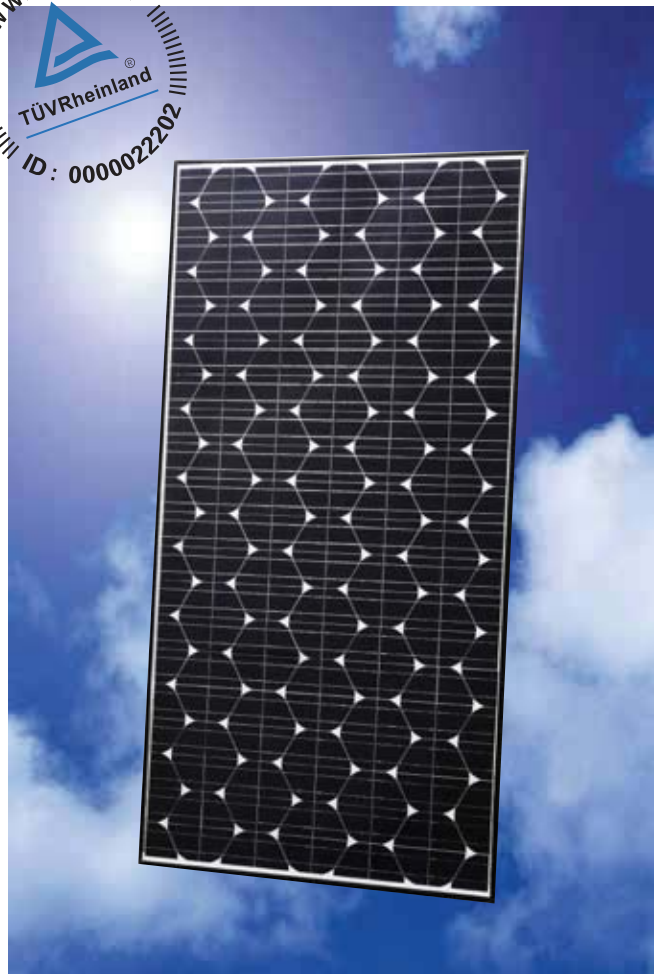


# HIT photovoltaic module

## HIT-240HDE4 HIT-235HDE4

The SANYO HIT (**H**eterojunction with **I**ntrinsic **T**hin 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.



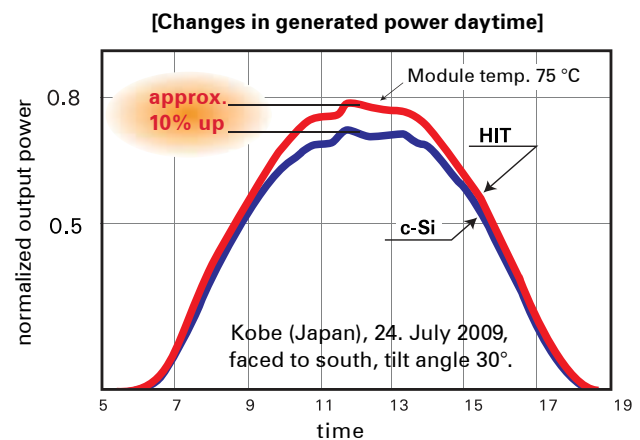
### Benefit in Terms of Performance

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

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

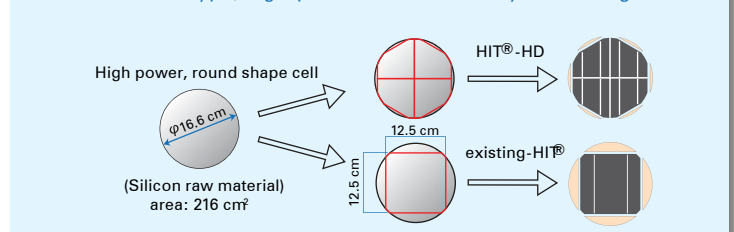


### Environmentally-Friendly Solar Cell More Clean Energy

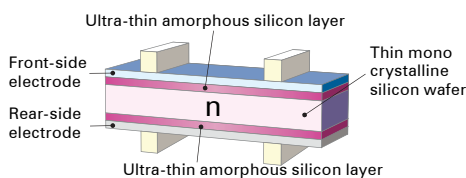
HIT can generate more clean Energy than other conventional crystalline solar cells.

