



## Photovoltaic Module HIT® N330, N325 | VBHN330SA16, VBHN325SA16

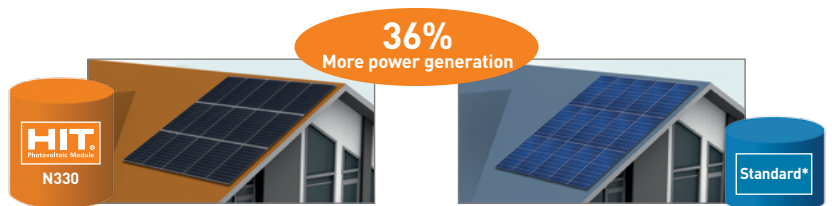
### Panasonic solar technology

Panasonic photovoltaic modules HIT® feature an innovative hetero-junction cell structure made of mono-crystalline and amorphous silicon layers. Ultra-thin amorphous silicon layers prevent recombinations of electrons, keeping carrier loss to an absolute minimum. As a result, HIT® conversion efficiency ratings are among the highest available today.

### 19.7% module efficiency

Employing 96 cells in the same size footprint, N330 and N325 HIT® produce up to 36% more free electricity compared to conventional 60-cell panels.

- More solar power output per square foot
- Fewer panels to install, faster installations
- Ideal for small roof areas
- Greater cost savings for homeowners over a 25-year lifecycle

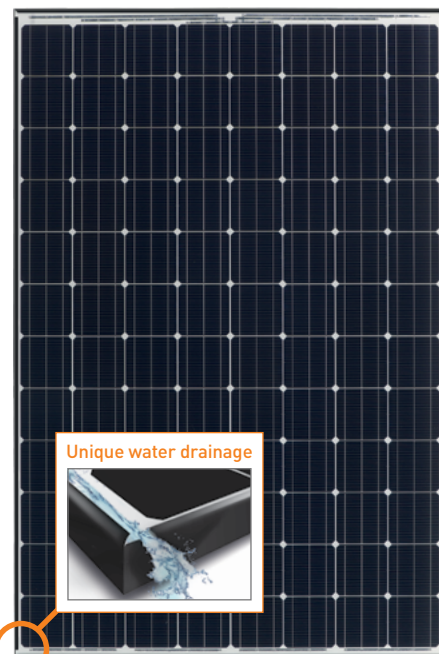


HIT®: 9,167kWh/year (15pcs x 330W = 4.95kW)

VS Standard\*: 6,716kWh/year (15pcs x 260W = 3.90kW)

NOTE: Panasonic's simulation in CA, USA

\*Conventional crystalline module



### Quality you can trust

#### 100% Panasonic HIT®

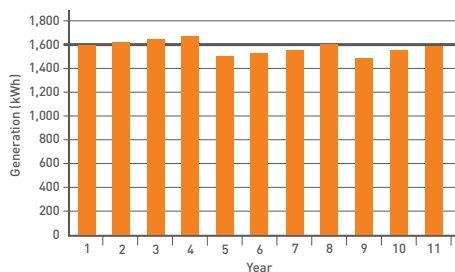
Starting over 40 years ago with the research and development of photovoltaic cells in 1975, Panasonic has been a solar pioneer since the beginning of the green revolution. In 1997, the HIT® set the industry standard for high conversion efficiency. Satisfied customers worldwide have come to trust and rely on Panasonic quality ever since.

#### Panasonic manufactured and guaranteed

- 25-year power output warranty and 15-year workmanship warranty
- Vertically integrated in-house manufacturing of wafer, cell, and module
- State-of-the-art production facilities and manufacturing processes
- Industry's most stringent independent testing and quality control standards
- IEC and 20+ internal tests

#### Minimal field degradation

Actual recorded data proves reliable, stable performance over 11 years.



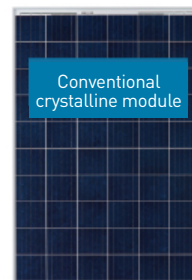
### Simply powerful

330W

260W



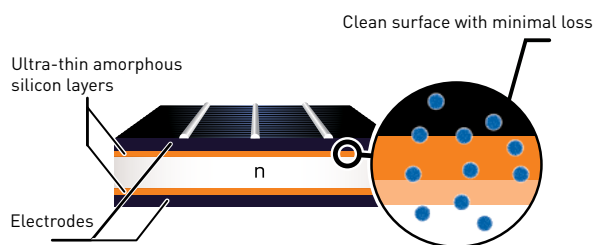
Panel size (1.6m<sup>2</sup>)



Panel size (1.6m<sup>2</sup>)

With the same dimension, HIT® N330 produces more power than conventional crystalline modules

