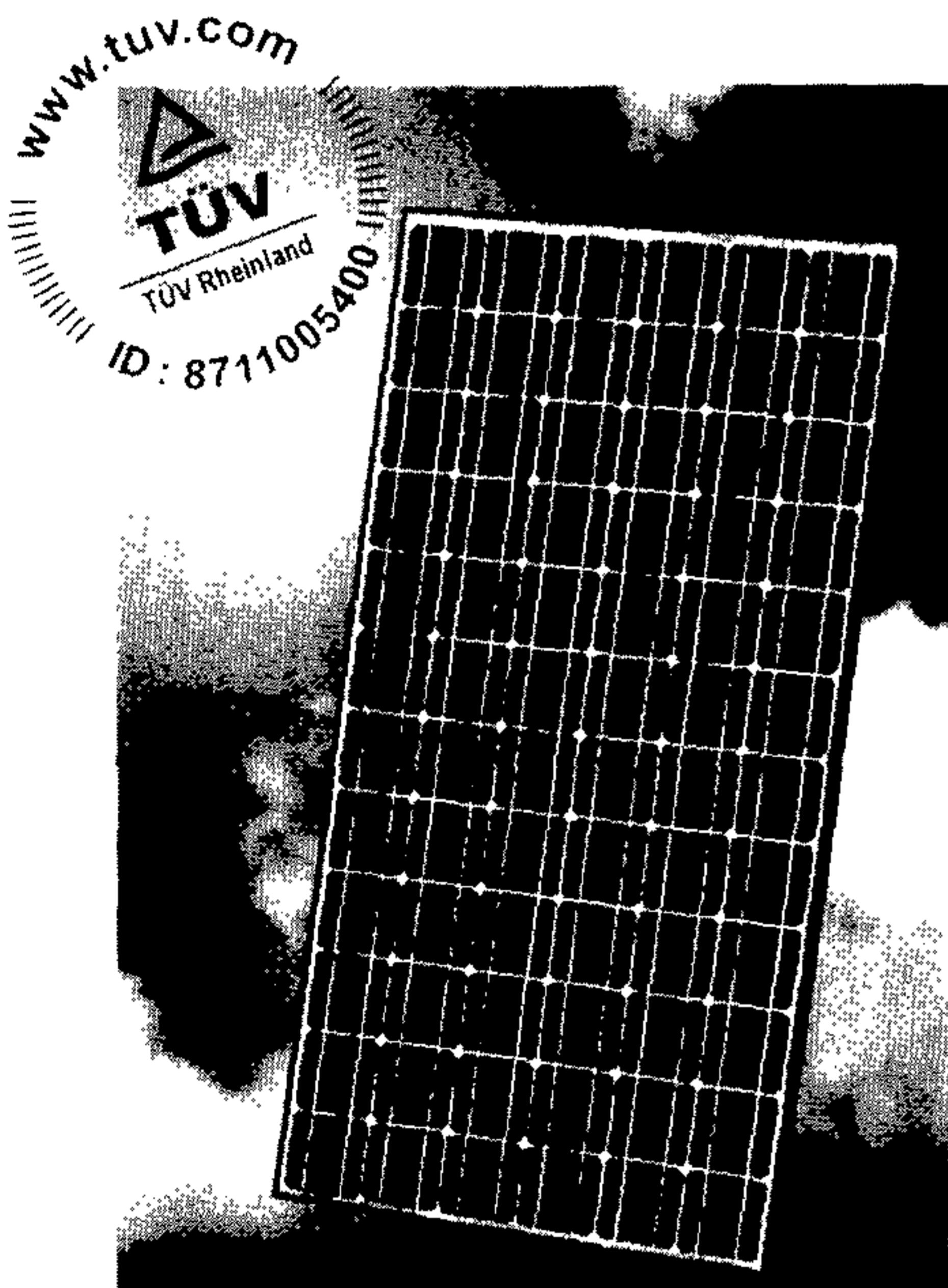


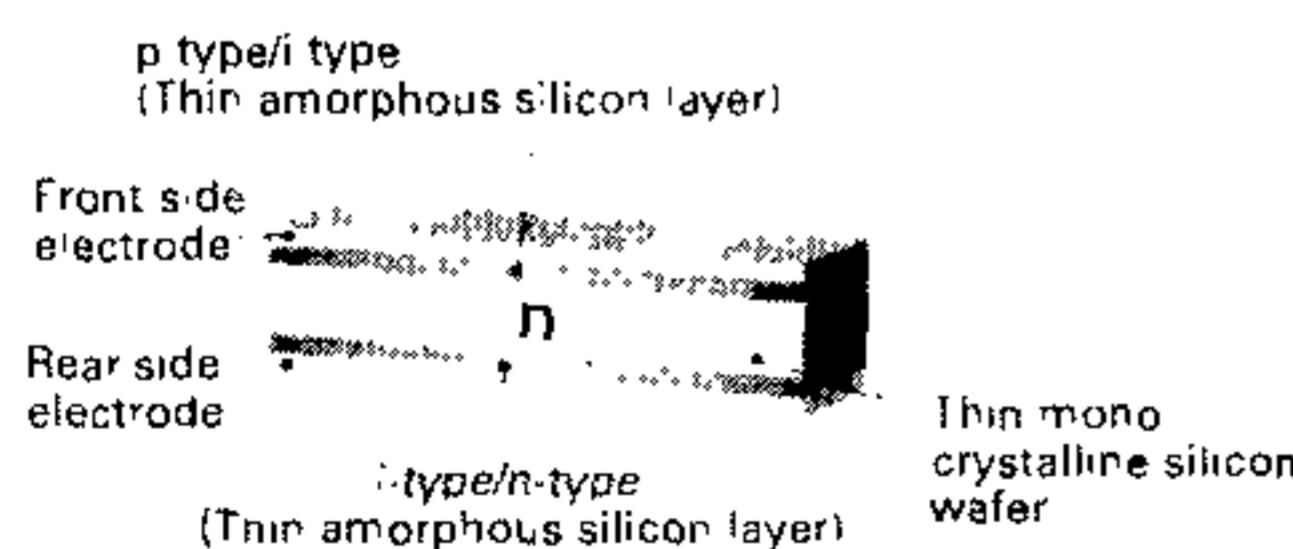
# HIT PHOTOVOLTAIC MODULE HIP-215NHE5

**SANYO**

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.



