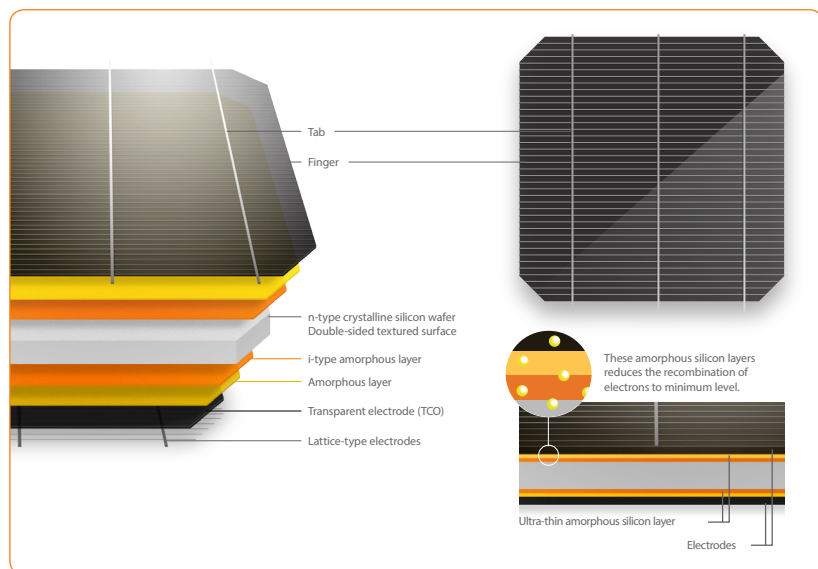


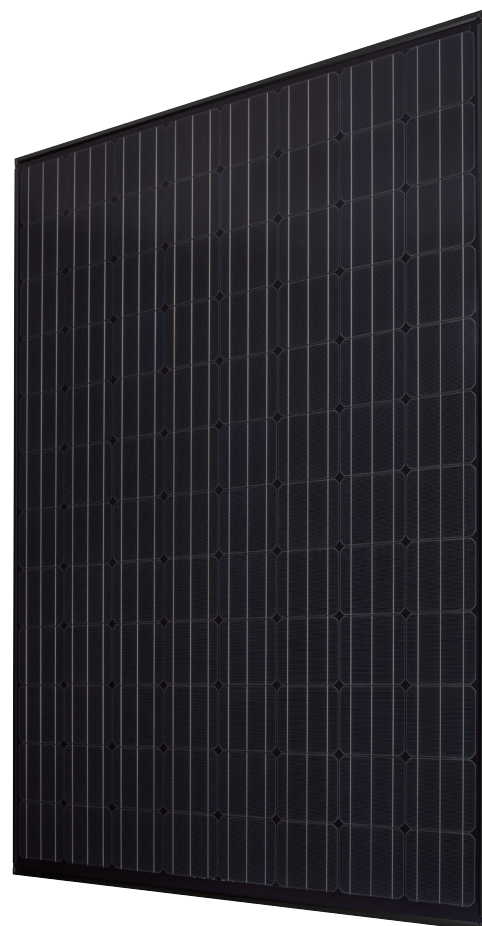
Photovoltaic module HIT® KURO (N330K/N325K/N320K)

Panasonic's unique heterojunction technology uses ultra-thin amorphous silicon layers. These thin dual layers reduce losses, resulting in higher energy output than conventional panels.



Panasonic HIT® KURO is the brand new all-black module which features a high module efficiency of 19.7%, an industry leading temperature coefficient of $-0.258\% / ^\circ\text{C}$ and a sleek design.

Powerful and aesthetic, designed to make your roof look great.



Our competitive advantages



High Performance at High Temperatures

As temperature increases, HIT® continues to perform at high levels due to the industry leading temperature coefficient of $-0.258\% / ^\circ\text{C}$. No other module even comes close to our temperature characteristics. That means more energy throughout the day and particularly in summer.



25 Year Product and Performance Guarantee**

Industry leading 25 year product workmanship and performance guarantee is backed by a century old company - Panasonic. Power output is guaranteed to 86.2% after 25 years.



Quality and Reliability

Panasonic's vertical integration, over 20 years of experience manufacturing HIT® and 20 internal tests 3-times beyond those mandated by current standards provide extreme quality assurance.



Higher Efficiency 19.7% and compact size

Enables higher power output and greater energy yields. HIT® provides maximum production for your limited roof space.



Low Degradation

HIT "N-type" cells result in extremely Low Light Induced Degradation (LID) and zero Potential Induced Degradation (PID) which supports reliability and longevity. This technology reduces annual degradation, guaranteeing more power for the long haul.



Unique water drainage

The water drainage system gives rain, water and snow melt a place to go, reducing water stains and soiling on the panel. Less dirt on the panel means more sunlight getting through to generate power.