### Cell structure of HIT®



## Electrical Specifications (TENTATIVE)

Model	VBHN330SA16	VBHN325SA16
Rated Power (Pmax) <sup>1</sup>	330W	325W
Maximum Power Voltage (Vpm)	58.0V	57.6V
Maximum Power Current (Ipm)	5.70A	5.65A
Open Circuit Voltage (Voc)	69.7V	69.6V
Short Circuit Current (Isc)	6.07A	6.03A
Temperature Coefficient (Pmax)	-0.30%/°C	-0.30%/°C
Temperature Coefficient (Voc)	-0.174V/°C	-0.174V/°C
Temperature Coefficient (Isc)	1.82mA/°C	1.82mA/°C
NOCT	44.0°C	44.0°C
CEC PTS Rating	305.9W	301.2W
Cell Efficiency	22.09%	21.76%
Module Efficiency	19.7%	19.4%
Watts per Ft. <sup>2</sup>	18.3W	18.0W
Maximum System Voltage	600V	600V
Series Fuse Rating	15A	15A
Warranted Tolerance (-/+)	+10%/-0%*	+10%/-0%*

## Mechanical Specifications (TENTATIVE)

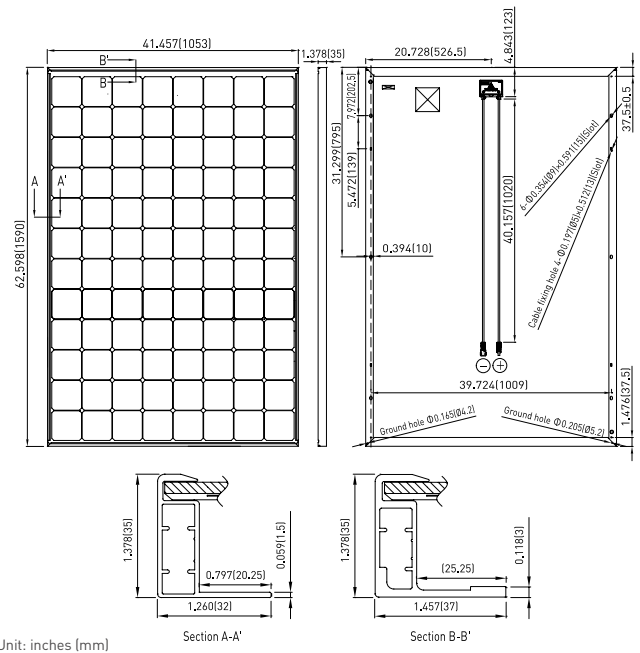
Model	VBHN330SA16, VBHN325SA16
Internal Bypass Diodes	4 Bypass Diodes
Module Area	18.02 Ft. <sup>2</sup> [1.67m <sup>2</sup> ]
Weight	40.81 Lbs. (18.5kg)
Dimensions LxWxH	62.6x41.5x1.4 in. [1590x1053x35 mm]
Cable Length +Male/-Female	40.2/40.2 in. [1020/1020 mm]
Cable Size / Type	No. 12 AWG / PV Cable
Connector Type <sup>2</sup>	Multi-Contact <sup>®</sup> Type IV (MC4™)
Static Wind / Snow Load	50 PSF [2400 Pa]
Pallet Dimensions LxWxH	63.7x42.2x5.5 in. [1618x1071x140 mm]
Quantity per Pallet / Pallet Weight	40 pcs. /1719 Lbs. (780 kg)
Quantity per 40' Container	560 pcs.
Quantity per 20' Container	240 pcs.

## Operating Conditions & Safety Ratings (TENTATIVE)

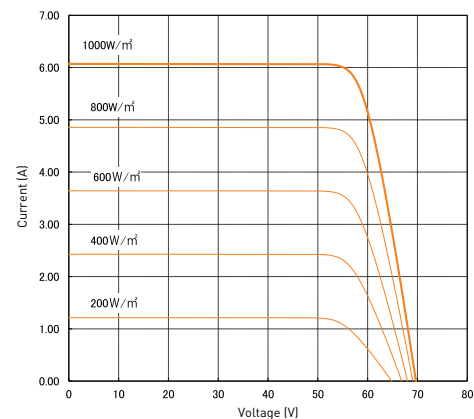
Model	VBHN330SA16, VBHN325SA16
Operating Temperature	-40°F to 185°F (-40°C to 85°C)
Hail Safety Impact Velocity	1" hailstone [25mm] at 52 mph [23m/s]
Safety & Rating Certifications	UL 1703, cUL, CEC
UL 1703 Fire Classification	Type 2
Limited Warranty	15 Years Workmanship, 25 Years Power Output

Note: Standard Test Conditions: Air mass 1.5; irradiance = 1000W/m<sup>2</sup>; cell temp. 25°C  
<sup>1</sup>Maximum power at delivery. For guarantee conditions, please check our guarantee document.  
<sup>2</sup>STC: Cell temp. 25°C, AM1.5, 1000W/m<sup>2</sup>  
<sup>3</sup>Safety locking clip (PV-SSH4) is not supplied with the module.  
 Note: Specifications and information above may change without notice.

## Dimensions



## Dependence on Irradiance



Reference data for model: VBHN330SA16  
 (Cell temperature: 25°C)

**CAUTION!** Please read the installation manual carefully before using the products.  
 Used electrical and electronic products must not be mixed with general household waste. For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.