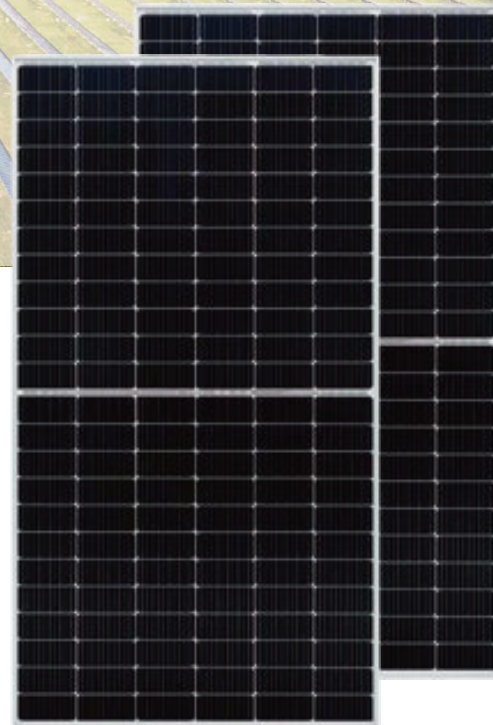




# HEX<sub>5</sub>

## BSM550M10-72HBD



182

Bifacial Dual Glass 530W-550W  
Leading 5%-25% more yield  
Efficiency up to 21.2%

## Made In Thailand

Long Beach, CA Stock

Best Solar Plant Selling (2.16GW Shipped)

Same Day Shipping

- Dimensions: 2285\*1134\*35mm
- Weight: 32.2kg
- Max. System Voltage: 1500 V/DC(IEC)

### PERFORMANCE WARRANTY

12  
Years

Enhanced Product Warranty on Materials  
and Workmanship

30  
Years

Linear Power Performance Warranty  
According to the applicable Bluesun  
Solar Limited Warranty Statement.

### GREAT PERFORMANCE AND RELIABILITY

- ★ Bi-facial Perc Half Cut Technology
- ★ Better Energy Yield
- ★ Power Degradation -0.45%/30 Years Linear Warranty
- ★ TUV SUD Anti PID Certificated
- ★ IP68 Junction Box/High Water Proof Level
- ★ Reduced Hot Spot Risk

### MANAGEMENT SYSTEM CERTIFICATES

- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems

### PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / IEC 61701 / IEC TS 62804
- UL 1703 / UL61730



### BLUESUN SOLAR CO.,LTD

Add: 1499 Zhenxing Road, Shushan District, 230031 Hefei, China

Tel: +86 (158) 5821 3997  
E-mail: info@bluesunpv.com

Fax: +86 (551) 6565 2651  
Http: www.bluesunpv.com

US Warehouse Location: Long Beach, CA

\*Release BSM550M10-72HBD(530-550W)\_V\_22\_07

# BLUESUN

## LIMITED WARRANTY FOR PV MODULES

Effective May, 2022

You have made the right choice by purchasing BLUESUN products with a long life time.

Bluesun standard photovoltaic modules are covered by our 12 years workmanship and 25 years performance warranty as described in detail below.

**Bluesun double glass photovoltaic modules are covered by our 12 years workmanship and 30 years performance warranty as described in detail below.**

Bluesun Singled photovoltaic modules are covered by our 15 years workmanship and 30 years performance warranty as described in detail below.

Bluesun Standard PV Module Products covered under this warranty include:

Standard Modules:

BSMxxxP-60[XXX=270-300]; BSMxxxP-72[XXX=330-350]  
BSMxxxM-60HPH[XXX=345-380]; BSMxxxM-72HPH[XXX=425-460]  
BSMxxxG12-54HPH[XXX=405-425]; BSMxxxM10-72HPH[XXX=530-560]  
BSMxxxG12-72HPH[XXX=650-670];

Bifacial Modules:

BSMxxxM-72HBD[XXX=435-460]; BSMxxxM10-72HBD[XXX=530-560];

Shingled Modules:

BSMxxxPM5-60SB[XXX=395-415]; BSMxxxPM5-78SA[XXX=470-490]  
BSMxxxPM5-72SB[XXX=480-500]; BSMxxxPM5-78SA[XXX=470-490]  
BSMxxxPMB6-69SDC[XXX=650-670]; BSMxxxPMB6-70SDC[XXX=675-700]

xxx is a module power ratings listed on IEC certificate.