## HIT Solar Cell Structure



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

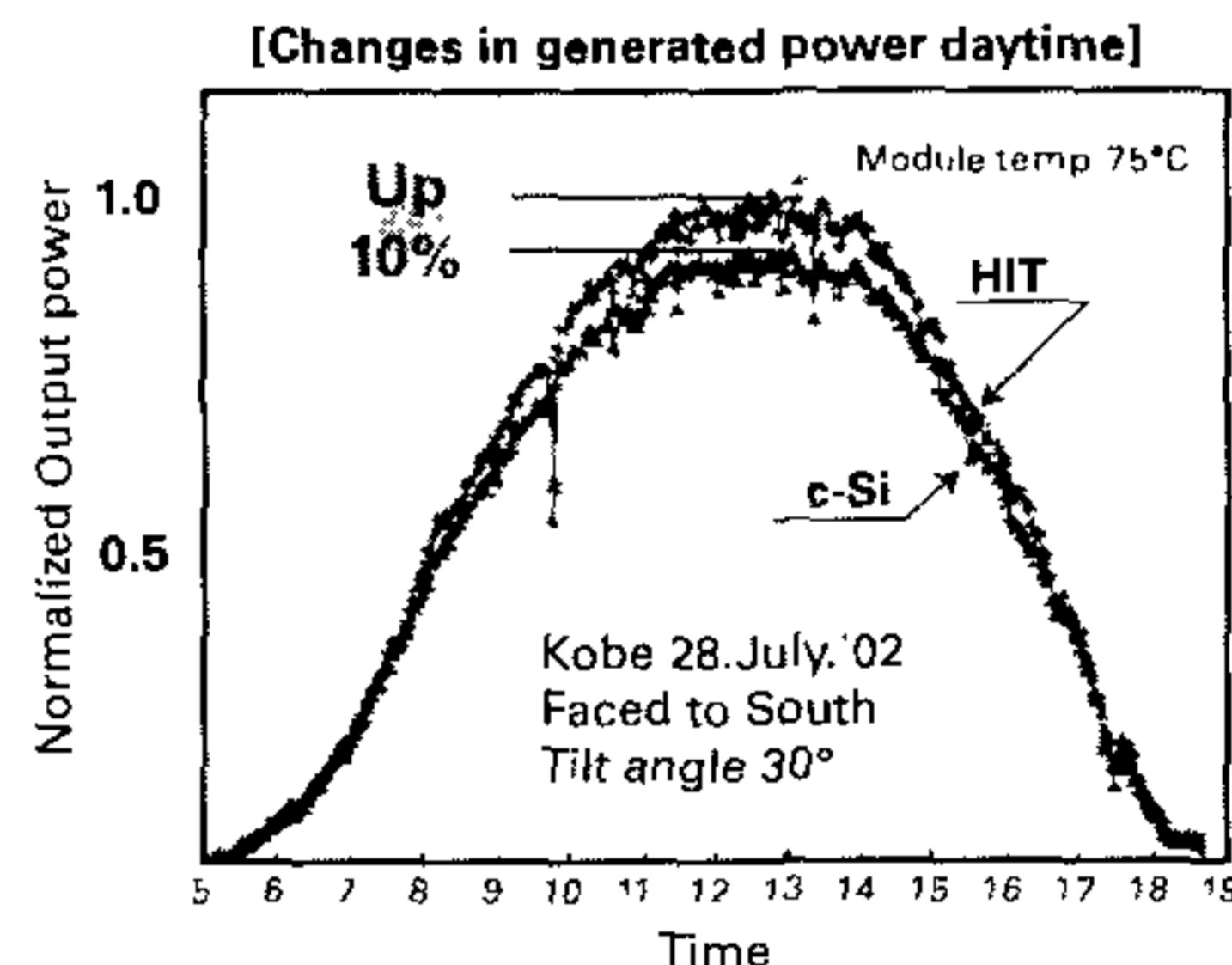
## Benefit in Terms of Performance

**High efficiency cell: 19.3%, Module: 17.2%**

The HIT cell and module have the world's highest level of 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.



## Environmental Friendly Solar Cell More Clean Energy

HIT can generate more annual power output per unit area than other conventional crystalline silicon 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.

## Benefit in Terms of Quality

**High quality in accordance with ISO 9001 and 14001 standards**

HIT solar cell and modules are subject to strict inspections and measurements to ensure compliance with electrical, mechanical and visual criteria.

