

**N330E**

**HIT® AC Series Advantage**

**More power from every roof**

An Enphase IQ 7X microinverter with Individual MPPT (Module-level Power Point Tracker) is integrated with HIT® high efficiency solar technology to deliver maximum power production from every roof size and shape. The result is the HIT® AC Series, offering extreme efficiency and high power output for residential solar systems.

**Easy to Install**

No inverter installation and no DC wire management required. The built-in microinverter is factory mounted on the module, saving installation time, labor and money.

**Simple Logistics**

The Enphase IQ 7X recesses into the frame of the module, saving storage space, reducing trips up the ladder, and simplifying the purchasing process.

**Lower operations and maintenance (O&M) costs**

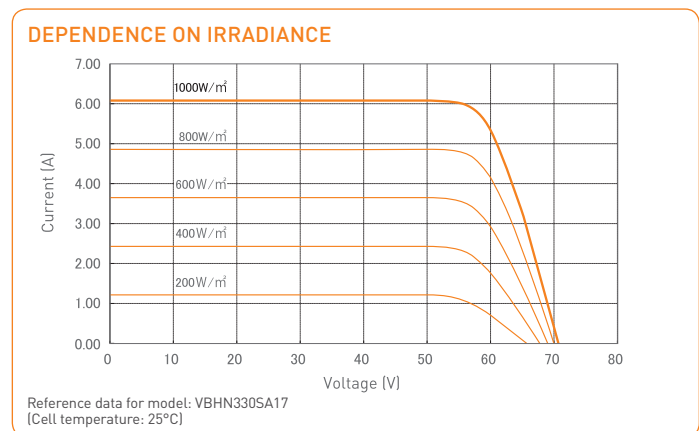
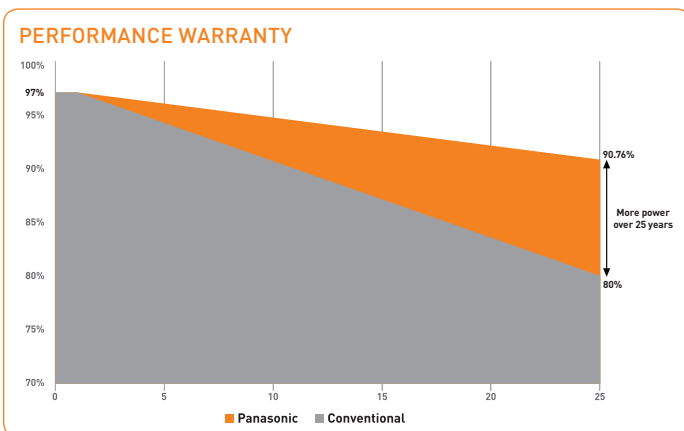
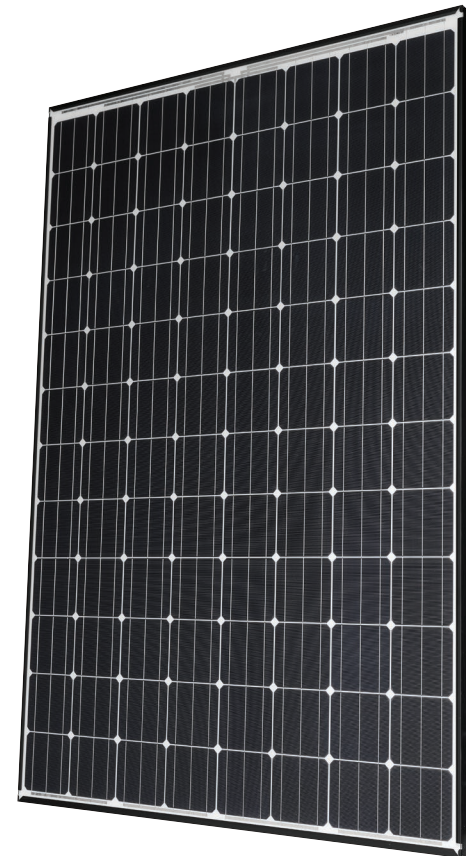
Each microinverter is field-replaceable without the need to replace the entire solar module. The operation and maintenance costs savings help maximize the ROI on your home solar system.

**High Efficiency at High Temperatures**

Where most modules weaken and underperform in hot summer temperatures, HIT® AC Series outperforms like no other module. Our industry-low temperature coefficient of  $-0.258\%/^{\circ}$  generates more solar power than competing models on the warmest days.

**25-year TripleGuard warranty provides complete system protection**

Backed by one of America's longest-standing brands, our comprehensive module warranty covers performance, workmanship and parts for 25 years. Our guaranteed minimum 90.76% rated power output after 25 years means you'll produce more electricity and save more money year after year.



