

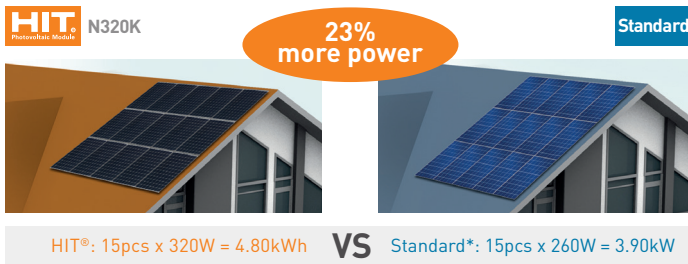
PHOTOVOLTAIC MODULE HIT® **BLACK** VBHN320KA01, VBHN315KA01, VBHN310KA01

N320K, N315K,
N310K



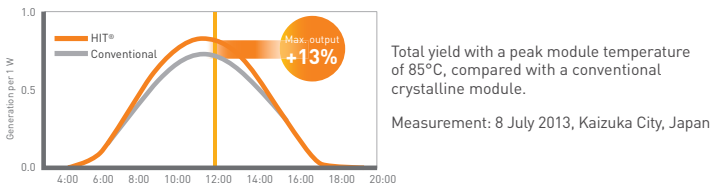
19.1% module efficiency with all black appearance

Enables reaching a higher output and lower specific installation and balance-of-system costs than with the same number of standard 60-cell modules.



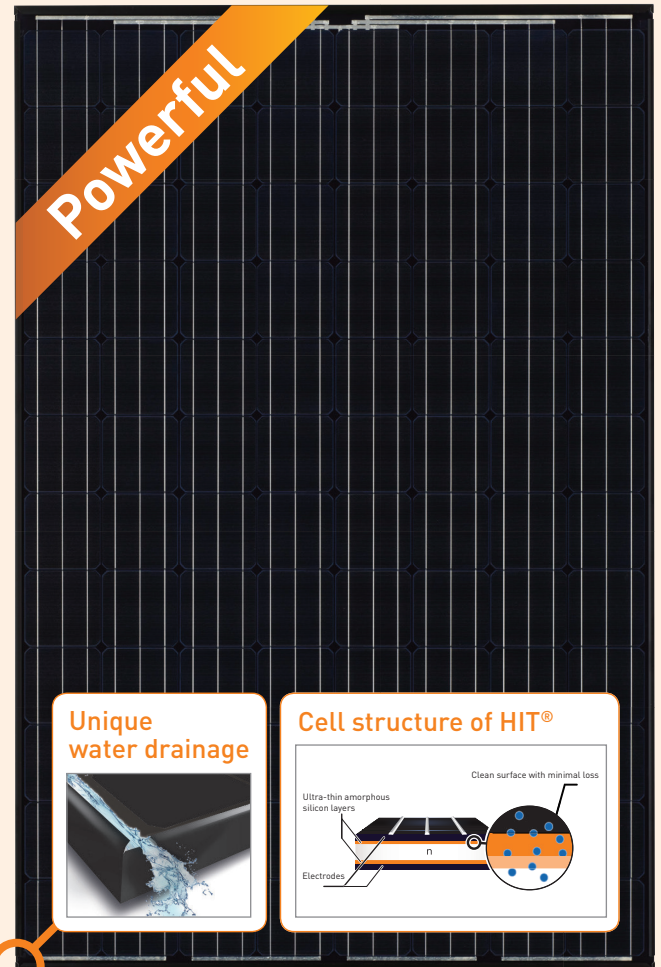
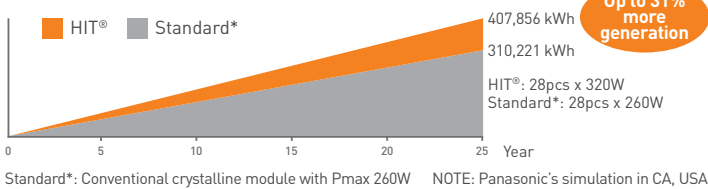
High performance in high temperature

Low temperature coefficient of HIT® (-0.29%/°C) allows them to maintain high efficiency and performance even in hot temperatures, producing more energy throughout the day.



More energy, higher profit!

Helping you reach a higher final profit with your PV system!



320W/315W/310W

High Efficiency

+

High Performance
at High Temperatures

=

High Power
Generation

QUALITY PROVEN 4 WAYS

1 Panasonic Quality

- IEC and over 20 Panasonic internal tests
- 100% Vertically integrated own manufacturing (wafer, cell and module)

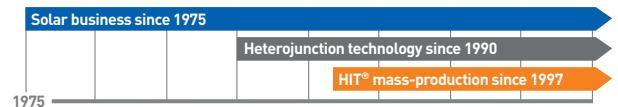


2 15-year product workmanship warranty

Long term mass-production experience enables 15-year product workmanship warranty exceeding the market standard (10 years).

