HIT® photovoltaic module

SANYO

EN

HIT-H250E01
HIT-H245E01

R&D technology adaptation

Reduction of carrier recombination loss
-Preserving as much of the generated electricity as possible
-Realizing even higher voltage

HD cell design

Use resources effectively
-By cutting the wafer almost round the HD cell produces less waste of material
-Compact module size but highest electric generation

Anti-reflection glass

Reduction of optical loss
-Enabling as much incoming sunlight as possible to reach the electrical generating layer (crystalline silicon)
-Realizing even higher current

18.0%*
180 W/m²

* For HIT-H250E01

HIT cell technology

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.

Special Features

More Clean Energy
HIT can generate more clean Energy than other conventional crystalline solar cells.

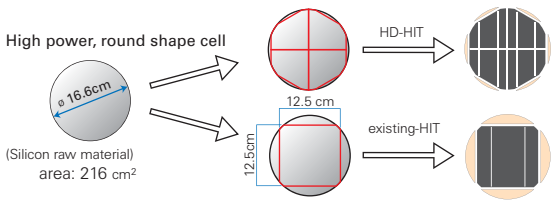
Environmentally-Friendly Solar Cell

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.

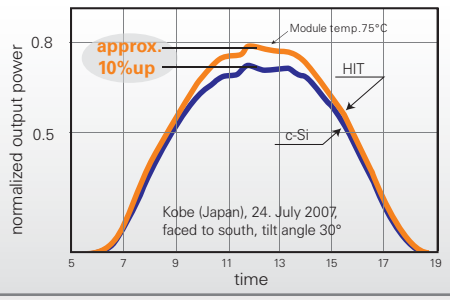
High performance at high temperatures

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

HIT® HD Solar Cell



Changes in generated power daytime



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

Model	Cell Efficiency	Module Efficiency	Output / m²
HIT-H250E01	20.8%	18.0%	180 W/m²
HIT-H245E01	20.4%	17.7%	177 W/m²

HIT® HD
Photovoltaic Module

HIT® Photovoltaic Module

Electrical and Mechanical Characteristics

HIT-H250E01, HIT-H245E01

EN

Electrical data (at STC)

	Models HIT-HxxxE01 250	245
Maximum power (Pmax) [W]	250	245
Max. power voltage (Vmp) [V]	34.9	34.4
Max. power current (Imp) [A]	7.18	7.14
Open circuit voltage (Voc) [V]	43.1	42.7
Short circuit current (Isc) [A]	7.74	7.73
Maximum over current rating [A]	15	
Output power tolerance [%]	+10/-5*	
Maximum system voltage [V]	1000	

Note: Standard Test Conditions: Air mass 1.5, Irradiance = 1000W/m², cell temperature = 25°C

Temperature characteristics	250	245
Temperature (NOCT) [°C]	46.0	46.0
Temperature coefficient of Pmax [%/°C]	-0.30	-0.30
Temperature coefficient of Voc [V/°C]	-0.108	-0.107
Temperature coefficient of Isc [mA/°C]	2.32	2.32

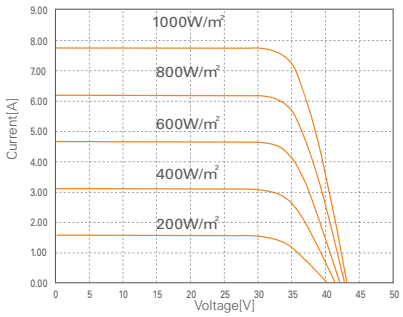
At NOCT	250	245
Maximum power (Pmax) [W]	188.9	185.4
Max. power voltage (Vmp) [V]	32.8	32.4
Max. power current (Imp) [A]	5.76	5.73
Open circuit voltage (Voc) [V]	40.5	40.1
Short circuit current (Isc) [A]	6.23	6.23

Note: Nominal Operating Cell Temperature : Air mass 1.5 spectrum, Irradiance = 800W/m², Air temperature = 20°C , wind speed 1 m/s

At low irradiance	250	245
Maximum power (Pmax) [W]	48.8	47.7
Max. power voltage (Vmp) [V]	34.1	33.6
Max. power current (Imp) [A]	1.43	1.43
Open circuit voltage (Voc) [V]	40.1	39.7
Short circuit current (Isc) [A]	1.55	1.55

Note: Low irradiance: Air mass 1.5 spectrum, Irradiance = 200W/m², cell temperature = 25°C

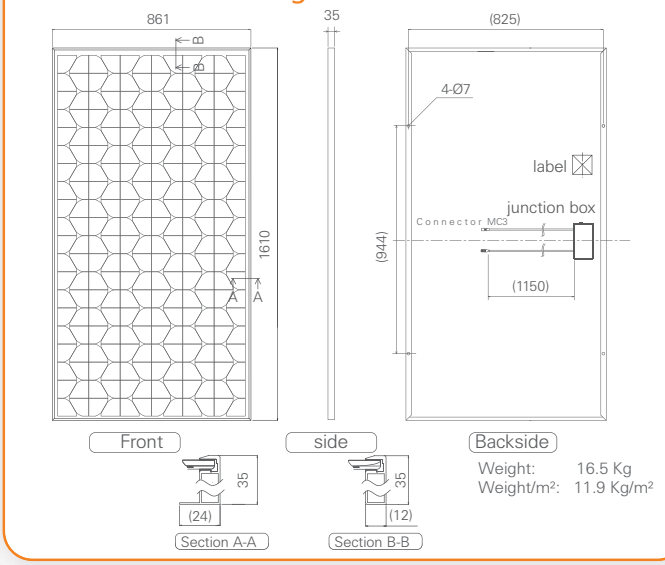
Dependence on irradiance



Reference data for model HIT-H250E01
(Cell temperature: 25°C)

Dimensions and weight

unit: mm



Weight: 16.5 Kg
Weight/m²: 11.9 Kg/m²

Guarantee

Power output: 10 years (90% of Pmin) 25 years (80% of Pmin)
Product workmanship: 5 years
(Based on guarantee documents)

Materials

Cell material: Honeycomb Design HIT cells
Glass material: AR coated tempered glass
Frame materials: Black anodized aluminium
Connector type: MC3

Certificates

TÜVRheinland ID: 000002431
- Safety tested, IEC 61730
- Periodic Inspection

IEC 61730
IEC 61215

CE

APPROVED PRODUCT
MCS
BRE GLOBAL LISTED

Certificate No. MCS PV0034
Photovoltaic System

Electrical Protection Class II

Member of

PV CYCLE

Please consult your local dealer for more information.

⚠ CAUTION!Please read the installation manual 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

SANYO Electric Co.,Ltd.
Solar Division
http://www.sanyo.com/solar/

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