

## HIT PHOTOVOLTAIC MODULE

## HIP-210NH1-BO-1, HIP-205NH1-BO-1

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**

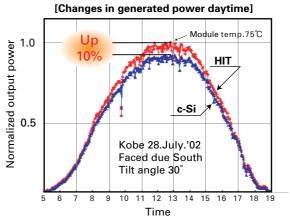
High efficiency cell

Model	Cell Efficiency	Il Efficiency Module Efficiency	
HIP-210NH1-BO-1	18.9%	16.5%	
HIP-205NH1-BO-1	18.4%	16.1%	

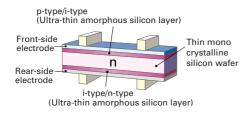
The HIT cell and module have very high conversion efficiency in mass production.

## High performance at high temperatures

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



## **HIT Solar Cell Structure**



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

## **Environmental 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-210NH1-BO-1, HIP-205NH1-BO-1

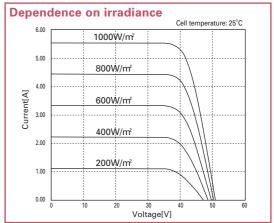
	-xxxNH1-BO-1		
Electrical data		210	205
Maximum power (Pmax)	[W]	210	205
Max. power voltage (Vmp)	[V]	41.3	40.7
Max. power current (Imp)	[A]	5.09	5.05
Open circuit voltage (Voc)	[V]	50.9	50.3
Short circuit current (Isc)	[A]	5.57	5.54
Warranted minimum power (Pmin)	[W]	199.5	194.8
Output power tolerance	[%]	+10/-5	
Maximum system voltage	[V]	600	
Temperature coefficient of Pmax	[%/°C]	-0.30	
Voc	[V/°C]	-0.127	-0.126
Isc	[mA/°C]	1.67	1.66

Note1: Standard Test Conditions: Air mass 1.5, Irradiance =  $1000W/m^2$ , Cell temperature =  $25^{\circ}C$ 

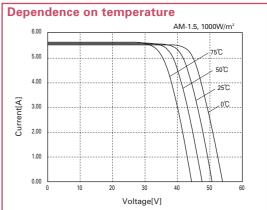
Note2: The values in the above table are nominal

# **Dimensions and weight** unit: mm В side Front Backside Weight: 15kg Section A-A Section B-B

#### Reference data for model HIP-210NH1-BO-1



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Please consult your local dealer for more information.

Power output: 20 years (80% of minimum output power) Product workmanship: 2 years

(Based on contract)

## Certificate Number: PV05-53103-1004

An above number is a certification number by JET. JET: Japan Electrical Safety&Environment Technology Laboratories

**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.

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**Clean Energy Company** 

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