Panasonic

### Limited Warranty for Panasonic's Photovoltaic Modules HIT®

**1. Scope of Limited Warranty Coverage:** This warranty applies to all solar photovoltaic models with model numbers VBHNxxxSA17 and VBHNxxxKA03 series (xxx = rated power) (hereinafter, "Product") and sold by PANASONIC LIFE SOLUTIONS COMPANY OF AMERICA, Division of Panasonic Corporation of North America, a Delaware Corporation, or any of its affiliated companies, divisions or units (hereinafter, "PANASONIC") and is extended to the original end-user purchaser, and when the Product remains at its original installed location, is transferable to any subsequent owner of the location, or subsequent title holder of the Product upon satisfactory proof of succession or assignment (all such persons hereinafter referred to as, "Customer").

2. Limited Product Workmanship Warranty. PANASONIC warrants the Product to be free from defects in materials and product workmanship under normal application, installation, use, and service conditions for a period ending fifteen (15) years from date of Product purchase by the Customer or twenty-five (25) years if installation has been registered within 60 days of purchase through our web portal: https://na.panasonic.com/us/home-living-solutions/solar/. If the Product fails to conform to this warranty, as determined by PANASONIC in its sole and absolute discretion, PANASONIC will employ one of the following Limited Warranty Remedies as set forth under Section 4 below. This fifteen (15) years or enhanced twenty-five (25) years Limited Product Workmanship Warranty does not warrant a specific power output, which shall be exclusively covered under Section 3 below.

**3.** Limited Power Output Warranty. PANASONIC warrants the power output will be no less than 97% of the designated Maximum Power (Pmax) stated in the product data sheet for the first year from date of purchase of the Product by the Customer and the power output degradation will be no more than 0.26% per year for the following 24 years, so that, at the end of 25<sup>th</sup> year, the power output will be at least 90.76% of Pmax. The power output values under this Limited Power Output Warranty shall be those measured under PANASONIC'S Standard Test Conditions (STC) as follows: (a) Irradiance 1000 W/m2, (b) Cell Temperature of 25°C, and (c) Air Mass of 1.5g.

Upon receipt of a Power Output warranty claim, PANASONIC or its designated representative may conduct measurements, including under STC to determine the actual power output of the Product. Should PANASONIC decide to conduct measurements PANASONIC's measurement shall be the sole determination for purposes of warranty settlement. If PANASONIC measures power output levels under the warranted output levels set out above, taking into account a ±3% measurement tolerance range, and such power loss is the result of a product defect, as determined by PANASONIC in its sole and absolute discretion, PANASONIC will supplement the power output deficiency using one of the following Limited Warranty Remedies as set forth under Section 4 below.

#### 4. Limited Warranty Remedies. Panasonic, at is sole discretion, will take one of following remedies

- a. PANASONIC will repair or replace the Product with new or refurbished product
- b. PANASONIC will provide additional new or refurbished product to restore deficient output;
- c. PANASONIC will refund the Customer the original Product purchase price. Any refund may be pro-rated by the number of months from the date of original purchase by the Customer and/or may be calculated based on the difference between actual power output (Product measured under STC) and minimal guaranteed output;
- 5. Limited Remedy Conditions. When one of the Limited Warranty Remedies is employed, the following conditions will apply:
  - a. The warranty remedy will extend only to claims received before the end of the warranty period.
  - b. The original warranty period remains in effect and will not be extended, nor will a new warranty period begin, upon repair, replacement, addition, or prorated refund of the defective Product.
  - c. The purchase date of original Product shall determine the start of the warranty period in the event PANASONIC repairs, replaces, adds to, or prorates a refund for the defective Product.
  - d. Remedy options may not be combined. Only one remedy option will be employed at PANASONIC's sole discretion.
  - e. The warranty remedy is applicable to the Product only and does not apply to any other system components or parts.
  - f. When Product is the subject of third party financing, any applicable refund will be paid to the title-holder of the Product.
  - g. Product removal, packaging, transportation, reinstallation, and related costs and fees are excluded from these limited warranties.
  - h. Product that is replaced by PANASONIC shall become the property of PANASONIC. PANASONIC reserves the right, at its sole option, to deliver another type of new or refurbished product that may differ in size, color, shape, model number, and/or power level.