3 100% Panasonic, 100% HIT®

Proudly featuring Panasonic's original invention, the heterojunction solar cell. With over 1 billion cells produced commercially over 18 years, 25 years after the breakthrough in the development and looking back to over 40 years of experience in solar, Panasonic really offers you a 25-year guarantee you can trust.



4 3rd Party verified

- Lifecycle testing (Long-Term-Sequential-Test) by TÜV Rheinland (tested on VBHN240SE10)
- PID-free (tested by Fraunhofer Institute)



Electrical and Mechanical Characteristics

VBHN320KA01, VBHN315KA01, VBHN310KA01

Electrical Specifications

Model	VBHN320KA01	VBHN315KA01	VBHN310KA01
Rated Power (Pmax) ¹	320	315	310
Maximum Power Voltage (Vpm)	58.7V	58.4V	58.1V
Maximum Power Current (Ipm)	5.46A	5.40A	5.34A
Open Circuit Voltage (Voc)	70.5V	70.2V	69.9V
Short Circuit Current (Isc)	5.89A	5.83A	5.78A
Temperature Coefficient (Pmax)	-0.29%/°C	-0.29%/°C	-0.29%/°C
Temperature Coefficient (Voc)	-0.174V/°C	-0.174V/°C	-0.174V/°C
Temperature Coefficient (Isc)	1.79mA/°C	1.79mA/°C	1.79mA/°C
NOCT	44.0°C	44.0°C	44.0°C
CEC PTC Rating	—	—	—
Cell Efficiency	21.6%	21.2%	20.9%
Module Efficiency	19.1%	18.8%	18.5%
Watts per Ft. ²	17.8W	17.5W	17.2W
Maximum System Voltage	600V	600V	600V
Series Fuse Rating	15A	15A	15A
Warranted Tolerance [-/+]	+10%/-0%*	+10%/-0%*	+10%/-0%*

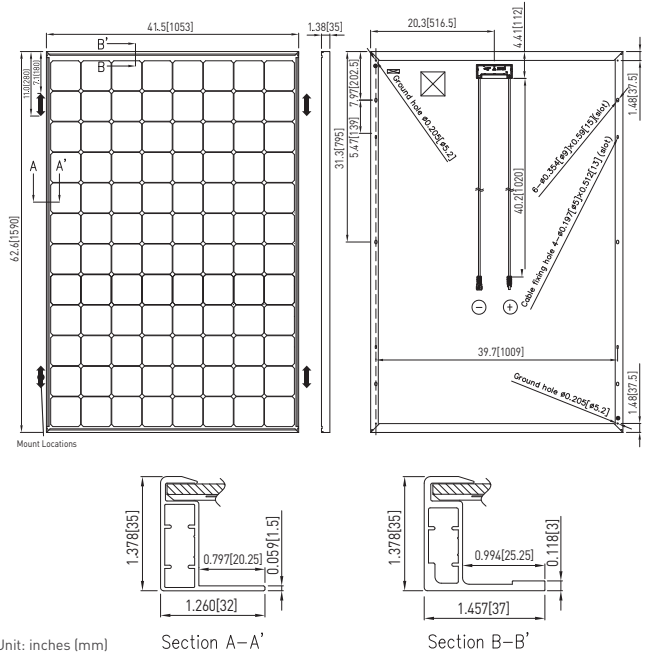
Mechanical Specifications

Model	VBHN320KA01, VBHN315KA01, VBHN310KA01
Internal Bypass Diodes	4 Bypass Diodes
Module Area	18.02 Ft. ² (1.67m ²)
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 ²	Multi-Contact® 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

Model	VBHN320KA01, VBHN315KA01, VBHN310KA01
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 (Linear)

Dimensions

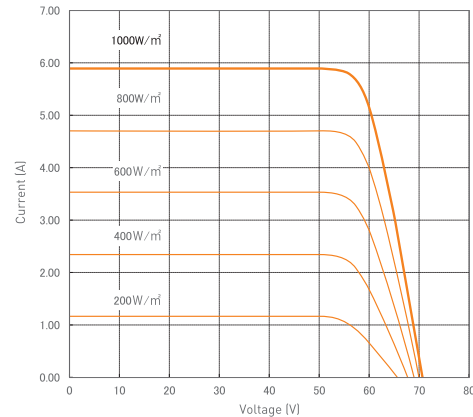


Unit: inches (mm)

Section A-A'

Section B-B'

Dependence on Irradiance



Reference data for model: VBHN320SA01
(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.

Note: Standard Test Conditions: Air mass 1.5; irradiance = 1000W/m²; cell temp. 25°C
¹Maximum power at delivery. For guarantee conditions, please check our guarantee document.
²STC: Cell temp. 25°C, AM1.5, 1000W/m²
³Safety locking clip (PV-SSH4) is not supplied with the module.
 Note: Specifications and information above may change without notice.