For the standard solar module types listed above, Bluesun Solar Co., Ltd. (hereinafter referred to as "BLUESUN") warrants its Photovoltaic Solar Modules (MODULES) starting from the date of sale with an Original Copy of Bluesun certifiable invoice (SALES DATE) to the first customer installing (for their own use) the MODULES (CUSTOMER), or starting at the latest 12 months after MODULES dispatch from BLUESUN factory, whichever occurs earlier ("WARRANTY START DATE").

### **1. Limited Product Warranty – Twelve/Fifteen Years Repair, Replacement or Refund Remedy**

BLUESUN warrants its MODULES, including factory-assembled DC connectors and cables, if any, to be free from defect in materials and workmanship, as per the mechanical and electrical characteristics of the product's datasheet, under normal application, proper installation as per Bluesun installation guide, use and service conditions. If MODULES fail to conform to this warranty, during the period of One Hundred Forty Four (144)/One Hundred Eighty (180) months from the WARRANTY START DATE, BLUESUN will, at its option, either repair or replace the product, or refund the current list price at the time of warranty claim resolution of comparable BLUESUN MODULES. The repair or replacement or refund remedy shall be the sole and exclusive remedy provided under the "Limited Product Warranty" and shall not be extended beyond the period set forth herein. The replacement will be Grade A and above modules. This "Limited Product Warranty" does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter ("Limited Peak Power Warranty").

### **2. Limited Peak Power Warranty - Limited Remedy**

Bluesun warrants that for a period of twenty-five years the module will maintain a level of performance as set forth below:

• For Mono PERC Module, the actual average power output of the modules will be no less than 98% of the labelled power output in the first year; thereafter, 0.55% maximum decrease per ending with 84.8% in the 25th year after the WARRANTY START DATE.

• For Mono PERC bifacial double-glass module, Mono PERC Shingled module the actual average power output of the modules will be no less than 98% of the labelled power output in the first year; thereafter, 0.45% maximum decrease per year, ending with 84.95% in the 30th year after the WARRANTY START DATE.

BLUESUN warrants each module against defects in materials and workmanship that result in the failure of the MODULES to produce the warranted percentage specified above of the nominal power output for the module set forth in BLUESUN product datasheet. If BLUESUN determines in its discretion that any module is not providing the warranted percentage of the nominal power output because of defects in materials and workmanship, BLUESUN will at its option either (1) replace such loss in power by either, (a) providing additional MODULES to the CUSTOMER to make up for such loss in power, or (b) replacing the defective module(s) or part by a functional equivalent; or (2) refund the percentage of the module(s) price, representing the percentage of the power that is less than the warranted percentage of the nominal power according to the current list price, at the time of warranty claim resolution, of comparable BLUESUN MODULES.

The remedies set forth in this clause 2 shall be the sole and exclusive remedies provided under the "Limited Peak Power Warranty". Nominal Power Output in product datasheet is the power in Watt peak that a Photovoltaic Solar Modules generates in its Maximum Power Point under Standard Testing Conditions (STC). STC are as follows: (a) light spectrum of AM 1.5, (b) an irradiation of 1000 W per m<sup>2</sup> and (c) a cell temperature of 25 degrees centigrade at right angle irradiation. The measurements are carried out in accordance with IEC 61215 as tested at the connectors or junction box terminals – as applicable – per calibration and testing standards of BLUESUN valid at the date of manufacture of the PV Modules.

### **3. Exclusions and Limitations**

(1) In any event, all warranty claims must be received within the applicable warranty period for this warranty to be effective.

(2) The "Limited Product Warranty" and the "Limited Peak Power Warranty" do not apply to any MODULES which have been subjected to:

- Misuse, abuse, vandalism, neglect or accident;
- Alteration, improper installation or application;
- Extreme thermal or environmental conditions, high density dust environment, or rapid changes in such conditions, not authorized by Bluesun
- Contamination by chemical products in the environment
- Non-observance of BLUESUN installation manual or maintenance instructions detailed within the document named <Installation Guide for Bluesun Solar Shingled Double-Glass PV Module>, <Installation Guide for Bluesun Solar Shingled Single-Glass PV Module>, & <Installation Guide for Bluesun Solar Standard PV Module> download address: [www.powerbluesun.com](http://www.powerbluesun.com);
- Repair or modifications by someone other than an approved service technician of BLUESUN;
- Power failure surges, lightning, flood, fire, accidental breakage, improper connections resulting in hazardous reverse current or other events outside BLUESUN control.
- Modules which have been installed and energized on a permanent structure and later removed and re-installed on a different structure for energy harvest.

(3) Both "Limited Product Warranty" and "Limited Peak Power Warranty" do not cover any costs associated with installation, removal or re-installation of the MODULES and customs clearance or any other costs for return of the MODULES, except as explicitly set forth in the final paragraph of Section 5.