### 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



### HIT® Solar Cell Structure



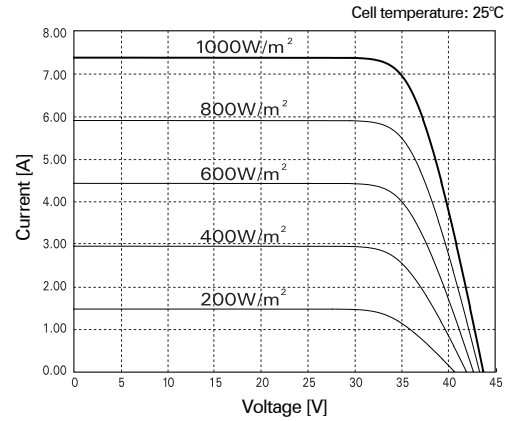
Development of HIT solar cell was supported in part by the New Energy and Industrial Technology Development Organization (NEDO).

| Electrical data                   | Models HIT-xxxHDE4 |        |
|-----------------------------------|--------------------|--------|
|                                   | 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   |

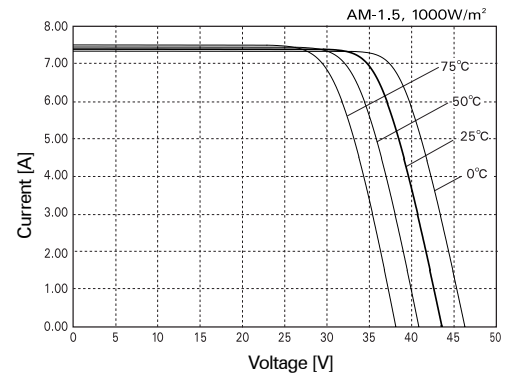
Note 1: Standard test conditions: Air mass 1.5, Irradiance = 1000 W/m<sup>2</sup>, Cell temperature = 25 °C.  
Note 2: The values in the above table are nominal.

## Reference data for model HIT-240HDE4

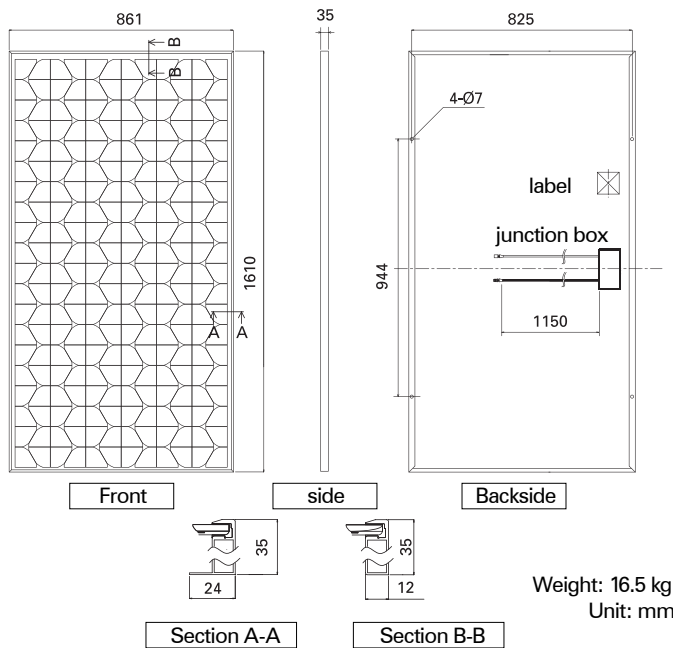
### Dependence on irradiance



### Dependence on temperature



### Dimensions and weight



### Certificates

IEC 61730 IEC 61215

### Member of



• Periodic inspection  
• Qualified, IEC 61215  
• Safety tested, IEC 61730



Electrical Protection



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.

HIT is a registered trademark of SANYO Electric Co.,Ltd.

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