#### 6. Limited Warranty Exclusions. The warranties above in Sections 2 and 3 are void and do not apply under the following:

- a. Products sold and/or installed outside the United States; provided, however, that any Products sold and/or installed in any of the American territories located in the Pacific Ocean (including American Samoa, Saipan, Guam), or in any island nation and territory located in the Caribbean Sea, except Cuba, are covered by the warranties in Sections 2 and 3 above.
- b. Expiration of warranty, no registration, no evidence of purchase, or no proof of installation by a qualified licensed solar or electrical contractor.
- c. Altered, removed, or illegible Product serial number(s).
- d. Any Product repaired by anyone other than PANASONIC.
- e. Cosmetic variations, stains or scratches that do not affect power output.
- f. Marine (e.g. boats), recreation vehicle, or mobile installations of any kind. Multi-axis tracking systems are not considered mobile installations.
- g. Improper applications, such as, but not limited to, use with mirrors, concentrated sunlight, and contact with solar thermal systems.
- h. Damage due to lack of compliance with the General Installation Manual, national or local codes, such as the National Electric Code, or any Authority Having Jurisdiction.
- i. Damage or corrosion resulting from environmental pollution such as soot, chemical vapors, acid rain, direct contact with salt water such as ocean spray, immersion in water, whether caused by flooding or otherwise, and any type of mold.



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- j. Damage from sound, vibration, rust, scratches, or discoloration that is the result of normal wear and tear, aging or continuous use.
- k. Damage caused by inadequate or improper usage, alteration, installation, wiring, handling, removal, maintenance, storage, packaging, transportation.
- I. Claims made more than one year from the date the alleged power output degradation, or product workmanship defect, reasonably should have been discovered.
- m. Damage caused by abuse, neglect, vandalism, accident, animals or insects, or external stress, such as, but not limited to, stepping on Product, impacts from falling objects such as tools, golf balls, rocks, hailstones, or other debris.
- n. Damage from non-compatibility with, or defects in, system-related parts and components.
- o. Damage from extreme natural conditions such as earthquakes, typhoons, tornados, volcanic activity, tsunami, lightning, heavy snow or ice, fire, or other unforeseen circumstances.
- p. Damage to the backsheet such as, but not limited to, cuts, scrapes, scratches, punctures, penetrations, or wear and tear, from objects such as, screws, bolts, nails, tools, system or structural components, sharp edges, constant rubbing, tree branches, etc.
- q. Damage from terrorist acts, riots, war, power surges, power failures, or other man-made disasters.

7. Limitation of Warranty. THE EXPRESS WARRANTIES SET FORTH HEREIN SHALL CONSTITUTE THE ONLY WARRANTIES APPLICABLE TO THE PRODUCT. PANASONIC HEREBY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON PANASONIC'S PART, UNLESS SUCH OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ARE EXPRESSLY AGREED TO IN WRITING BY PANASONIC. PANASONIC SHALL NOT BE RESPONSIBLE OR LIABLE IN ANY WAY FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY, OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOVER ARISING OUT OF OR RELATED TO THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE PRODUCT, OR FROM USE OR INSTALLATION. IN NO EVENT SHALL PANASONIC BE LIABLE FOR INCIDENTAL, CONSQUENTIAL OR SPECIAL DAMAGES, LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, OR LOSS OF REVENUES FOR ANY REASON WHATSOEVER. PANASONIC'S TOTAL LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE INVOICE VALUE PAID BY THE CUSTOMER FOR THE PRODUCT OR SERVICE(S) FURNISHED, WHICH IS THE SUBJECT OF CLAIM OR DISPUTE. THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY IN SOME STATES THAT DO NOT ALLOW THE EXCLUSION OF CERTAIN TYPES OF DAMAGES. THE LIMITATIONS ON IMPLIED WARRANTIES DO NOT APPLY TO ANY PURCHASE OF PRODUCTS MADE FOR PERSONAL, FAMILY OR HOUSEHOLD PURPOSES.