(4) Warranty claims will not be honored if the type or serial number of the MODULES have been altered, removed or made illegible.

(5) Both "Limited Product Warranty" and "Limited Peak Power Warranty" do not apply to MODULES marked as "Grade A" or substandard modules. BLUESUN explicitly refers to its "Limited Warranty for PV Modules marked Grade A".

#### 4. Limitation of Warranty Scope

This "limited warranty for PV Modules" As set forth herein is expressly in lieu of and excludes all other express or implied warranties, including but not limited to warranties of merchantability and of fitness for particular purpose, use, or Application, and all other obligations or liabilities on the part of Bluesun, unless such other obligations or liabilities are expressly agreed to in writing signed and approved by Bluesun. Bluesun shall have no responsibility or liability whatsoever for damage or injury to persons or property, or for other loss or injury resulting from any cause whatsoever arising out of or related to the modules, including, without limitation, any defects in the modules, or from use or installation. Under no circumstances shall Bluesun be liable for incidental, consequential or special damages, howsoever caused. Loss of use, loss of profits, loss of production, and loss of revenues are specifically and without limitation excluded. Bluesun aggregate liability, if any, in damages or otherwise, shall not exceed the invoice value as paid by the customer, for the single unit of module.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This limited warranty does not affect any additional rights you have under laws in your jurisdiction governing the sale of consumer goods, including, without limitation, national laws implementing ec directive 99/44. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the limitations or exclusions in this limited warranty statement may not apply to you.

The following statement applies to customers that are 'consumers' within the meaning of the Australian consumer LAW: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure."

#### 5. Obtaining Warranty Performance

If the CUSTOMER has a justified claim covered by this "Limited Warranty for PV Modules", an immediate notification shall be filed directly to (a) the installer company, or (b) BLUESUN authorized distribution partner, who supplied affected modules, or (c) BLUESUN directly by mailing a registered letter in writing, or sending an email letter to the email account of BLUESUN listed hereunder. Together with the notification, should enclose (a) party making claim; (b) detailed description; (c) evidence, including photographs and data; (d) relevant serial numbers; (e) Warranty Start Date; (f) Module type; (g) physical address; (h) any additional evidence reasonably requested by Bluesun. A related invoice document with stamp or signature of BLUESUN or its authorized distributor should cover those requirements and should be part of the evidence. Regional addresses of BLUESUN offices are listed in the end of this document.

The return of any MODULES will not be accepted unless prior written authorization has been given by BLUESUN. In connection with both the "Limited Product Warranty" and "Limited Peak Power Warranty", BLUESUN shall reimburse CUSTOMER for reasonable, customary and documented transportation charges by sea freight for both the return of the MODULES and reshipment of any repaired or replaced MODULES, only if this cost is authorized by BLUESUN customer service department.

#### 6. Severability

If a part, provision or clause of this "Limited Warranty for PV Modules", or the application thereof to any person or circumstance, is held invalid, void or unenforceable, such holding shall not affect and shall leave all other parts, provisions, clauses or applications of this "Limited Warranty for PV Modules", and to this end such other parts, provisions, clauses or applications of this "Limited Warranty for PV Modules" shall be treated as severable.

#### 7. Disputes

In case of any discrepancy in a warranty-claim, a first-class international test-institute such as Fraunhofer ISE in Freiburg/ Germany, TÜ V Rheinland in Cologne/ Germany or ASU Arizona State University shall be involved to judge the claim finally. All fees and expenses shall be borne by the losing party, unless otherwise awarded. And the final explanation right shall be borne by Bluesun.

#### 8. Various

The repair or replacement of the MODULES or the supply of additional MODULES, does not cause the beginning of new warranty terms, nor shall the original terms of this "Limited Warranty for PV Modules" be extended. Any replaced MODULES shall become the property of BLUESUN for disposal. BLUESUN has the right to deliver another type (different in size, color, shape and/or power) in case BLUESUN has discontinued producing the replaced MODULES at the time of warranty claim resolution.

#### 9. Warranty Transfer

This "Limited Warranty for PV Modules" is transferable when the module products remain installed in their original installation location.

#### 10. Force Majeure

BLUESUN shall not be responsible or liable in any way to the customer or any third-party arising from any non-performance or delay in performance of any terms and conditions of sale, including this "Limited Warranty for PV Modules", due to a force majeure event, including, without limitation, acts of God, war, riots, strikes, warlike conditions, perils of the seas, plague or other epidemics, fire, flood, or any other similar cause or circumstance beyond the reasonable control of BLUESUN. In such cases, performance by BLUESUN of this Limited Warranty shall be suspended without liability for the period of delay reasonably attributable to such causes.

