

Think GAIA  
For Life and the Earth



HIT<sup>®</sup> photovoltaic module

HIT-240HDE4  
HIT-235HDE4

The SANYO HIT<sup>®</sup> (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.



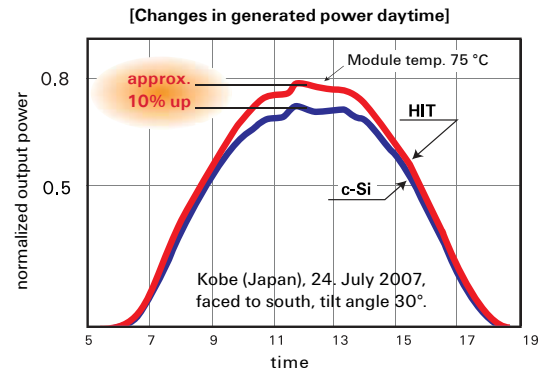
**Benefit in Terms of Performance**

The HIT<sup>®</sup> cell and module have very high conversion efficiency in mass production.

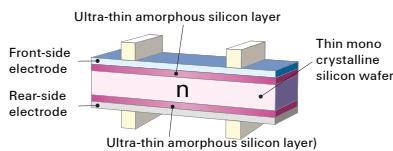
Model	Cell Efficiency	Module Efficiency
HIT-240HDE4	20.0%	17.3%
HIT-235HDE4	19.6%	16.9%

**High performance at high temperatures**

Even at high temperatures, the HIT<sup>®</sup> solar cell can maintain higher efficiency than a conventional crystalline silicon solar cell.



**HIT<sup>®</sup> Solar Cell Structure**



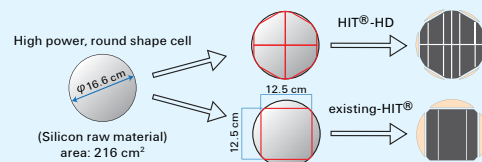
Development of HIT<sup>®</sup> solar cell was supported in part by the New Energy and Industrial Technology Development Organization (NEDO).

**Environmentally-Friendly Solar Cell More Clean Energy**

HIT<sup>®</sup> can generate more clean Energy than other conventional crystalline solar cells.

**A module that uses silicon resources effectively**

The newly developed "Honeycomb Design" HD cell allows the maximum number of round-type, high-power cells to be arrayed in a single module.



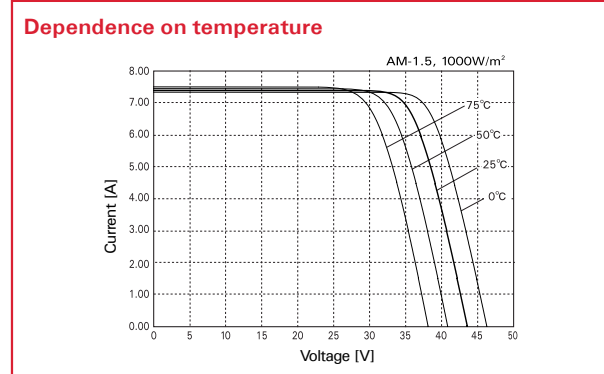
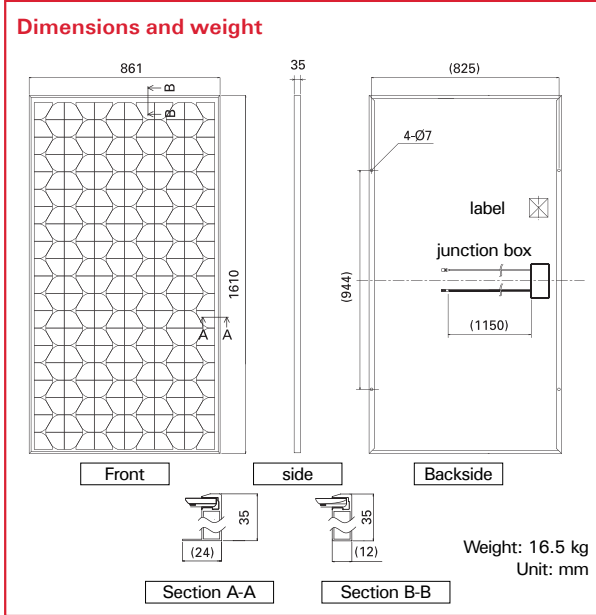
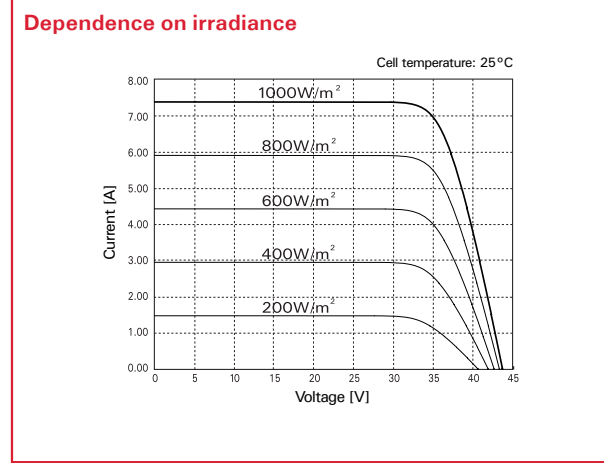


# Electrical and Mechanical Characteristics HIT-240HDE4, HIT-235HDE4

Models HIT-xxxHDE4		
Technical data	240	235
Maximum power (Pmax) [W]	240	235
Max. power voltage (Vpm) [V]	35.5	35.1
Max. power current (Ipm) [A]	6.77	6.70
Open circuit voltage (Voc) [V]	43.6	43.4
Short circuit current (Isc) [A]	7.37	7.33
Warranted min. power (Pmin) [W]	228.0	223.3
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]	-0.109	-0.109
Temperature coeff. of Isc [mA/°C]	2.21	2.20

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

## Reference data for model HIT-240HDE4



**Certificates** IEC 61730 IEC 61215

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.

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