**N330E**

**PRELIMINARY**

**DC ELECTRICAL SPECIFICATIONS**

Model	VBHN330SA17E
Rated Power (Pmax) <sup>1</sup>	330W
Maximum Power Voltage (Vpm)	58.0V
Maximum Power Current (Ipm)	5.70A
Open Circuit Voltage (Voc)	69.7V
Short Circuit Current (Isc)	6.07A
Temperature Coefficient (Pmax)	-0.258%/°C
Temperature Coefficient (Voc)	-0.16V/°C
Temperature Coefficient (Isc)	3.34mA/°C
NOCT	44.0°C
CEC PTC Rating (Tentative)	-
Cell Efficiency	22.09%
Module Efficiency	19.7%
Watts per Ft. <sup>2</sup>	18.3W
Maximum System Voltage	600V
Series Fuse Rating	15A
Warranted Tolerance (-/+)	+10%/-0%*

**MECHANICAL SPECIFICATIONS**

Model	VBHN330SA17E
Internal Bypass Diodes	4 Bypass Diodes
Module Area	18.02 Ft. <sup>2</sup> (1.67m <sup>2</sup> )
Weight	42.99 Lbs. (19.5kg)
Dimensions LxWxH	62.6x41.5x1.6 in. (1590x1053x40 mm)
Cable Length +Male/-Female	40.2/40.2 in. (1020/1020 mm)
Cable Size / Type	No. 12 AWG / PV Cable
Connector Type <sup>2</sup>	Multi-Contact® Type IV (MC4™)
Static Wind / Snow Load	112 PSF (5400Pa)****
Pallet Dimensions LxWxH	65.3 x 43.7 x 48.5 in.
Quantity per Pallet / Pallet Weight	24 pcs./1098 Lbs. (498 kg)
Quantity per 40' Container	672 pcs.
Quantity per 20' Container	288 pcs.

**OPERATING CONDITIONS & SAFETY RATINGS**

Model	VBHN330SA17E
Operating Temperature	TBD
Hail Safety Impact Velocity	1" hailstone (25mm) at 52 mph (23m/s)
Safety & Rating Certifications	UL 1703, cUL, CEC
UL 1703 Fire Classification	Type 2
Limited Warranty	Module: 25** Yrs Workmanship and Power Output (Linear)*** Microinverter: 25 Yrs Workmanship and Materials†
Manufacturing Locations	USA

**NOTE:** Standard Test Conditions: Air mass 1.5; irradiance = 1000W/m<sup>2</sup>; cell temp. 25°C

\* Maximum power at delivery. For guarantee conditions, please check our guarantee document.

\*\* Installation need to be registered through our website [www.panasonicusahitwarranty.com](http://www.panasonicusahitwarranty.com) within 60 days in order to receive twenty-five (25) year Product workmanship. Otherwise, Product Workmanship will be only fifteen (15) years.

\*\*\* 1st year 97%, after 2nd year 0.26% annual degradation to year 25.

† Nominal voltage range can be extended beyond nominal if required by the utility.

\*\* Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

‡ Microinverter warranty provided by Enphase. Please refer to Panasonic's HIT AC Module Limited Warranty Document for further information.

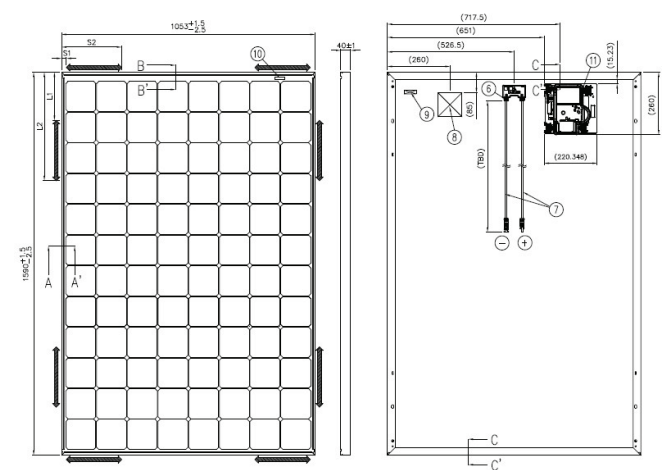
**AC ELECTRICAL SPECIFICATIONS**

Model	VBHN330SA17E
Peak Power Output	320VA
Maximum Continuous Output Power	315VA
Nominal (L-L) voltage/range <sup>†</sup>	240V / 211 – 264V
Maximum Continuous Output Current	1.31A @ 240VAC / 1.51A @ 208VAC
Nominal Frequency	60Hz
Extended Frequency Range	47 – 68Hz
AC Short Circuit Fault Current Over 3 Cycles	5.8Arms
Maximum Units per 20 A (L-L) Branch Circuit <sup>††</sup>	12 @ 240VAC / 10 @ 208VAC
Overvoltage Class AC Port	III
AC Port Backfeed Current	0A
Power Factor Setting	1.0
Power Factor (adjustable)	0.7 leading / 0.7 lagging
CEC Weighted Efficiency	97.5% @ 240V / 96.5% @ 208V

**FEATURES**

Model	VBHN330SA17E
Communication	Power Line Communication (PLC)
Communication	Enlighten Manager and MyEnlighten monitoring options. Compatible with Enphase IQ Envoy
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect required by NEC 690.
Compliance	CA Rule 21 UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC-2014 and NEC-2017 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions

**DIMENSIONS**



<sup>1</sup> STC: Cell temp. 25°C, AM1.5, 1000W/m<sup>2</sup>

<sup>2</sup> Safety locking clip (PV-SSH4) is not supplied with the module.

**NOTE:** Specifications and information above may change without notice.