



C E R T I F I C A T E

Certificate No. 10-PPV-0007109/01-M01-TIC

**WE HEREBY CERTIFY THAT THE PHOTOVOLTAIC MODULES WITH THE MODEL
SG-NH100-GG, SG-NH95-GG, SG-NH90-GG
GA-100-GBA (Tested Type)**

**And with Types extended for similarity*
- See Annex -**

**OEM APPLICANT & LICENSE HOLDER
SUNGEN International Limited
Unit 1-7, 6/F Metro Loft, 38 Kwai Hei Street, Kwai Chung, Hong Kong**

**IS IN COMPLIANCE WITH THE REQUIREMENTS OF
IEC 61646 : 2008**

**Thin-film terrestrial photovoltaic (PV) modules. Design qualification and type approval
&**

IEC 61730-1:2004 / IEC 61730-2:2004

Photovoltaic (PV) module safety qualification

To be used in plants at a total voltage up to : 1000 Vdc (application Class A)

AS RESULT OF THE TEST IN OUR APPOINTED LABORATORY

EA ACCREDITED LABORATORY N. 0192

**REPORT No. TIC-PVQ01CdO09C507001, TIC-PS101CdO09C507001
TIC-PS201CdO09C507001**

Expiring date 01.03.2015

(Providing that the testing basis continues unchanged)

Notes: (*) The Manufacturer and OEM Applicant declare that these products are constructed using the same materials, components and processes as the tested type GA-100-GBA. Further details on certified models are reported on the attachment. Technical data, materials and components description are into the indicated test reports. Any changes of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval. The certification is performed on tested model as complete certification without Fire Test according to IEC 61730-2/MST 23. The types extended for similarity are identical to the tested one but have bigger dimensions not suitable for testing. Further details are included in the test reports. This certificate is for type approval and based on voluntarily product test without Factory Inspection.



Am Bonner Bogen 2, D-53227 Bonn, 07.09.2010

Dipl.-Ing. F. Sergizzarea

TUV INTERCERT Certification Body

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C E R T I F I C A T E

Annex of

Certificate No. 10-PPV-0007109/01-M01-TIC

THE PHOTOVOLTAIC MODULES WITH THE MODEL

**Types extended for similarity* with a-Si Cell Technology
without need of re-testing
(according to IECCE "Retesting guideline"):**

Type	Cell Number	Cell Size	Power [W]
SG-NH100-GG*	119	1370 x 8.9	100
SG-NH95-GG*	119	1370 x 8.9	95
SG-NH90-GG*	119	1370 x 8.9	90

Notes: (*) The Manufacturer and OEM Applicant declare that these products are constructed using the same materials, components and processes as the tested type GA-100-GBA. Further details on certified models are reported on the attachment. Technical data, materials and components description are into the indicated test reports. Any changes of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval. The certification is performed on tested model as complete certification without Fire Test according to IEC 61730-2/MST 23. The types extended for similarity are identical to the tested one but have bigger dimensions not suitable for testing. Further details are included in the test reports. This certificate is for type approval and based on voluntarily product test without Factory Inspection.



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