#### 11. Update

BLUESUN is entitled to update this "Limited Warranty", the updated version is superior to this "Limited Warranty for PV Modules". And this version shall continue to be valid till the updated version is issued officially.

This "Limited Warranty for PV Modules" will become null and void if the module is transferred from the original continent of destination (e.g. North America, Europe, Asia, Australia, Africa or South America) or from China to Japan, without written permission from BLUESUN. All customers, direct and indirect, are hereby notified of such potential nullification.

In case of questions regarding our products' quality and performance, please contact authorized BLUESUN distribution partners or your nearest BLUESUN office which can be found at [www.bluesunpv.com](http://www.bluesunpv.com). Global service mailbox: [service@bluesunpv.com](mailto:service@bluesunpv.com).

Bluesun Solar Co., Ltd.

Tel: +86 (158) 5821 3997

Fax: +86 (551) 6565 2651

Email: [info@bluesunpv.com](mailto:info@bluesunpv.com)

Service: [Service@bluesunpv.com](mailto:Service@bluesunpv.com)

Add: 1499 Zhenxing Road, Shushan District, 230031 Hefei, China

## ELECTRICAL PARAMETERS

### Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	530	535	540	545	550
Operating Voltage (Vmpp/V)	41.32	41.48	41.64	41.80	41.96
Operating Current (Imp/A)	12.83	12.90	12.97	13.04	13.11
Open-Circuit Voltage (Voc/V)	49.32	49.46	49.60	49.76	49.92
Short-Circuit Current (Isc/A)	13.72	13.79	13.86	13.93	14.00
Module Efficiency $\eta_m(\%)$	20.5	20.6	20.8	21.0	21.2

### Performance at NMOT

Maximum Power (Pmax/W)	395	398	402	406	410
Operating Voltage (Vmpp/V)	38.6	38.7	38.8	39.0	39.1
Operating Current (Imp/A)	10.24	10.30	10.36	10.41	10.47
Open-Circuit Voltage (Voc/V)	46.4	46.5	46.7	46.8	47.0
Short-Circuit Current (Isc/A)	11.06	11.12	11.17	11.23	11.28

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

### Electrical characteristics with different rear side power gain (refer to 530W front)

Pmax gain	Pmax/W	Vmpp/V	Imp/A	Voc/V	Isc/A
5%	557	41.32	13.47	49.32	14.41
10%	583	41.32	14.11	49.32	15.09
15%	610	41.32	14.75	49.32	15.78
20%	636	41.32	15.40	49.32	16.46
25%	663	41.32	16.04	49.32	17.15

## MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	32.2kg
Module Dimensions	2285*1134*35mm
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm <sup>2</sup> (0.006inches <sup>2</sup> )/UL: 12AWG
Front Glass	2.0mm (0.08 inches) AR Coating Semi-tempered Glass
Back Glass	2.0mm (0.08 inches) Glazed Semi-tempered Glass
No. of Bypass Diodes	3
Packing Configuration (1)	31pcs/carton, 620pcs/40hq
Packing Configuration (for USA)	31pcs/carton, 558pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

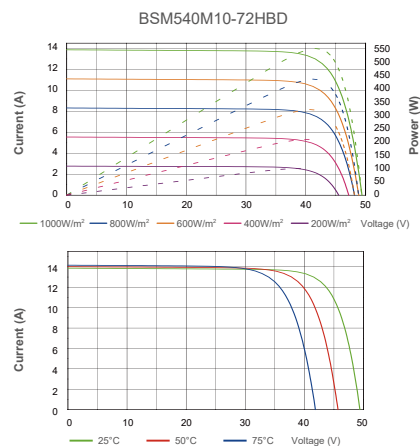
## OPERATING CONDITIONS

Maximum System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	30A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2
Backside Output Ratio*	70%±5%
*Under STC: Backside Output Ratio = $P_{\max(\text{rear})} / P_{\max(\text{front})}$	

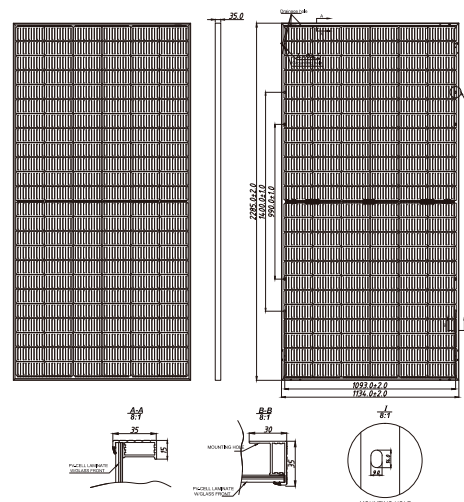
## TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.35%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.048%/°C
NMOT	43±2°C