8. Obtaining Warranty Performance. Customers who believe they have a justified claim covered by this Limited Warranty must immediately notify the installer who sold the Product, or an authorized PANASONIC representative, or contact PANASONIC directly by writing to:

PANASONIC LIFE SOLTIONS COMPANY OF AMERICA Division of Panasonic Corporation of North America

Two Riverfront Plaza, 5<sup>th</sup> Floor Newark, NJ 07102 panasonichit@us.panasonic.com

Customers may also contact Panasonic via its website as follows,

#### https://na.panasonic.com/us/home-living-solutions/solar/

Claims must accompany evidence of the Product purchase date by the Customer. The return of any Product will not be accepted by PANASONIC unless accompanied by a valid return material authorization and prior written authorization issued by PANASONIC.

9. Severability. If a part, provision or clause of this Limited Warranty, or its application to any person or circumstance is held invalid, void or unenforceable, such holding shall not affect this Limited Warranty and all other parts, provisions, clauses or applications shall remain, and, to this end, such other parts, provisions, clauses or applications of this Limited Warranty shall be treated as severable.

**10. Disputes.** The Customer may bring no action, regardless of form, arising out of or in any way connected with this Limited Warranty, more than one (1) year after the earlier of (a) date the Customer is aware, or, with reasonable diligence, should have been aware, of a defect of power loss in excess of the warranty minimum output or (b) the date of the first claim by the Customer under this warranty.

**11.** Force Majeure. PANASONIC shall not be held responsible or liable to the Customer or any third-party arising out of any non-performance or delay in performance of any terms and conditions of sale, including this Limited Warranty, due to acts of God, war, riots, strikes, unavailability of suitable and sufficient labor, material, die, or capacity or technical or yield failures and any unforeseen event beyond its control, including, without limitations, any technological or physical event or conditions which is not reasonably known or understood at the time of the sale of the Product or the claim.

**12. Dispute Resolution by Binding Arbitration.** All disputes, claims, or controversies arising under or relating to this Limited Warranty will be resolved by binding arbitration before a sole arbitrator. The arbitration will be administered by JAMS pursuant to its Comprehensive Arbitration Rules and Procedures. Any arbitration under this Limited Warranty will take place on an individual basis; class arbitrations under this Limited Warranty are prohibited. Questions as to arbitrability will be decided by the sole arbitrator.

# Panasonic

## Warranty claim process



Contact: PanasonicHIT@us.panasonic.com

Instructions for submitting a warranty claim:

- 1) Customer must send the <u>warranty claim form</u> with high resolution photos to show module defect(s) (see pages 3 and 4).
  - a) It is recommended that the photos be placed in a .zip file to decrease the file size. If the total file size exceeds 20MB, then please note this in your email and Panasonic will provide further instructions for uploading.
- 2) Panasonic will review the claim, the photos that show defect(s) and any other submitted information.
- 3) A replacement module will be issued if it meets all necessary criteria.
- If a module needs further review, customer must return the module to Panasonic for further investigation (please do not dispose of the module until given notice <u>from Panasonic</u>).

