

HIT photovoltaic module

HIP-215NKHE5 HIP-214NKHE5

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.



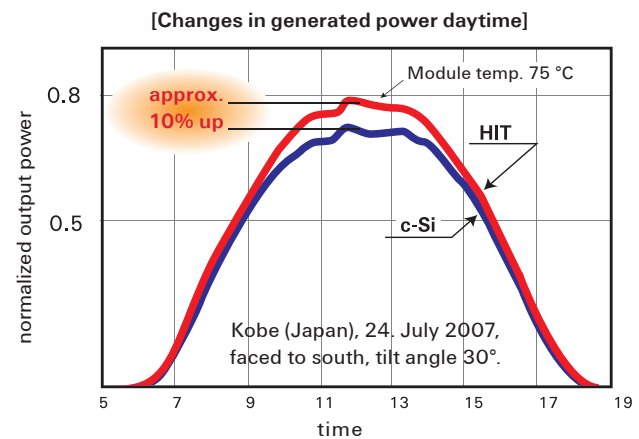
Benefit in Terms of Performance

The HIT cell and module have very high conversion efficiency in mass production.

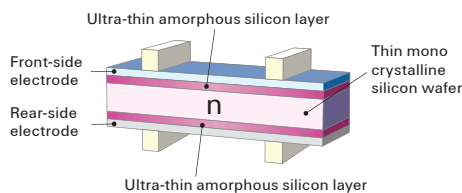
Model	Cell Efficiency	Module Efficiency
HIP-215NKHE5	19.3%	17.1%
HIP-214NKHE5	19.2%	17.0%

High performance at high temperatures

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



HIT Solar Cell Structure



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

Environmentally-Friendly Solar Cell More Clean Energy

HIT can generate more clean Energy than other conventional crystalline 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.

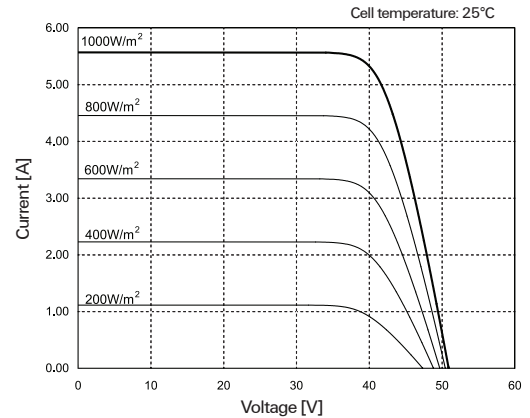
Electrical and Mechanical Characteristics HIP-215NKHE5, HIP-214NKHE5

Electrical data	Models HIP-xxxNKHE5	
	215	214
Maximum power (Pmax) [W]	215	214
Max. power voltage (Vpm) [V]	42.0	41.9
Max. power current (Ipm) [A]	5.13	5.12
Open circuit voltage (Voc) [V]	51.6	51.5
Short circuit current (Isc) [A]	5.61	5.60
Warranted min. power (Pmin) [W]	204.3	203.3
Maximum over current rating [A]	15	
Output power tolerance [%]	+10 / -5	
Max. system voltage [Vdc]	1000	
Temperature coeff. of Pmax [%/°C]	-0.30	
Temperature coeff. of Voc [V/°C]	-0.129	-0.129
Temperature coeff. of Isc [mA/°C]	1.68	1.68
NOCT [°C]	48.0	

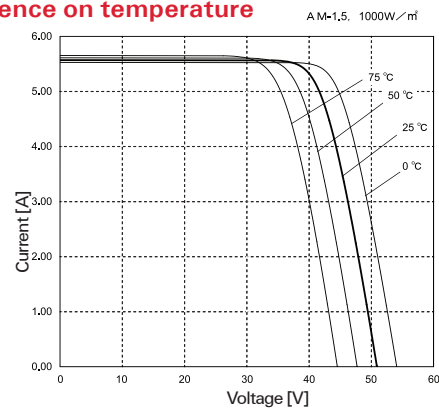
Note 1: Standard test conditions: Air mass 1.5, Irradiance = 1000 W/m², Cell temperature = 25 °C.
Note 2: The values in the above table are nominal.

Reference data for model HIP-215NKHE5

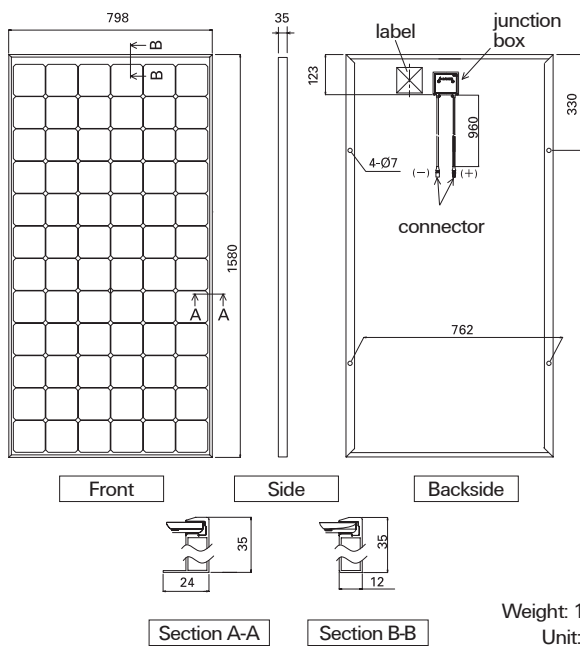
Dependence on irradiance



Dependence on temperature



Dimensions and weight



Certificates

IEC 61730 IEC 61215 ed. 2



Qualified, IEC 61215
Safety tested,
IEC 61730
Periodic Inspection



Electrical Protection
Class II

Please consult your local dealer for more information.

Guarantee

Product: 5 years

Power output: 10 years (90% of Pmin), 20 years (80% of Pmin)

Full conditions are available on our website.

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

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

SANYO Component Europe GmbH
Solar Division

Stahlgruberring 4
81829 Munich, Germany
Tel. +49-(0)89-460095-0
Fax. +49-(0)89-460095-170
http://www.sanyo-solar.eu
email: info.solar@sanyo-solar.eu

SANYO Electric Co., Ltd.
Solar Division

http://www.sanyo.com/solar
email: homepage_solar@sanyo.com