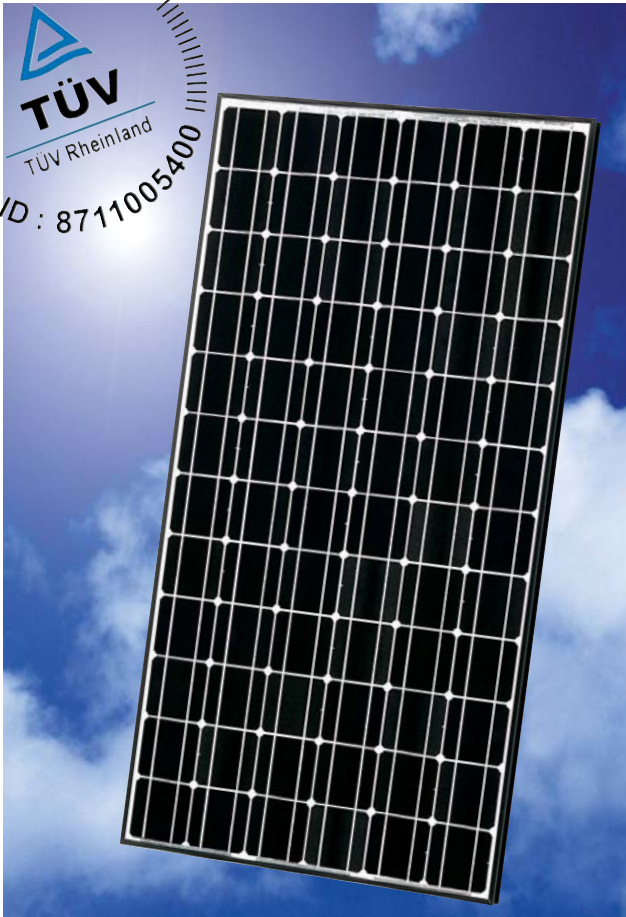


HIT PHOTOVOLTAIC MODULE HIP-205NHE1



The SANYO HIT (Heterojunction with Intrinsic Thin layer) solar cell is made of a thin mono crystalline silicon wafer surrounded by ultra-thin amorphous silicon layers. This product provides the industry's leading performance and value using state-of-the-art manufacturing techniques.



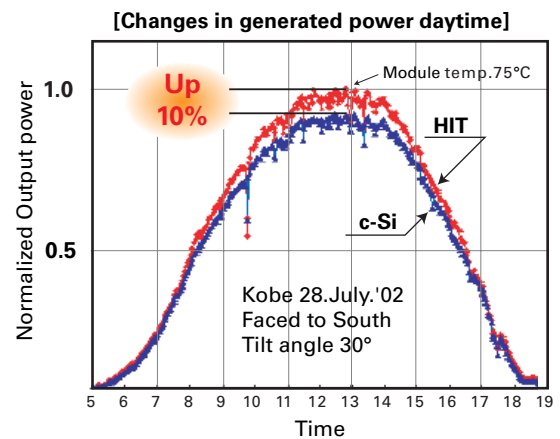
Benefit in Terms of Performance

High efficiency cell: 18,2%, Module: 16.4%

The HIT cell and module have the world's highest level of conversion efficiency in mass production.

High performance at high temperatures

Even at high temperatures, the HIT solar cell can maintain higher efficiency than a conventional crystalline silicon solar cell.



Environmental Friendly Solar Cell

More Clean Energy

HIT can generate more annual power output per unit area than other conventional crystalline silicon solar cells.

Special Features

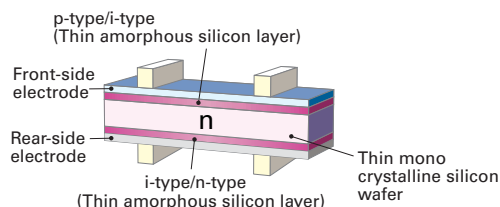
SANYO HIT solar modules are 100% emission free, have no moving parts and produce no noise. The dimensions of the HIT modules allow space-saving installation and achievement of maximum output power possible on given roof area.

Benefit in Terms of Quality

High quality in accordance with ISO 9001 and 14001 standards

HIT solar cell and modules are subject to strict inspections and measurements to ensure compliance with electrical, mechanical and visual criteria.

HIT Solar Cell Structure



Development of HIT solar cell was supported in part by the New Energy and Industrial Technology Development Organization (NEDO).