## I-V CURVE



## TECHNICAL DRAWINGS



## BLUESUN SOLAR CO.,LTD

Add:1499 Zhenxing Road, Shushan District,230031 Hefei,China

Tel:+86 (158) 5821 3997  
E-mail:info@bluesunpv.com

Fax:+86 (551) 6565 2651  
Http://www.bluesunpv.com

US Warehouse Location: Long Beach, CA

\*Release BSM550M10-72HBD(530-550W)\_V\_22\_07





## Certificación de Equipos de Energía Renovable

### Datos de la Solicitud

De acuerdo a la información suministrada se solicita la certificación para equipo(s) de energía renovable Comercial-Privado, en territorio del Estado Libre Asociado de Puerto Rico, según indicado(s) a continuación:

**Solicitante:** Gilberto Diaz

**Correo Electrónico:** gil.diaz@energydepotpr.com

**Compañía:** Energy Depot LLC

### Datos de Equipo Certificado

**Tipo de Equipo(s):** Módulo Fotovoltaico

**Clasificación:** Equipo Existente

MARCA	MODELO	CERTIFICACIONES	ESPECIFICACIONES
BLUESUN SOLAR	BSM460M-72HBD	Certificación de Potencia: IEC 61215 Núm. Certificación: 31-122315 Laboratorio: DEKRA Certificación de Seguridad: UL 1703 Núm. Certificación: E518345 Laboratorio: UL	Potencia Nominal: 460Watts 10 años (Potencia): 95% 20 años (Potencia): 90% Dimensiones: 6.8x3.4 Garantía Manufactura: 15 año(s)
Blue Sun	BSM360M-72	Certificación de Potencia: IEC 61730 Núm. Certificación: Z2 093536 0002 Rev. 00 Laboratorio: TUVPSG Certificación de Seguridad: UL 1703 Núm. Certificación: 171001724SHA-001 Laboratorio: ITSNA	Potencia Nominal: 345Watts 10 años (Potencia): 90% 20 años (Potencia): 80% Dimensiones: 69.42 X 3.25 Garantía Manufactura: 10 año(s)
Bluesun	BSM550M10-72HBD	Certificación de Potencia: IEC 61215 Núm. Certificación: 31-122315 Laboratorio: Dekra Certificación de Seguridad: UL 61730 Núm. Certificación: E518345 Laboratorio: UL	Potencia Nominal: 550Watts 10 años (Potencia): 92.55% 20 años (Potencia): 87.05% Dimensiones: 7.49 X 3.72 Garantía Manufactura: 30 año(s)
BlueSun Solar	BSM380M-72	Certificación de Potencia: IEC 61215 Núm. Certificación: PVC181148 Laboratorio: TUVPSG Certificación de Seguridad: UL 1703 Núm. Certificación: 5010510 Laboratorio: ITSNA	Potencia Nominal: 380Watts 10 años (Potencia): 90% 20 años (Potencia): 80% Dimensiones: 77.01 X 39.06 Garantía Manufactura: 25 año(s)
BLUESUN SOLAR	BSM405M-72OPH	Certificación de Potencia: IEC 61215 Núm. Certificación: Z20935360009 Laboratorio: TUVPSG Certificación de Seguridad: UL 1703 Núm. Certificación: E518345 Laboratorio: UL	Potencia Nominal: 405Watts 10 años (Potencia): 91.95% 20 años (Potencia): 84.8% Dimensiones: 6.59FT X 3.29 FT Garantía Manufactura: 15 año(s)
BlueSun Solar	BSM370M-72	Certificación de Potencia: IEC 61215 Núm. Certificación: PVC181148 Laboratorio: TUVPSG Certificación de Seguridad: UL 1703 Núm. Certificación: 5010510 Laboratorio: ITSNA	Potencia Nominal: 370Watts 10 años (Potencia): 90% 20 años (Potencia): 80% Dimensiones: 77.01 X 39.06 Garantía Manufactura: 25 año(s)
Bluesun Solar	BSM455M-72HPH	Certificación de Potencia: IEC-61215 Núm. Certificación: Z2 093536 0009 Rev. 00 Laboratorio: TUV SUD Certificación de Seguridad: IEC-61730 Núm. Certificación: Z2 093536 0009 Rev. 00 Laboratorio: TUV SUD	Potencia Nominal: 455Watts 10 años (Potencia): 92.55% 20 años (Potencia): 87.05% Dimensiones: 6.87ft x 3.40ft Garantía Manufactura: 25 año(s)

### División de Edificabilidad

Se recomienda la instalación del equipo de fuente de energía renovable sometido ante la OGPe, a tenor con el Reglamento para la Certificación de Sistemas de Energía Renovable y el Reglamento Conjunto para Obras de Construcción y Usos de Terrenos, vigentes.

