

# HIT photovoltaic module

# HIP-210NKHE5

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.



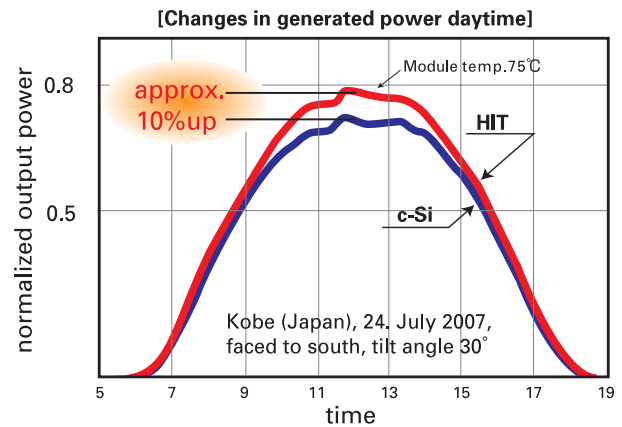
## Benefit in Terms of Performance

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

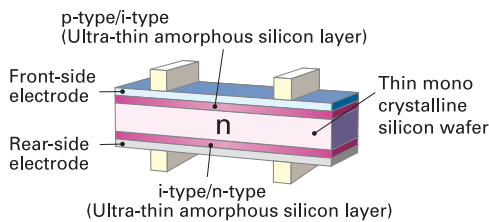
Model	Cell Efficiency	Module Efficiency
HIP-210NKHE5	18.9%	16.7%

## 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.

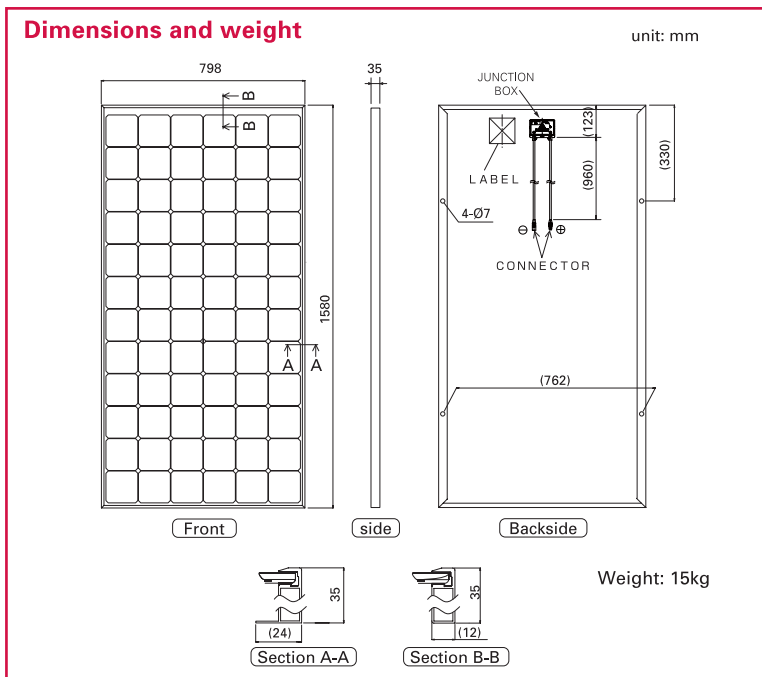
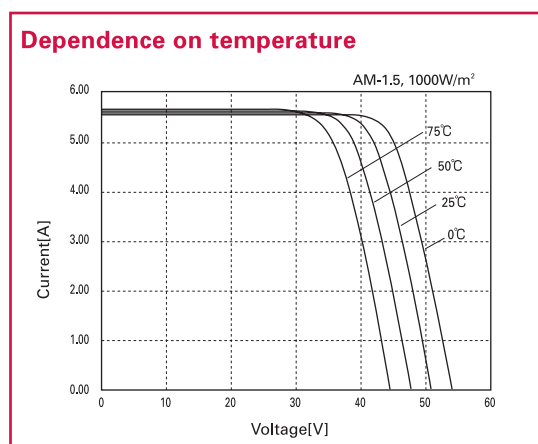
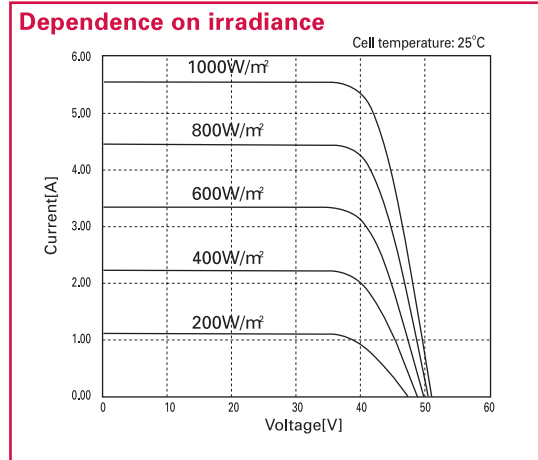
## Special Features

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.

Models HIP-210NKHE5		
<b>Electrical data</b>		
Maximum power (Pmax)	[W]	210
Max. power voltage (Vmp)	[V]	41.3
Max. power current (Imp)	[A]	5.09
Open circuit voltage (Voc)	[V]	50.9
Short circuit current (Isc)	[A]	5.57
Warranted minimum power (Pmin)	[W]	199.5
Maximum over current rating	[A]	15
Output power tolerance	[%]	+10/-5
Maximum system voltage	[V]	1000
Temperature coefficient of Pmax	[%/°C]	-0.30
	Voc [V/°C]	-0.127
	Isc [mA/°C]	1.67

Note 1: Standard Test Conditions: Air mass 1.5, Irradiance = 1000W/m<sup>2</sup>, Cell temperature = 25°C  
 Note 2: The values in the above table are nominal

Reference data for model HIP-210NKHE5



**Certificates**

IEC 61730 IEC 61215

• Safety tested, IEC 61730  
 • Periodic Inspection

Electrical Protection Class II

Please consult your local dealer for more information.

**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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