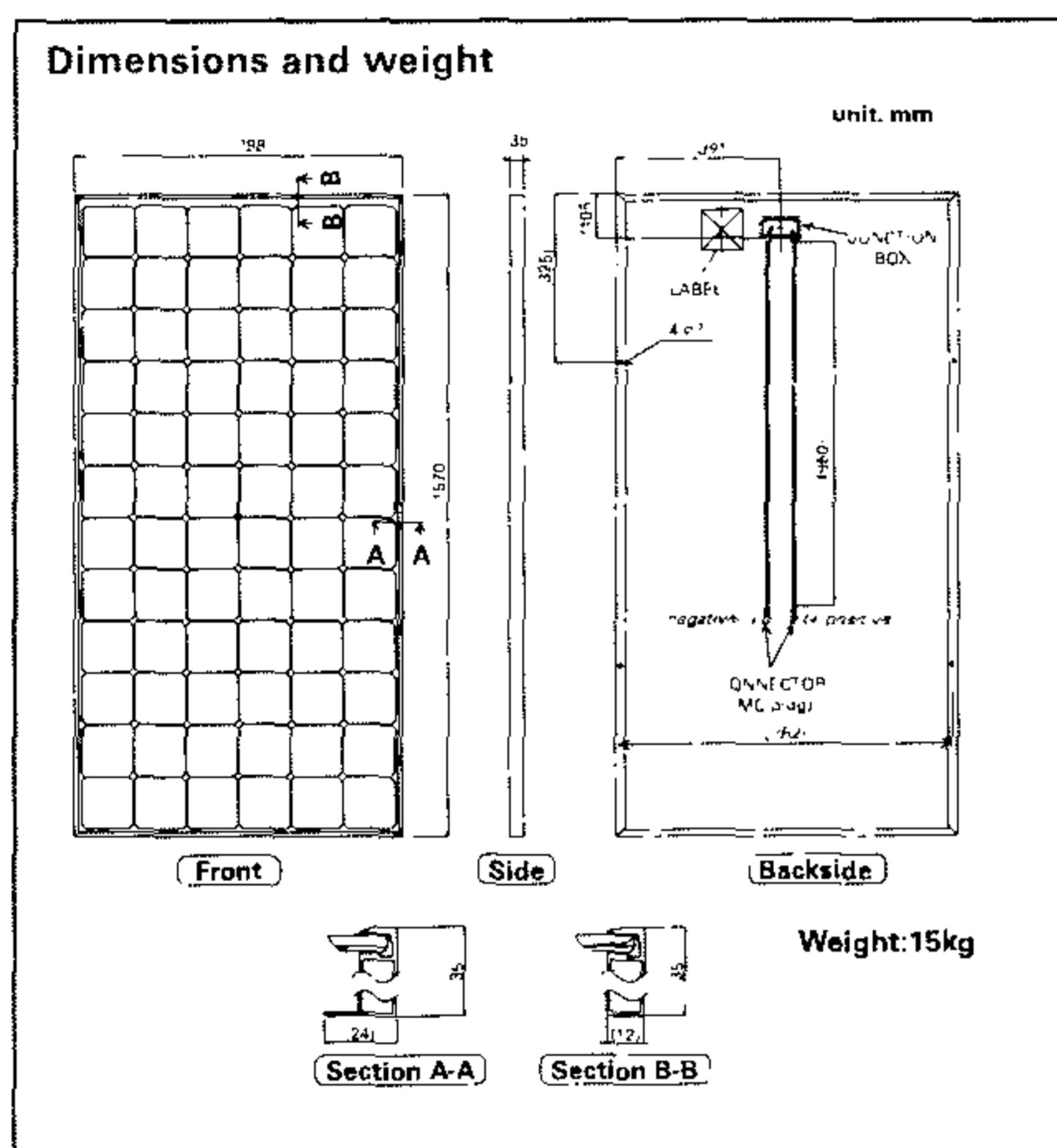
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# Electrical and Mechanical Characteristics

## HIP-215NHE5

Electrical data		
Maximum power (Pmax)	[W]	215
Max. power voltage (Vpm)	[V]	42.0
Max. power current (Ipm)	[A]	5.13
Open circuit voltage (Voc)	[V]	51.6
Short circuit current (Isc)	[A]	5.61
Warranted minimum power (Pmin)	[W]	204.25
Output tolerance	[%]	+10/-5
Maximum system voltage	[Vdc]	1000
Temperature coefficient of Pmax	[%/°C]	-0.30
Voc	[V/°C]	-0.129
Isc	[mA/°C]	1.68