### Condiciones Especiales





## Certificación de Equipos de Energía Renovable

Bajo ninguna circunstancia, deberá interpretarse que esta certificación implique la aprobación de instalación de equipos en un proyecto de construcción, ni que se autorice iniciar obras de construcción de clase alguna, sin el trámite del correspondiente permiso de construcción.

### Firmas / Sellos

#### Fecha de Expedición:

07/JUL/2023



**Lcdo. Félix E. Rivera Torres**  
**Secretario Auxiliar de la OGPe**

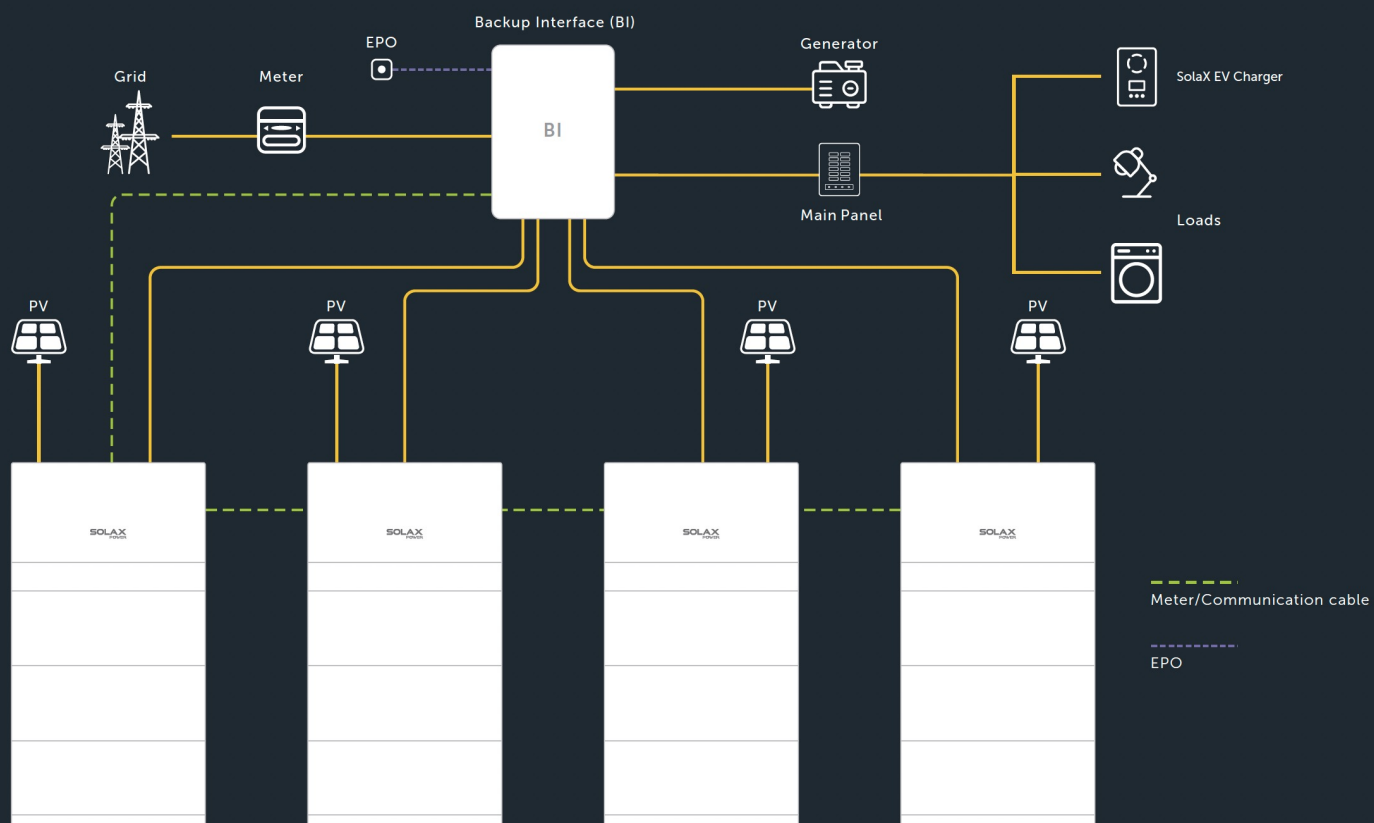




ENERGY DEPOT  
WE ARE THE DIFFERENCE

## ENERGY STORAGE SYSTEM (PARALLEL OPERATION)

- Friendly with existing PV system
- Up to 4 battery modules stackable, 20kWh each system
- Up to 4 systems in parallel, 7.6kW \*4 =30.4kW, 20kWh\*4=80kWh
- 160A BI supported



