

# Certificate

Registration No.: PV 50178778

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Report No.: 12605818 017

**License Holder:**

**Hyundai Heavy Industries Co., Ltd.**  
1, Jeonha-dong,  
Dong-gu, Ulsan,  
682-792, Rep. of Korea

**Product:**

PV Module  
Addition  
Type: HiS-MxxxMF, HiS-SxxxMF  
xxx = 190, 193, 195, 198, 200, 203, 205, 208, 210, 213,  
215, 218, 220, 223, 225, 228, 230  
HiS-MxxxMG  
xxx = 203, 205, 208, 210, 213, 215, 218, 220, 223, 225,  
228, 230, 233, 235, 238, 240, 243, 245, 248, 250, 253, 255  
HiS-SxxxMG  
xxx = 220, 223, 225, 228, 230, 233, 235, 238, 240, 243,  
245, 248, 250, 253, 255, 258, 260, 263, 265, 267  
HiS-SxxxSF  
xxx = 221, 224, 227, 233, 236, 239

**Manufacturing Plant:**

**Hyundai Heavy Industries Co., Ltd.**  
169, Daejang-ri, Soi-myeon,  
Eumseong-kun, Chungcheongbuk-do,  
369-872, Rep. of Korea

**Basis:**

**IEC 61215:2005**  
**EN 61215:2005**  
"Crystalline silicon 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 61215**
- **Safety tested, IEC 61730**

**Remarks:**

- Additional type designations see above.
- Mechanical load at 5400 Pa has been performed.
- The details of the factory inspection are documented in report no. 21207320.

**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 until 01 September 2014.**



**Certification body**



Dipl.-Ing. S. Hartter

Yokohama, 08 October 2010

# Certificate

Registration No.: PV 50178779

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Report No.: 12605818 018

**License Holder:**

**Hyundai Heavy Industries Co., Ltd.**  
1, Jeonha-dong,  
Dong-gu, Ulsan,  
682-792, Rep. of Korea

**Product:**

PV Module  
Addition  
Type: HiS-MxxxMF, HiS-SxxxMF  
xxx = 190, 193, 195, 198, 200, 203, 205, 208, 210, 213,  
215, 218, 220, 223, 225, 228, 230  
HiS-MxxxMG  
xxx = 203, 205, 208, 210, 213, 215, 218, 220, 223, 225,  
228, 230, 233, 235, 238, 240, 243, 245, 248, 250, 253, 255  
HiS-SxxxMG  
xxx = 220, 223, 225, 228, 230, 233, 235, 238, 240, 243,  
245, 248, 250, 253, 255, 258, 260, 263, 265, 267  
HiS-SxxxSF  
xxx = 221, 224, 227, 233, 236, 239

**Manufacturing Plant:**

**Hyundai Heavy Industries Co., Ltd.**  
169, Daejang-ri, Soi-myeon,  
Eumseong-kun, Chungcheongbuk-do,  
369-872, Rep. of Korea

**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 61215**
- **Safety tested, IEC 61730**

**Remarks:**

- 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. 21207320.

**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 until 01 September 2014.**

Yokohama, 08 October 2010



**Certification body**



Dipl.-Ing. S. Hartter