### Warranty claim form (editable PDF link below)

### ftp://ftp.panasonic.com/solar/warranty/claim\_form\_warranty.pdf

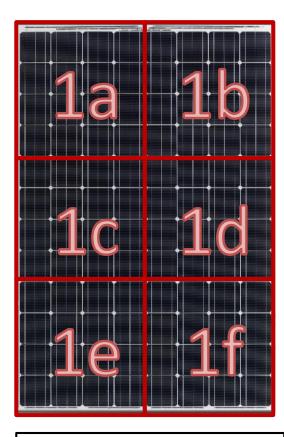
Panasonio		arranty claim fo Panasonic Mod		Photovoltais Module	Page 1 of 2	Panasonic		ty claim for HIT® sonic Modules		Page 2 of 2
Claim Information	(INTERNAL USE ONLY	)				HIT® Information:				
	- ``	, 1				Describe the failure in the modul	e:			
Customer:		-	Sales representative:							
Date received:		_	QA Manager:			Briefly describe how the issue w	as discovered? Was it v	isual low voltage, poor	system performance.	around fault_etc?
Failure in the Module:			Sales Manager:							,
Customer Contact	t Information:									
Name:			Phone #:			Was any test conducted to diagn	ose the problem?			
Address:			Fax:							
Email:			Other:			What is the status of the faulty n	nodule(s)? Is It installed	l, in customer's warehou	use, already shipped, et	:c?
The customer is: (Circle One)	End user		Contractor							
Where and When_was th	Distributor		Other:			Divide the module in three imagin				
Who was the authorized						Module (s) ID:				
Who installed the solar s	ystem?						Module A	Module B	Module C	Module D
						Model Number				
Solar system infor	mation:					Serial Number				
Full job name and addres	ss of the installation:					Position from neg. end of string.				
Is it off-grid or grid-tied?			Number of modules of	connected in series:		Date of manufacture Measured Voc				
ls it a commercial or resi	dential system?		Number of modules	or strings connected i	in parallel:	Measured Isc				
						Irradiation or light condition				
What is the system size i	n DC Watts?		What is the array's o	rientation and tilt ang	jle?	PLEA SE ENSURE PHOTOS ARE ACHIEVED WITH A CAMERA CA	PABLE OF 5 MEGAPIXE	LS OR HIGHER. PLEAS		
RACKING INFORMATION	I					PROCESS FOR PHOTO REQUIRE	EMENTS AND FURTHE	R INFORMATION:		
Type of Mounting (Circle Roof Mount (flush) Single-Axis Trac One):		Single-Axis Tracker	Racking Manufacture	er:		Link to warrany claim process				
,	Roof Mount (tilted)	2-Axis Tracker	Racking Model (inclu	de model of rail if app	plicable):	Photo of serial number (Y/N)				
Pole Mount	Ground Mount	Other:	-			Photos of module front (Y/N)				
INVERTER INFORMATION What is the inverter size,			Make and model of N	PE (if applicable)?		Photos of back of the module (Y/N)				
matis the inverter size,	make and moder:		make and model of W			Photos of visual defects (Y/N)				
						Photos of installation (Y/N)				

2/4

QF-297 Rev. 1

### Required high resolution<sup>1</sup> photos for warranty claim:





Close up photos (1a – 1f) of the front side of the module 20

Close up photos (2a – 2f) of the back side of the module



1. Minimum of 5 megapixel image required (easily achieved with most smart phone cameras). Do not crop image; ensure photo is taken up close as shown above.



Panasonic	Model No.	ISA17	COLOUS LISTED
MAXIMUM POWER (Pmax) SHORT CIRCUIT CURRENT (Is OPEN CIRCUIT VOLTAGE (Voc MAXIMUM POWER CURRENT MAXIMUM POWER VOLTAGE / MAX. SYSTEM VOLTAGE AT 1000 TO TO THE STATE AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND AND	c) ) (Ipmax) Vpmax) S'C CELL SULATED FOR PROPERT EXPROSED TO SHE EXPROSED TO SHE LLATIO ADDI CARDING AND CARDING AND CARDIN CA	GHT. COVER N W ALL SAFET REMOVAL OF TH	SERIES FUSE: 15 A LOAD RATING: 2 33 ~ 75 lb/M IN ACCORDANCE TO THE FIGURES SHOWN IN THE INSELATION MANUAL SOLAR MODULES CAN IODULES WHEN PRECAUTIONS ERMINAL BLOCK VOIDS
CLASS C FIRE RESISTANCE RATING DATE OF MANUFACTURE 180625 Manufactured by Panasonic Corporation		NUMBER	J6PE38136

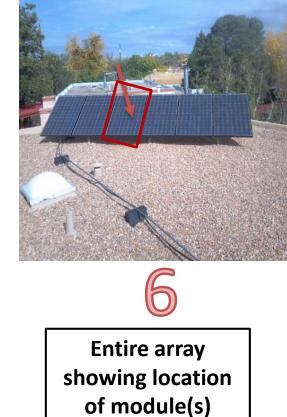
### Required high resolution<sup>1</sup> photos for warranty claim (cont'd):

