

Certificate

Registration No.: PV 50177984

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Report No.: 12607145 053

License Holder:

Solar Frontier K. K. Daiba Frontier Bldg. 2-3-2 Daiba, Minato-ku

Tokyo, 135-8074, Japan

Product: PV Module

Addition

Type: SFxxx-T, SFxxx-S

xxx = 130, 135, 140, 145, 150, 155, 160, 165

Manufacturing Plant: Solar Frontier K. K.

Kunitomi Plant 1815 Tajiri, Kunitomi-cho Higashimorokata-gun Miyazaki, 880-1104, Japan

Basis:



IEC 61646:2008 EN 61646:2008

"Thin-film terrestrial photovoltaic (PV) modules - Design qualification and type approval"



Factory Inspection

To document the consistent quality of the product factory inspections are performed periodically.



- Periodic inspection
- Qualified, IEC 61646
- Safety tested, IEC 61730

Remarks:

- Additional type designations see above.

- The details of the factory inspection are documented in report no. 12608289.

Conditions:

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

The certificate is valid for 5 years from the date of issue stated on page 1.



Certification body

Dipl.-Ing. (FH) J. Taylor

Yokohama, 15 May 2012

TÜV Rheinland Japan Ltd. - Yokohama 222-0033, Japan



Certificate

Registration No.: PV 50177988

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Report No.: 12607145 054

License Holder: Solar Frontier K. K. Daiba Frontier Bldg.

2-3-2 Daiba, Minato-ku Tokyo, 135-8074, Japan

Manufacturing Plant: Solar Frontier K. K.

Kunitomi Plant 1815 Tajiri, Kunitomi-cho Higashimorokata-gun Miyazaki, 880-1104, Japan Product:

PV Module

Addition

Type: SFxxx-T, SFxxx-S

xxx = 130, 135, 140, 145, 150, 155, 160, 165

Basis:



IEC 61730-1:2004 IEC 61730-2:2004 EN 61730-1:2007 EN 61730-2:2007

"Photovoltaic (PV) module safety qualification"



Factory Inspection

To document the consistent quality of the product factory inspections are performed periodically.



- Periodic inspection
- Qualified, IEC 61646
- Safety tested, IEC 61730

- Additional type designations see above.

- IEC EN 61730 consists of part 1 (Requirements for construction) and part 2 (Requirements for testing).

- The above listed PV modules fulfil the requirements of Application Class A (Safety Class II). They may be used in PV plants at a maximum system voltage (Voc at STC) of up to 1000 VDC. - The fire test (IEC 61730-2 / MST 23) was not performed.

- The details of the factory inspection are documented in report no. 12608289.

Conditions:

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

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