSAP6-xxx/66 (xxx = 300 - 320, in increment of 5) 60 cells: APSAP6-xxx/60 (xxx = 275 - 290, in increment of 5)
Maximum system voltage:	1000V
Fuse rating:	15A
Application class:	Class A
Electrical protection class:	Class II

Remark:
For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

TÜV NORD CERT GmbH
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Consumer Products

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Certificate of Registration

CERTIFICATE

QUALITY MANAGEMENT SYSTEM

Australian Premium Solar India Pvt Ltd.

At & Post: TAJPUR, NH-08, Prantij, Dist : Sabarkantha,
Gujarat 383205, India.

SCOPE

"Manufacturer And Supplier Of Solar Panels, Solar Inverters And Allied Products
Cess Qualification WPS,PQR, WPQ, U Stamp Consultancy"

This is to certify that the Quality Management System of the above mentioned Organization meets the requirement of

ISO 9001:2015

MS: 65290921	10 September 2021
Certificate Number	Date of Initial Certification
16 September 2022	09 September 2023 ♦
Date of Last Issue	Date of Expiry

Signed on behalf of M/S OSS Certification Services Pvt. Ltd.

♦ Certificate is **Valid for 3 Years (10-09-2021 to 09-09-2024)** From the **Date of Initial Certification**. Upon Successful **Completion of 2nd Surveillance Audit** a **New Certificate** with an **Extended Validity** shall be issued.

M/S OSS Certification Services Pvt. Ltd.

301 & 304, Kartik Plaza, Amberhai Extension, Plot No.16 & 17, Sector-19, Dwarka, New Delhi-110075.

www.osscertification.com

Accreditation by the Joint Accreditation System of Australia and New Zealand

www.jas-anz.org/register

Rev. 01, dt.16.09.2022

ISO 14001:2015

Certificate of Registration

This is to Certify that
Environmental Management System of

AUSTRALIAN PREMIUM SOLAR (INDIA) PVT. LTD.

AT: TAJPUR, NATIONAL HIGHWAY NO 08, TA: PRANTIJ, DIST: SABARKANTHA PIN CODE: 383205, GUJARAT, INDIA.

has been assessed and found to conform to the requirements of

ISO 14001:2015

for the following scope :

MANUFACTURING AND SUPPLIER OF SOLAR PANELS, SOLAR INVERTERS AND ALLIED PRODUCTS.

Certificate No	: **21IEGW80**		
Initial Registration Date	: 08/04/2021	Issuance Date	: 08/04/2021
Date of Expiry	: 07/04/2024		
1st Surve. Due	: 08/03/2022	2nd Surve. Due	: 08/03/2023

Director

IAS ACCREDITED Management Systems Certification Body MSCB-119

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

AQC MIDDLE EAST LLC

Head Office: Office No. 02, Ground Floor, Sharjah Media City, Sharjah, UAE. e-mail: info@aqcworld.com,
Key Location: A-60, Sector - 2, Noida, Uttar Pradesh, 201301, India.

**Validity of the Certificate is subject to successful completion of surveillance audit on or before of due date. (in case surveillance audit is not allowed to be conducted, this certificate shall be suspended/withdrawal).*

Certificate Verification: Please Re-check the validity of certificate at http://www.aqcworld.com/activeclients.aspx or www.aqcworld.com at Active Clients.