# Panasonic









1. Minimum of 5 megapixel image required (easily achieved with most smart phone cameras). Do not crop image; ensure photo is taken up close as shown above.

module



### Warranty claim for HIT® Panasonic Modules



Claim Information		()					
		7					
Customer:			Sales representative:				
Date received:			QA Manager:				
Failure in the Module:			Sales Manager:				
Customer Contac	t Information:						
			I				
Name:			Phone #:				
Address:			Fax:				
Email:			Other:				
The customer is:	End user		Contractor				
	Distributor		Other:				
<u>Where and When</u> was th	e module purchased?						
Who was the authorized	Panasonic distributor?						
Who installed the solar s	ystem?						
Solar system info	rmation:						
Solar system info	rmation:						
Solar system info							
	ss of the installation:		Number of modules connection	ected in series:			
Full job name and addres	ss of the installation:		Number of modules conne	ected in series:			
Full job name and addres	ss of the installation:						
Full job name and addres	ss of the installation:			ected in series: ings connected in parallel:			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi	ss of the installation:		Number of modules or str	ings connected in parallel:			
Full job name and addres	ss of the installation:			ings connected in parallel:			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi	ss of the installation:		Number of modules or str	ings connected in parallel:			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi	dential system?		Number of modules or str What is the array's orienta	ings connected in parallel:			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi What is the system size i	dential system?	Single-Axis Tracker	Number of modules or str	ings connected in parallel:			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi What is the system size i	dential system?	Single-Axis Tracker 2-Axis Tracker	Number of modules or str What is the array's orienta Racking Manufacturer:	ings connected in parallel: ation and tilt angle?			
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Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi What is the system size i RACKING INFORMATION	ss of the installation: dential system? n DC Watts? N Roof Mount (flush) Roof Mount (tilted) Ground Mount	2-Axis Tracker	Number of modules or str What is the array's orienta Racking Manufacturer:	ings connected in parallel: ation and tilt angle?			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi What is the system size i RACKING INFORMATION Type of Mounting: Pole Mount INVERTER INFORMATIO	ss of the installation: dential system? n DC Watts? N Roof Mount (flush) Roof Mount (tilted) Ground Mount	2-Axis Tracker	Number of modules or str What is the array's orienta Racking Manufacturer: Racking Model (include m	ings connected in parallel: ation and tilt angle?			
Full job name and addres Is it off-grid or grid-tied? Is it a commercial or resi What is the system size i RACKING INFORMATION Type of Mounting: Pole Mount INVERTER INFORMATIO	ss of the installation: dential system? n DC Watts? N Roof Mount (flush) Roof Mount (tilted) Ground Mount	2-Axis Tracker	Number of modules or str What is the array's orienta Racking Manufacturer: Racking Model (include m	ings connected in parallel: ation and tilt angle?			





HIT® Information:

Describe the failure in the module:

Briefly describe how the issue was discovered? Was it visual, low voltage, poor system performance, ground fault, etc?

Was any test conducted to diagnose the problem?

What is the status of the faulty module(s)? Is It installed, in customer's warehouse, already shipped, etc?

Divide the module in three imaginary sections and describe if the defect was found in the bottom, middle or upper section.

Module (s) ID:

Link to warrany alaim process

	Module A	Module B	Module C	Module D
Model Number				
Serial Number				
Position from neg. end of string.				
Date of manufacture				
Measured Voc				
Measured lsc				
Irradiation or light condition				

PLEASE ENSURE PHOTOS ARE OF SUFFICIENT QUALITY FOR VISUAL INSPECTION PURPOSES. TYPICALLY THIS IS ACHIEVED WITH A CAMERA CAPABLE OF 5 MEGAPIXELS OR HIGHER. PLEASE REFER TO THE WARRANTY CLAIM PROCESS FOR PHOTO REQUIREMENTS AND FURTHER INFORMATION:

Photo of serial number (Y/N)						
Photos of module front (Y/N)						
Photos of back of the module (Y/N)						
Photos of visual defects (Y/N)						
Photos of installation (Y/N)						