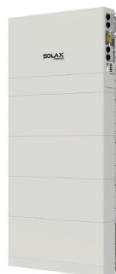




# ENERGY DEPOT

WE ARE THE DIFFERENCE

## A1-ESS-G2



### A1-HYB-G2

- Up to 200% oversizing allowed
- Up to 3 MPPTs
- Maximum 16A PV input current
- Microgrid supported
- Optional revenue grade metering
- Up to 4 systems in parallel<sup>④</sup>
- Peak efficiency: 98%
- Integrated arc fault protection and rapid shutdown transmitter

### T-BAT-SYS-HV-5.0

- Long life & Safe LPF battery
- Up to 4 battery modules stackable, 20kWh each system
- Modular design & Quick installation
- Floor or wall mounted



### A1-BI-200-G2

- Maximum 160A AC current
- Flexible home backup
- Up to 4 systems in parallel
- 64A generator supported
- Built-in energy management meter
- Smart load management<sup>⑤</sup>
- Heat pump extendable<sup>⑥</sup>
- EV charger extendable<sup>⑦</sup>

## A1-HYB-G2

### A1-HYB-3.8-G2

### A1-HYB-5.0-G2

### A1-HYB-6.0-G2

### A1-HYB-7.6-G2

#### INPUT PV

Maximum recommended PV power [W]	7600	10000	10000	15200
Maximum DC voltage [V]			550	
Nominal DC operating voltage [V]			360	
Maximum input current [A]	A: 16 / B: 16	A: 16 / B: 16	A: 16 / B: 16	A: 16 / B: 16 / C: 16
Maximum short circuit current [A]	A: 20 / B: 20	A: 20 / B: 20	A: 20 / B: 20	A: 20 / B: 20 / C: 20
MPPT voltage range [V]			90-500	
Start input voltage [V]			120	
No. of MPP trackers, Strings per MPP tracker	2, 1 / 1	2, 1 / 1	2, 1 / 1	3, 1 / 1 / 1
DC disconnection switch			YES	

#### INPUT/OUTPUT AC

Nominal AC power [VA]	3816	5016	6000	7608
Maximum apparent AC power [VA]	3816	5016	6000	7608
Nominal AC voltage [V] / Nominal AC frequency [Hz]			240 / 50, 60	
Nominal AC current [A]	15.9	20.9	25	31.7
Displacement power factor			0.8 leading to 0.8 lagging	
Total harmonic distortion (THD, rated power)			< 3%	

#### INPUT/OUTPUT BAT

Battery type			Li-ion	
Maximum output power [W]	3816	5016	6000	7600
Maximum charge / discharge current [A]	54	54	54	54
Reverse-polarity protection			YES	
Cycle efficiency charging to discharging (PCS)	88.5%	90.5%	91.5%	92.5%

#### ADDITIONAL FEATURES

AFCI	YES
Revenue grade metering, ANSI C12.20	Optional
Rapid shutdown transmitter	Integrated PLC controller to RSD

#### EFFICIENCY

CEC weighted efficiency	97.50%
Maximum inverter efficiency	98.00%

#### POWER CONSUMPTION

Internal consumption (night) [W]	< 3
----------------------------------	-----

#### STANDARD

Safety	UL1741, UL1741 SA, UL1699B, CSA - C22.2 No. 1071-01, Canadian AFCI according to T.I.L. M-07
Emissions	FCC Part 15 Class B
Grid connection standards	IEEE1547, Rule 21, Rule14 (H-I)

#### INSTALLATION SPECIFICATIONS

Protection class	NEMA 4X
Operating temperature range [°F / °C]	-13 to +140 / -25 to +60
De-rating start temperature [°F / °C]	113 / 45 or above
Storage temperature range [°F / °C]	-13 to +167 / -25 to +75
Relative humidity [%]	0 to 95
Altitude [ft / m]	9843 / 3000 MAX
Typical noise emission [dBA]	< 30
Over voltage category	IV (electric supply side), II (PV side)