Electrical and Mechanical Characteristics

HIP-205NHE1

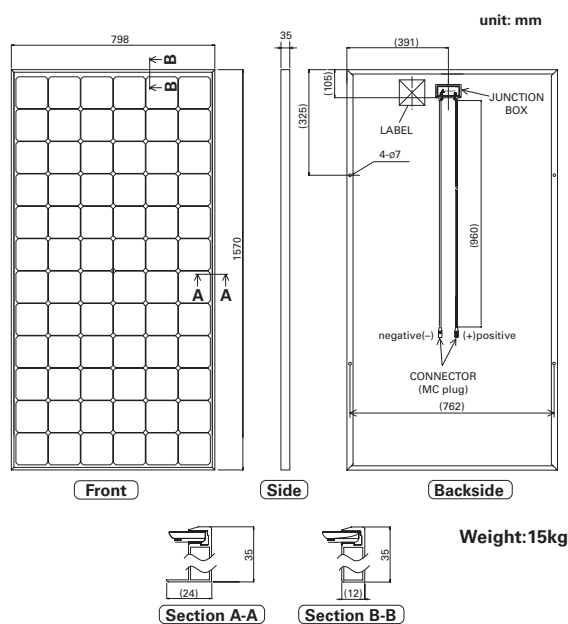
Electrical data

| | | |
|---------------------------------|---------|---------|
| Maximum power (Pmax) | [W] | 205 |
| Max. power voltage (Vpm) | [V] | 40.7 |
| Max. power current (Ipm) | [A] | 5.05 |
| Open circuit voltage (Voc) | [V] | 50.3 |
| Short circuit current (Isc) | [A] | 5.54 |
| Warranted minimum power (Pmin) | [W] | 194.75 |
| Output tolerance | [%] | +10/-5 |
| Maximum system voltage | [Vdc] | 760 |
| Temperature coefficient of Pmax | [%/°C] | - 0.3 |
| Voc | [V/°C] | - 0.126 |
| Isc | [mA/°C] | 1.66 |

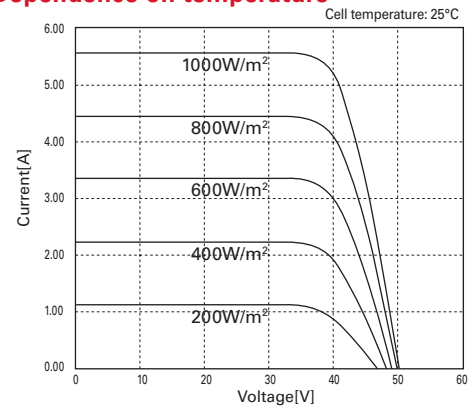
Note 1: Standard test conditions: Air mass 1.5, Irradiance = 1000W/m², Cell temperature = 25°C

Note 2: The values in the above table are nominal.

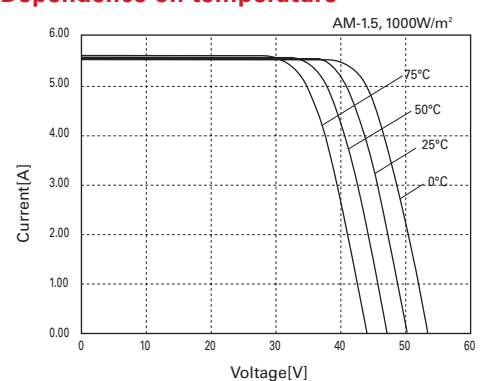
Dimensions and weight



Dependence on temperature



Dependence on temperature



Certificates



• Qualified IEC 61215
• Safety tested
• TÜV-Spec 9512/272-9
• Periodic inspection



Electrical Protection Class II

Please consult your local dealer for more information.

Warranty

Power output: 20 years (80% of minimum output power)

Product workmanship: 2 years

(Based on contract terms.)

CAUTION! Please read the operating instructions carefully before using the products.

Owing to our policy of continual improvement the products covered by this brochure may be changed without notice.

SANYO

SANYO Component Europe GmbH
Clean Energy Division

Stahlgruberring 4
81829 Munich, Germany
TEL: +49-(0)89-46 00 95-0
FAX: +49-(0)89-46 00 95-170
<http://www.sanyo-component.com>
email: info.solar@sanyo-component.com

SANYO Component Europe GmbH
U.K. Branch, SANYO House

18 Colonial Way,
Watford, WD 24 4PT, United Kingdom
TEL: +44-(0)1923-24 63 63
FAX: +44-(0)1923-47 74 79
<http://www.sanyo-component.com>
email: info.solar@sanyo-component.com

SANYO Electric Co., Ltd.
Component Group, Clean Energy Company

5 - 5, Keihan-Hondori 2, Moriguchi,
Osaka 570-8677, Japan
TEL: +81-(0)6-69 94-7282
FAX: +81-(0)6-69 94-7289
http://www.sanyo.co.jp/clean/solar/hit_e/index_e.html
email: sola101115@sanyo.co.jp