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

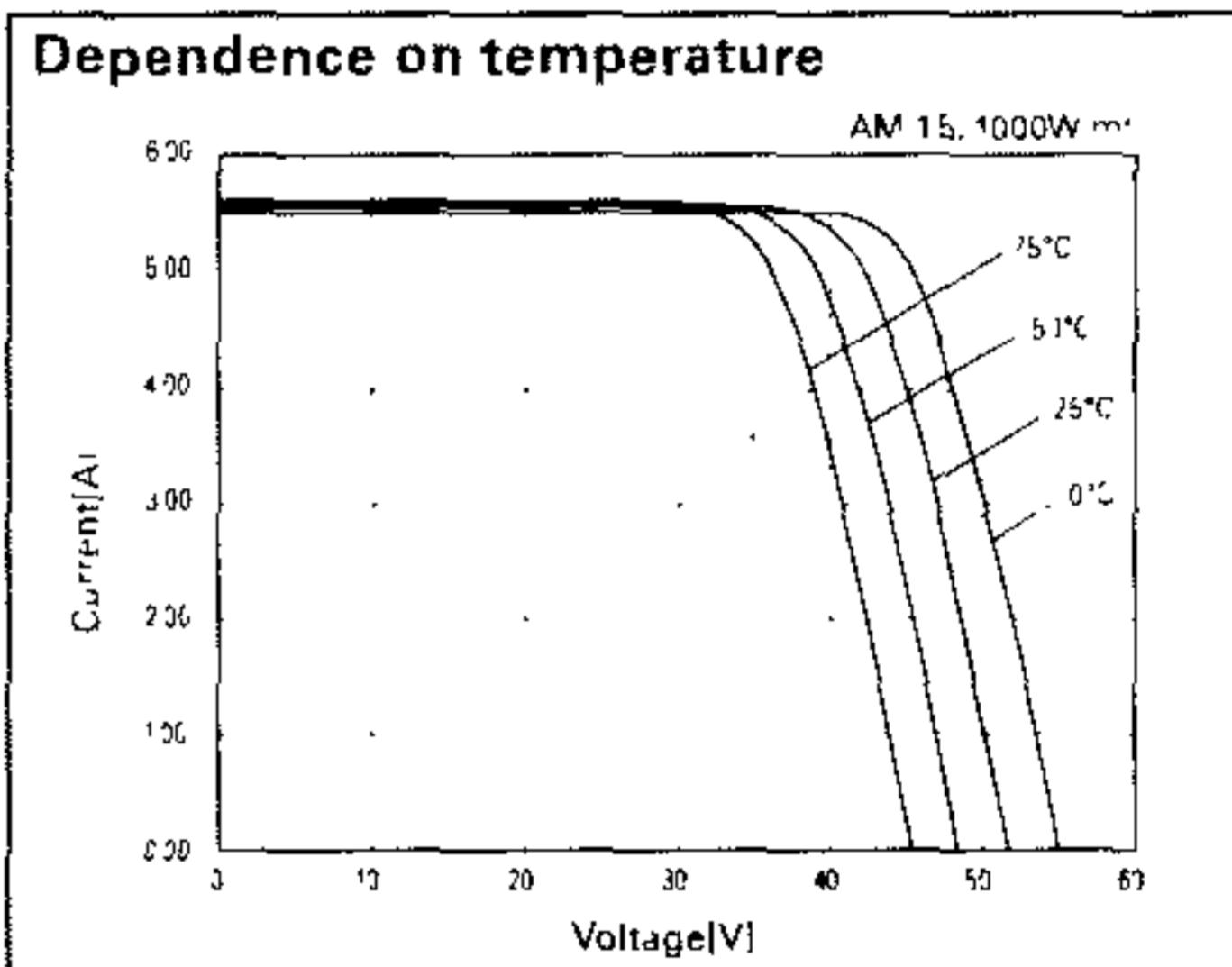
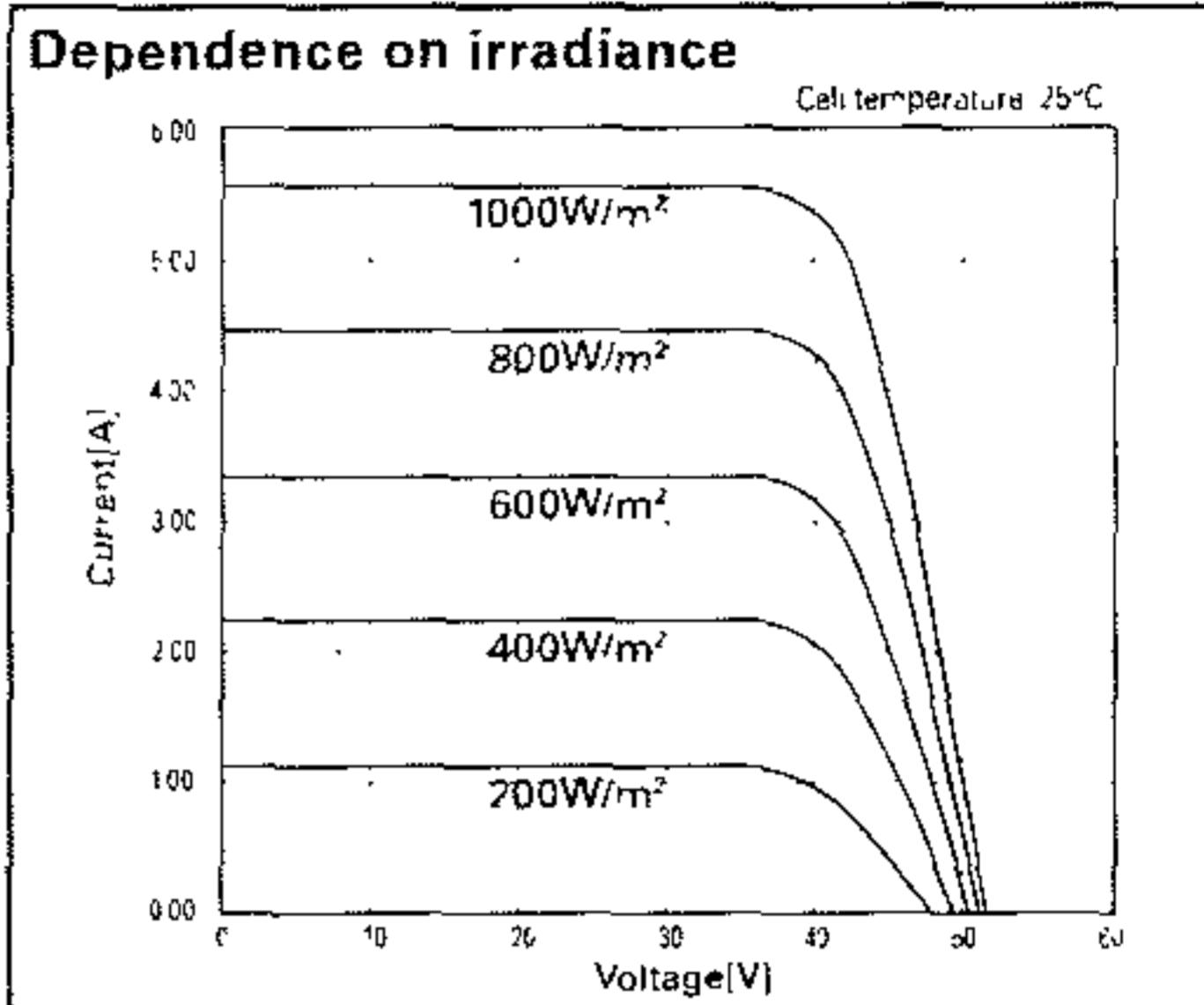


### Warranty

Power output: 20 years (80% of minimum output power)  
Product workmanship: 2 years  
(Based on contract terms.)

**CAUTION!** Please read the operating instructions carefully before using the products.

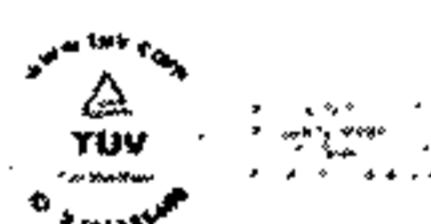
Owing to our policy of continual improvement the products covered by this brochure may be changed without notice.



### Certificates



IEC 61215



Please consult your local dealer for more information.

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**SANYO**