Photovoltaic module HIT® VBHN330SJ47 / VBHN325SJ47

N 325



19.7% module efficiency

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



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.



More energy, higher profit!

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







Guarantee water drainage

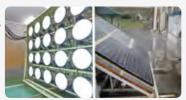
330W / 325W



QUALITY PROVEN 4 WAYS

Guaranteed by Panasonic

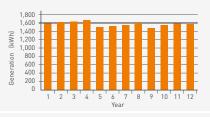
- IEC and over 20 Panasonic internal tests
- Vertically integrated own manufacturing (wafer, cell and module)



Less degradation on the field

12 years actual data prove a reliable and stable performance.

Installation: March 2004 Location: Glocestershire, UK Model: HIP-180BE System size: 1.80 kWp



Record low claim rate

Less than 0.005% failure rate after more than 10 years experience in Europe (as of September 2015)

3rd Party verified

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

HIT® is a registered trademark of Panasonic Group.



Electrical and Mechanical Characteristics N330, N325



Electrical data (at STC)	VBHN3305 I47	VBHN325SJ47		
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Max. power (Pmax) [W]	330	325		
Max. power voltage (Vmp) [V]	58.0	57.6		
Max. power current (Imp) [A]	5.70	5.65		
Open circuit voltage (Voc) [V]	69.7	69.6		
Short circuit current (Isc) [A]	6.07	6.03		
Max. over current rating [A]	15			
Power tolerance [%] *	+10/-0			
Max. system voltage [V]	1000			
Solar Panel efficiency [%]	19.7	19.4		
Note: Standard Test Conditions: Air mass 1.5; Irradiance = 1000W/m²; cell temp. 25°C * Maximum power at delivery. For guarantee conditions, please check our guarantee document.				
Temperature characteristics				
Temperature (NOCT) [°C]	44.0	44.0		
Temp. coefficient of Pmax [%/°C]	-0.29	-0.29		
Temp. coefficient of Voc [V/°C]	-0.174	-0.174		
Temp. coefficient of lsc [mA/°C]	1.82	1.81		
At NOCT (Normal Operating Conditions)				

Max. power (Pmax) [W]	251.9	247.8
Max. power voltage (Vmp) [V]	56.3	55.9
Max. power current (Imp) [A]	4.54	4.50

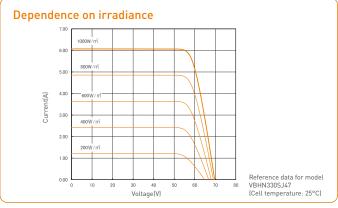
4.50 Open circuit voltage (Voc) [V] 65.8 65.7 Short circuit current (Isc) [A] 4 89 4 86

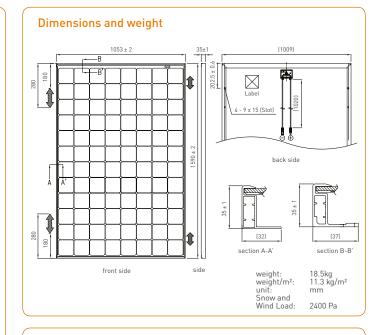
Note: Normal Operating Cell Temp.: Air mass 1.5; Irradiance = 800W/m²; Air temperature 20°C; wind speed 1 m/s

At low irradiance (20%)

Max. power (Pmax) [W]	63.5	62.3
Max. power voltage (Vmp) [V]	57.0	56.4
Max. power current (Imp) [A]	1.12	1.10
Open circuit voltage (Voc) [V]	65.6	65.3
Short circuit current (Isc) [A]	1.22	1.21

Note: Low irradiance: Air mass 1.5; Irradiance = 200W/m2; cell temp. = 25°C





Guarantee

Power output: 10 years (90% of Pmin)

25 years (80% of Pmin)

Product workmanship: 15 years (based on guarantee document)

Materials

Cell material: 5 inch photovoltaic cells Glass material: AR coated tempered glass Frame materials: Black anodized aluminium

Connectors type: SMK

Certificates







IEC61730-1 IEC61730-2





Please consult your local dealer for more information

A 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.



Panasonic Eco Solutions Europe Panasonic Electric Works Europe AG

