# **Panasonic**

# Bifacial Photovoltaic Module VBHN225DJ06



## Power per Square meter up to 207.9 Watts







Breezeway: El Solutions Burbank, CA

Patio Awning: Solar Living Design Lakewood, CO

### **High Efficiency**

HIT<sup>™</sup> Double is the world leader in sunlight conversion efficiency, helping customers to enjoy the maximum power per square meter from available space.

#### **Power Guarantee**

Panasonic guarantees customers will receive 100% of the panel's rated power (or more) at the time of purchase, enabling owners to generate more kWh per rated watt.

#### **Bifacial Effect**

The back face of the panel generates electricity from ambient light reflected off surrounding surfaces, and combines with power from the front face of the panel. Dependant upon system design and site albedo, this results in up to 30% higher power generation (more kWh) per square meter.



### **Application Possibilities**

- Architectural, Awnings, Balconies, Bus Shelters, BIPV
- Deck & Porch Coverings, Canopies, Carports, Facades
- Fences, Siding, Trellises, Tracking Systems

### **Proprietary Technology**

Our bifacial solar cells are hybrids of single crystalline silicon surrounded by ultra-thin amorphous silicon layers, available solely from Panasonic.

#### **High Temperature Performance**

As temperatures rise, the panel produces more electricity than conventional solar panels at the same temperature, for good performance in high temperature sites.

#### **Quality Products**

Panasonic is truly committed to quality since it began developing and manufacturing solar PV in 1975. We have been the technology leader, and for decades many satisfied customers have placed their trust in the competence of our unique solar technology.

#### **Brilliant Aesthetics**

This panel sets a new aesthetic standard in photovoltaic system design.With a double glass structure that allows brilliant light and shadows to shine through the panels, the solar cells truly appear to be floating in the air. Both residential and commercial customers will enjoy new architectural possibilities.

# Double 225

To Maximize Power

At low irradiance Max. Power (Pmax)

Max. Power Voltage (Vmp)

Max Power Current (Imp) Open Circuit Voltage (Voc)

Short Circuit Voltage (Isc)

Safety & Rating Certifications

**Mechanical Specifications** 

Limited Warranty

Internal Bypass Diodes Module Area

Module Weight

Connector

Statistics load

Pallet Dimentions

Quantity per pallet/Pallet weight

Quantity per 20FT/40FT container

Module Dimension

Cable Lengths/ size

Safety Rating & Limited Warranty Ambient Operating Temperature

1. Elevate panels above a surface as much as possible.

3. Do not allow support rails to shade the panel's back face.

42 7W

41.8V 1.02A

48.9V

1.11A

-20℃~+40℃

JET IEC61215, IEC61730-1, IEC61730-2 Power output: 10 years (90% of Pmin),

Product workmanship: 10 years (based on

3 Bypass Diodes

1.4 m<sup>2</sup>

24 kg

1630 x 862 x 35mm

1370, 1370 mm/4.0 sq

MC3 (PV-KBT/KST-3II-UR) "50PSF (2400Pa) /112PSF (5400Pa) \*Mount on long side only"

1657×879×150mm

36pcs/880kg

216 pcs/ 504 pcs

25 years (80% fo Pmin)

guarntee documents)

0.75 (19)

Section B-B

2. Place panels over light-colored surfaces.

Electrical Specifications	Specifications Including Backside Irradiation Contribution in ISC as a Percent of STC						
Model: VBHN225DJ06	STC	5%	10%	1 <b>5</b> %	<b>20%</b>	<b>25%</b>	30%
Rated Powr (Pmax)	225W	236W	247W	259W	269W	280W	291W
Maximum Power Voltage (Vpm)	43.2V	43.7V	43.7V	43.7V	43.6V	43.6V	43.6V
Maximu Power Current (Ipm)	5.21A	5.42A	5.67A	5.93A	6.18A	6.43A	6.68A
Open Circuit Voltage (Voc)	52.4V	52.5V	52.6V	52.7V	52.8V	52.9V	53.0V
Short Circuit Current (Isc)	5.54A	5.82A	6.09A	6.37A	6.65A	6.92A	7.20A
Max. System Voltage (Vsys)	600V						
Warranted Tolerance	±10%					—	
Series Fuse Rating	15A					—	—
Cell Efficiency	20.1%					—	
Module Efficiency	16.0%						
Power per Square meter	160.7W	168.6W	176.4W	185.0W	192.1W	200.0W	207.9W
Note:Temperature Coefficient is tentative specification and may be subjected to change in the future.							

#### **Temperature Characteristics (VBHN225DJ06)**

Temperature (NOCT)	45.8°C
Temp. Coefficient of Pmax	-0.29%/℃
Temp. Coefficient of Voc	-0.124V/°C
Temp. Coefficient of Isc	0.003A/°C

#### At NOCT (Normal Operating Coditions)

Max. Power(Pmax)	169.6W
Max. Power Voltage (Vmp)	40.9V
Max Power Current (Imp)	4.14A
Open Circuit Voltage (Voc)	49.5V
Short Circuit Voltage (Isc)	4.46A

#### **Dependence on Irradiance**



#### **Dimensions Unit : inches (mm)**



IMPORTANT: The rated power of HIT<sup>™</sup> Double is measured under Standard Test Conditions (STC). STC does not account for power produced from the back face of panels. Therefore, HIT Double panels will produce more power than their STC rating, up to 30% more, depending upon the system design and site albedo. Account for the additional power when sizing, selecting system components and wiring.

manufactured by SANYO Electric Co., Ltd.

Please contact

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Specications are subject to change without notice.