Panasonic

Photovoltaic module HIT™ VBHN294SJ45

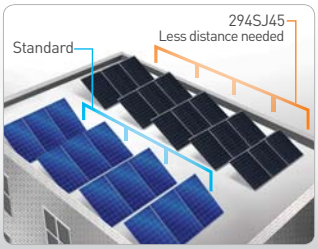
HIT™ Photovoltaic Module

19.1% module efficiency

Industry top-level output for a PV module $< 1.6\ m^2$

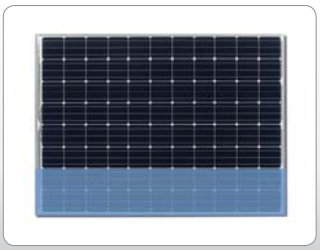
Compact size

Best fit in portrait due to shorter module length. Less space needed between module rows on flat roofs



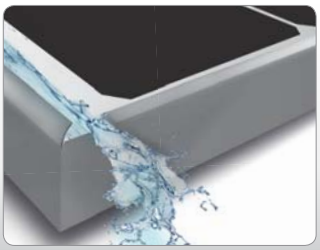
Improved shading performance

Featuring 4 shading zones instead of 3



Unique water drainage

on each corner for an improved self-cleaning



294 W

High Efficiency + High Performance at High Temperatures = High Power Generation

QUALITY PROVEN 4 WAYS

1 Guaranteed by Panasonic

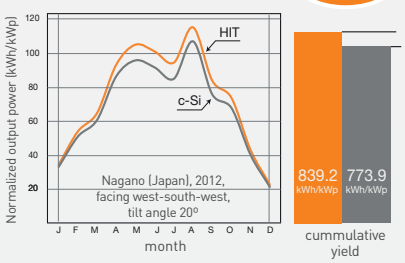
- IEC and over 20 Panasonic internal tests
- 40 years experience, longer than our 25 years Guarantee

2 Record low claim rate

0.0038% failure rate after more than 10 years experience in Europe (as of Jan.2015)

3 Higher yield on field test

8% more yield than standard c-Si solar modules



4 3rd Party verified

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

Photovoltaic module HIT™

Electrical data (at STC)

	VBHN294SJ45
Max. power (Pmax) [W]	294
Voltage at Max. Power (Vmp) [V]	52.6
Current at Max. Power (Imp) [A]	5.59
Open circuit voltage (Voc) [V]	63.7
Short circuit current (Isc) [A]	5.99
Max. over current rating [A]	15
Production tolerance power [%]	+10/0*
Max. system voltage [V]	1000

Note: Standard Test Conditions: Air mass 1.5; Irradiance = 1000W/m²; cell temp. 25°C
*Each panel output is measured by Panasonic at the time of production.

Temperature characteristics

Temperature (NOCT) [°C]	48.7
Temp. coefficient of Pmax [%/°C]	-0.29
Temp. coefficient of Voc [V/°C]	-0.164
Temp. coefficient of Isc [A/°C]	0.002

At NOCT (Normal Operating Conditions)

Max. power (Pmax) [W]	221
Max. power voltage (Vmp) [V]	49.2
Max. power current (Imp) [A]	4.50
Open circuit voltage (Voc) [V]	59.5
Short circuit current (Isc) [A]	4.85

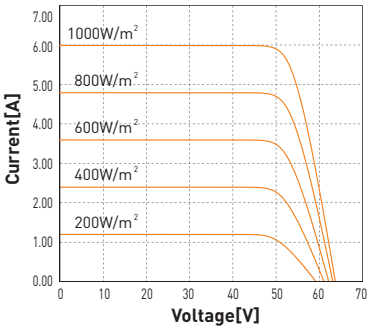
Note: Nominal Operating Cell Temp.: Air mass 1.5; Irradiance = 800W/m²;
Air temperature 20°C; wind speed 1 m/s

At low irradiance (20%)

Max. power (Pmax) [W]	56.8
Max. power voltage (Vmp) [V]	51.1
Max. power current (Imp) [A]	1.11
Open circuit voltage (Voc) [V]	60.3
Short circuit current (Isc) [A]	1.20

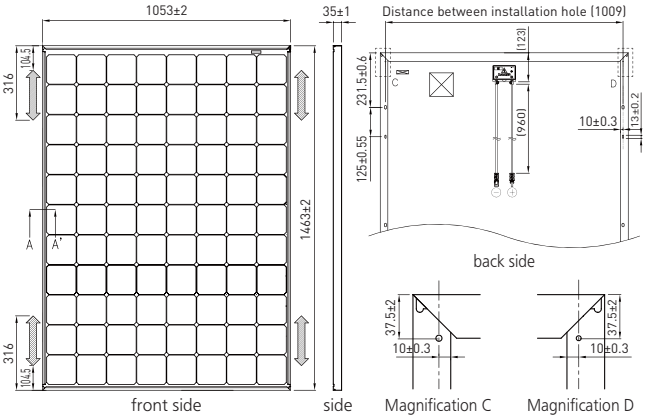
Note: Low irradiance: Air mass 1.5; Irradiance = 200W/m²; cell temp. = 25°C

Dependence on irradiance



Reference data for model VBHN294SJ45(Cell temperature 25°C)

Dimensions and weight



Note: A module is installed using 4 points, symmetrical mounting within setting range (shaded) .
Fixing span must be between 836-1200mm.

weight:	18 kg
weight/m²:	11,7 kg/m²
unit:	mm
Snow and Wind Load:	2400 Pa

Guarantee

Power output:	10 years (90% of Pmin) 25 years (80% of Pmin)
Product workmanship:	10 years (based on guarantee document)

Materials

Cell material:	5 inch photovoltaic cells
Glass material:	AR coated tempered glass
Frame materials:	Silver anodized aluminium
Connectors type:	SMK

Certificates

IEC61215
IEC61730-1
IEC61730-2

Electrical Protection Class II

manufactured by SANYO Electric Co., Ltd.

Please consult your local dealer for more information

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

Panasonic Corporation Eco Solutions Company
http://panasonic.net/ecosolutions/solar

08/2015