

Water drainage frame

- Rain water is drained off the module surface.
- This avoids not only water accumulation, but also water stains after drying.
- Even in low-angle installations, water drainage corners keep the module clean.



Power from both sides

- HIT[®] generates solar electricity simultaneously on the front and on the back side.
- This additional amount of light is combined with the light taken up by the front side of the module.



Light Capturing Technology

- Clean pyramid structures on the cell surface helps more light to be absorbed by solar cells.



Cell Surface

19.0%



Cell technology

Our cell is made of a thin monocrystalline silicon wafer surrounded by ultra-thin amorphous silicon layers. This product offers the industry's leading performance and value, using state-of-the-art manufacturing techniques. The development of the HIT[®] was supported in part by the New Energy and Industrial Technology Development Organization (NEDO).

Quality

Panasonic is truly committed to quality since it began developing and manufacturing solar PV in 1975. Since pioneering, developing and launching HIT[®] in the 1990s, we have been the technology leader, and for decades many satisfied customers have placed their trust in the competence in our unique HIT[®].

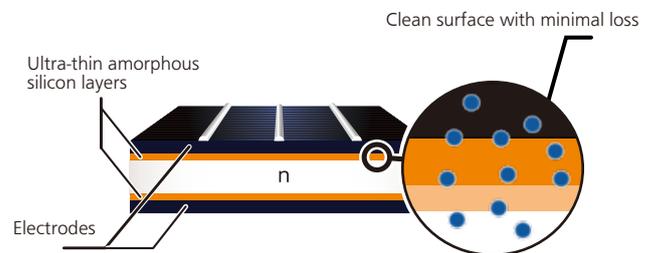
Special features

The solar modules are 100% emission free, have no moving parts and produce no noise. The dimensions of the modules enable a space saving installation and the achievement of maximum output power possible on a given roof area.

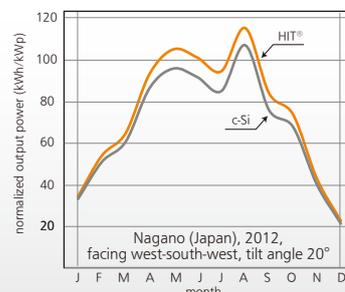
High performance at high temperatures

With its very low temperature coefficient of only $-0.30\%/^{\circ}\text{C}$, our solar cell can maintain a higher efficiency than a conventional crystalline silicon solar cell, even at high temperatures.

Cell structure of HIT[®]



Yield comparison



HIT[®]

Photovoltaic Module

"HIT" is a registered trademark of Panasonic Group.



Electrical and Mechanical Characteristics

N240

Electrical Specifications

Model	VBHN240SA11
Rated Power (P _{max}) ¹	240 W
Maximum Power Voltage (V _{pm})	43.7 V
Maximum Power Current (I _{pm})	5.51 A
Open Circuit Voltage (V _{oc})	52.4 V
Short Circuit Current (I _{sc})	5.85 A
Temperature Coefficient (P _{max})	-0.30% / °C
Temperature Coefficient (V _{oc})	-0.126 V / °C
Temperature Coefficient (I _{sc})	1.76 mA / °C
NOCT	118.9°F (48.3°C)
CEC PTC Rating	223.5 W
Cell Efficiency	21.6%
Module Efficiency	19.0%
Watts per Ft. ²	17.70 W
Maximum System Voltage	600 V
Series Fuse Rating	15 A
Warranted Tolerance (-/+)	-0% / +10%

Mechanical Specifications

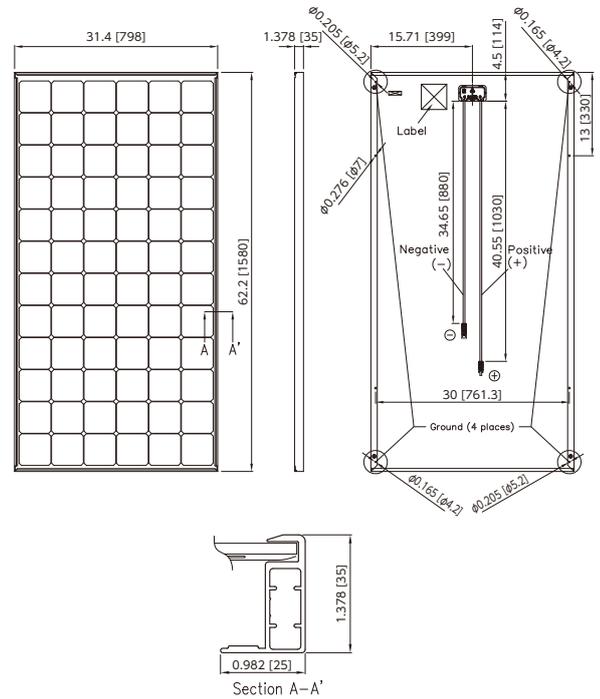
Internal Bypass Diodes	3 Bypass Diodes
Module Area	13.56 Ft ² (1.26m ²)
Weight	33.1 Lbs. (15kg)
Dimensions LxWxH	62.2x31.4x1.4 in. (1580x798x35 mm)
Cable Length +Male/-Female	40.55/34.64 in. (1030/880 mm)
Cable Size / Type	No. 12 AWG / PV Cable
Connector Type ³	Multi-Contact [®] Type IV (MC4 [™])
Static Wind / Snow Load	50 PSF (2400 Pa)
Pallet Dimensions LxWxH	63.2x32x.65 in. (1607x815x1650 mm)
Quantity per Pallet / Pallet Weight	40 pcs./1388.9 Lbs (630 kg)
Quantity per 40' Container	560 pcs.
Quantity per 20' Container	280 pcs.

Operating Conditions & Safety Ratings

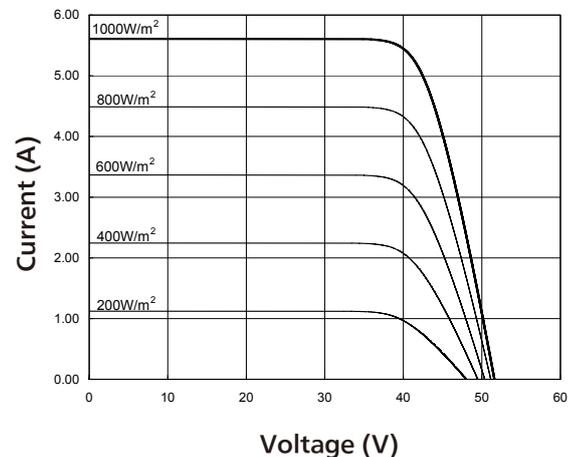
Ambient Operating Temperature ²	-4°F to 104°F (-20°C to 40°C)
Hail Safety Impact Velocity	1" hailstone (25mm) at 52 mph (23m/s)
Safety & Rating Certifications	UL 1703, cUL, CEC
UL 1703 Fire Classification	Type 2
Limited Warranty	10 Years Workmanship, 25 Years Power Output

¹ STC: Cell temp. 25°C, AM1.5, 1000W/m²
² Monthly average low and high of the installation site.
 Note: Specifications and information above may change without notice.
³ Safety locking clip (PV-SSH4) is not supplied with the module.

Dimensions and Weight



Dependence on Irradiance



HIT is a registered trademark of Panasonic Group.

CAUTION! Please read the installation manual carefully before using the products.

Please contact

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<http://panasonic.net/ecosolutions/solar>

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