Photovoltaic module HIT® KURO (N330K/N325K/N320K)

ELECTRICAL SPECIFICATIONS

Model	VBHN330KJ01	VBHN325KJ01	VBHN320KJ01
Maximum Power (P _{max}) ¹	330W	325W	320W
Maximum Power Voltage (V _{pm})	59.5V	59.2V	58.7V
Maximum Power Current (I _{pm})	5.55A	5.50A	5.46A
Open Circuit Voltage (V _{oc})	71.2V	70.9V	70.5V
Short Circuit Current (I _{sc})	5.99A	5.94A	5.89A
Temperature Coefficient (P _{max})	-0.258 %/°C	-0.258%/°C	-0.258%/°C
Temperature Coefficient (V _{oc})	-0.235 %/°C	-0.164V/°C	-0.164V/°C
Temperature Coefficient (I _{sc})	0.055 %/°C	3.34mA/°C	3.34mA/°C
NOCT	44.0°C	44.0°C	44.0°C
Module Efficiency	19.7%	19.4%	19.1%
Maximum System Voltage	1000V	1000V	1000V
Series Fuse Rating	15A	15A	15A
Power Tolerance [-/+]	+10%/ 0%*	+10%/ 0%*	+10%/ 0%*

MECHANICAL SPECIFICATIONS

Model	VBHN330KJ01, VBHN325KJ01, VBHN320KJ01
Internal Bypass Diodes	4 Bypass Diodes
Module Area	1.67m ²
Weight	19kg
Dimensions LxWxH	1590mm x1053mm x40 mm
Cable Length +Male/-Female	1020/1020 mm
Cable Size / Type	No. 12 AWG / PV Cable
Connector Type	SMK
Static Wind / Snow Load	5400 Pa
Pallet Dimensions LxWxH	1618mm x 1071mm x 2356mm (double stack)
Quantity per Pallet / Pallet Weight	48 pcs. (2x24 pcs.) (960 kg)
Quantity per 40' Container	672 pcs.

OPERATING CONDITIONS & SAFETY RATINGS

Model	VBHN330KJ01, VBHN325KJ01, VBHN320KJ01
Operating Temperature	-40°C to 85°C
Safety & Rating Certifications	IEC61215, IEC61730-1, IEC1730-2
Fire Classification	Class II (TÜV Rheinland)
Limited Guarantee	25** years workmanship and power output (linear)***

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.

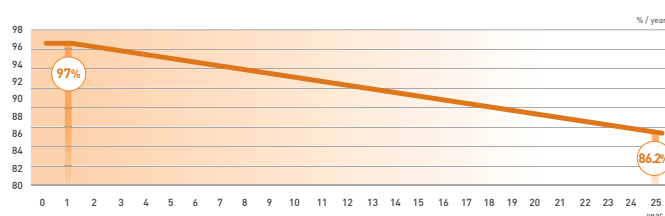
** Registration necessary on www.eu-solar.panasonic.net, otherwise 15 years apply based on guarantee document).

*** 1st year 97 %, from 2nd year -0.45 %/year, in 25th year 86.2%.

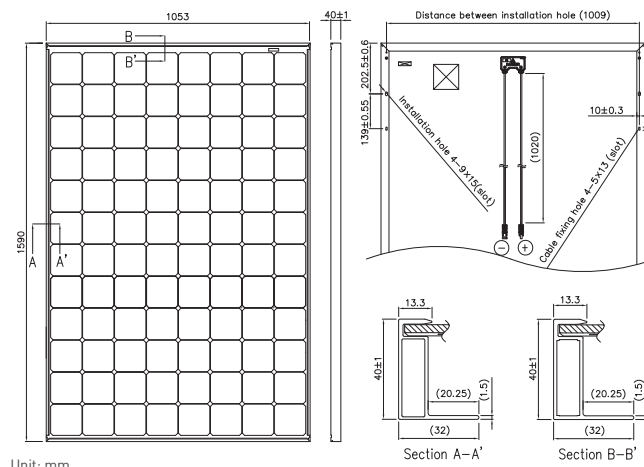
¹ STC: Cell temp. 25°C, AM1.5, 1000W/m²

NOTE: Specifications and information above may change without notice.

LINEAR PERFORMANCE GUARANTEE



DIMENSIONS

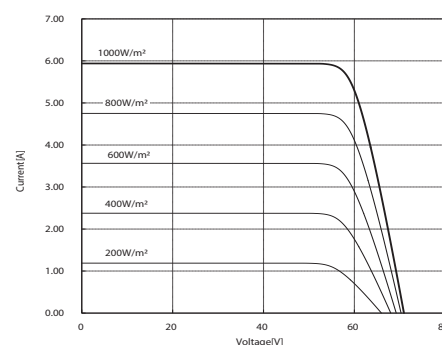


CERTIFICATES

CLASS II
By TÜV Rheinland
UNI 8457
UNI 9174
UNI 9177



DEPENDENCE ON IRRADIANCE



Reference data for model:
VBHN325KJ01
(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.

