Panasonic®

N 285

HIT® Photovoltaic Module

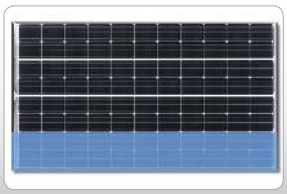
Photovoltaic module HIT®
VBHN285SJ40

Powerful
Industry top-level output for a PV module < 1.6 m²

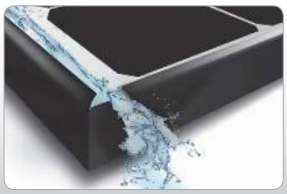
Compact size
Best fit in portrait due to shorter module length.
Less space needed between module rows on flat roofs

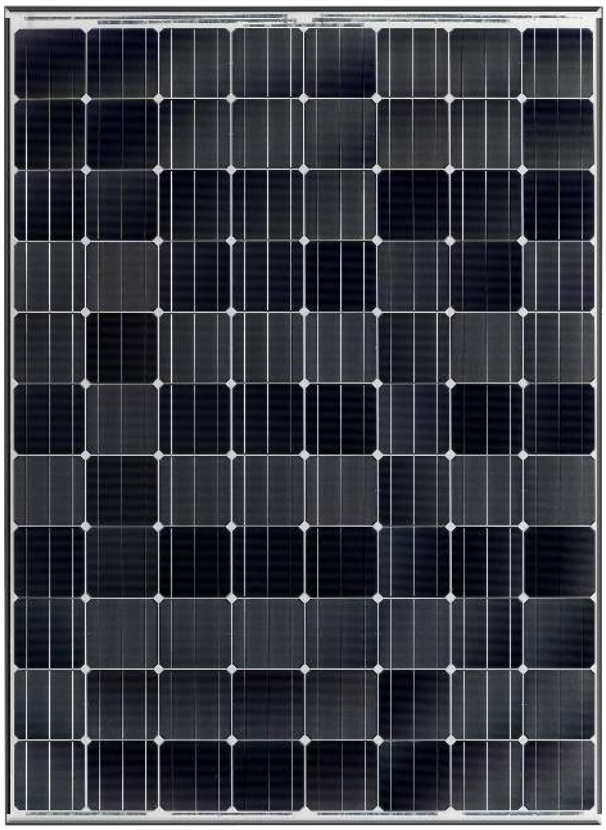


Improved shading performance
Featuring 4 shading zones instead of 3



Unique water drainage
on each corner for an improved self-cleaning





285 W

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

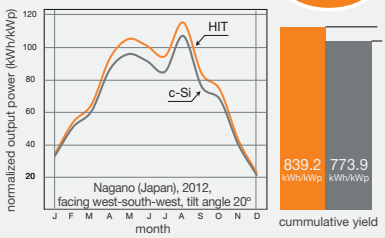
QUALITY PROVEN 4 WAYS

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)

Panasonic Eco Solutions Europe
Panasonic Electric Works Europe AG

www.eu-solar.panasonic.net

Photovoltaic module HIT®

Electrical data (at STC)

	VBHN285SJ40
Max. power (Pmax) [W]	285
Voltage at Max. Power (Vmp)(V)	52.0
Current at Max. Power (Imp)(A)	5.49
Open circuit voltage (Voc) [V]	63.5
Short circuit current (Isc) [A]	5.91
Max. over current rating [A]	15
Production tolerance power [%]	+10/-5 *
Max. system voltage [V]	1000
Max. amount of module in series.	13pcs

Note: Standard Test Conditions: Air mass 1.5; Irradiance = 1000W/m²; cell temp. 25°C
* All modules measured by Panasonic facilities have an output with positive tolerance.

Temperature characteristics

Temperature (NOCT) [°C]	44.0
Temp. coefficient of Pmax [%/°C]	-0.29
Temp. coefficient of Voc [V/°C]	-0.159
Temp. coefficient of Isc [mA/°C]	1.77

At NOCT (Normal Operating Conditions)

Max. power (Pmax) [W]	223
Max. power voltage (Vmp) [V]	48.5
Max. power current (Imp) [A]	4.65
Open circuit voltage (Voc) [V]	55.9
Short circuit current (Isc) [A]	4.75

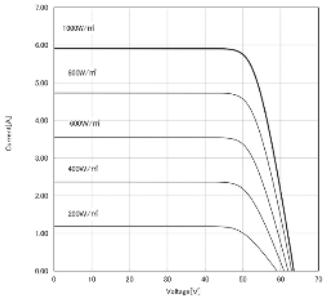
Note: Normal Operating Cell Temp.: Air mass 1.5; Irradiance = 800W/m²;
Air temperature 20°C; wind speed 1 m/s

At low irradiance (20%)

Max. power (Pmax) [W]	53.6
Max. power voltage (Vmp) [V]	47.1
Max. power current (Imp) [A]	1.14
Open circuit voltage (Voc) [V]	59.1
Short circuit current (Isc) [A]	1.18

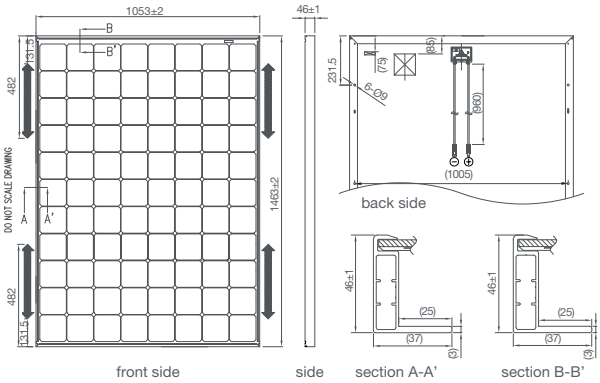
Note: Low irradiance: Air mass 1.5; Irradiance = 200W/m²; cell temp. = 25°C

Dependence on irradiance



Reference data for model
VBHN 285SJ40
(Cell temperature: 25°C)

Dimensions and weight



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

Fixing span must be between 600-1100mm.

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:	Black anodized aluminium
Connectors type:	SMK

Certificates

IEC61215
IEC61730-1
IEC61730-2

Electrical Protection Class II

Please consult your local dealer for more information.

⚠ 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 Electric Works Europe AG

Rudolf-Diesel-Ring 2
83607 Holzkirchen, Germany
Tel +49(0)8024648-0
Fax +49(0)8024648-111
info.solar@eu.panasonic.com

All Rights Reserved © 2015 COPYRIGHT Panasonic Electric Works Europe AG
Specifications are subject to change without notice.

01/2015