#### GENERAL

Dimensions (W x H x D) [in / mm]	33.1 x 15.7 x 5.7 / 840 x 400 x 145
Weight [lb / Kg]	75 / 34
Cooling	Natural convection
Topology	Transformerless
Communication interfaces	RS485, CAN, WIFI (optional) / 4G (optional), Dry Contact
Warranty	12 years





# ENERGY DEPOT

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## T-BAT-SYS-HV-5.0

### T-BAT H 10.0

### T-BAT H 15.0

### T-BAT H 20.0

<b>MODEL</b>	100Ah Lithium (LFP)		
Battery type			
Component	TBMS-MCS60060 + 2*TP-HS50	TBMS-MCS60060 + 3*TP-HS50	TBMS-MCS60060 + 4*TP-HS50
<b>NOMINAL CHARACTER</b>			
Voltage [V]	102.4	153.6	204.8
Operating voltage range [V]	90 - 116	135 - 174	180 - 232
Total energy [kWh]	10	15	20
Usable energy [kWh] <sup>④</sup>	9	13.5	18
Battery roundtrip efficiency [%] <sup>⑤</sup>		95%	
Maximum power [kW]	5.5	8.3	11.1
Maximum charge / discharge current [A]		54	
Cycle life (90% DOD)		6000 cycles	
Warranty	12 years (Details refer to Solax Power warranty statement.)		
<b>INSTALLATION SPECIFICATIONS</b>			
Charge / Discharge temperature range [°F / °C]	Charge: 32 to 127.4 / 0 to 53, Discharge: 14 to 127.4 / -10 to 53		
Storage temperature range [°F / °C]	3 months: 4 to 122 / -20 to 50, 1 year: 32 to 104 / 0 to 40		
Relative humidity [%]	0 to 100		
Altitude [ft / m]	9843 / 3000 MAX		
Protection class	NEMA 4X		
<b>STANDARD</b>			
Certification	UN38.3, UL1973, UL9540, UL9540A		
Hazardous materials classification	Class 9		
<b>GENERAL</b>			
Cooling	Natural convection		
Dimensions (W x H x D) [in / mm] - TBMS-MC60060 (BMS)	33.5 x 5.2 x 5.8 / 850 x 133 x 148		
Dimensions (W x H x D) [in / mm] - TP-HS50 (BAT)	33.5 x 23.6 x 5.8 / 850 x 600 x 148	33.5 x 35.4 x 5.8 / 850 x 900 x 148	33.5 x 47.2 x 5.8 / 850 x 1200 x 148
Dimensions (W x H x D) [in / mm] - Base	33.5 x 2.2 x 5.8 / 850 x 55 x 148		
Weight [lb / kg]	TBMS-MCS60060: 22 / 10 + 2*TP-HS50: 238 / 108	TBMS-MCS60060: 22 / 10 + 3*TP-HS50: 357 / 162	TBMS-MCS60060: 22 / 10 + 4*TP-HS50: 476 / 216

## A1-BI-200-G2

<b>GRID INPUT</b>		
Nominal AC input voltage [V]	120 / 240	
Nominal AC frequency [Hz]	50 / 60	
Maximum AC input current [A]	160	
<b>OUTPUT TO MAIN PANEL IN GRID TIED OPERATION</b>		
Nominal AC output voltage [V]	120 / 240	
Maximum AC input current [A]	160	
<b>OUTPUT TO MAIN PANEL IN BACKUP OPERATION</b>		
Nominal AC output voltage [V]	120 / 240	
Imbalance compensation in backup operation [VA]	5000	
Split phase imbalance output current [A]	41.7	
Maximum AC output current [A]	126.8	
<b>INPUT FROM INVERTER</b>		
Maximum number of inverter inputs	4	
Maximum AC power [W]	7600	
Maximum continuous input current @240V [A]	31.7	
Maximum inverter input AC circuit breaker [A]	40 (optional)	
Upgradability	Up to 4 x 40A circuit breaker	
<b>GENERATOR</b>		
Maximum AC power [W]	15000	
Maximum continuous input current [A]	63	
Auto generator start	Yes	
<b>GENERAL</b>		
Dimensions (HxWxD) [in / mm]	27.8 x 17.7 x 5.9 / 706 x 450 x 151	
Weight [lb / kg]	69.4 / 31.5	
Energy meter accuracy	1%	
Communication interfaces	RS485, CAN, Dry Contact	
Cooling	Fan	
Warranty	12 years	
<b>STANDARD</b>		
Safety	UL1741, CSA 22.2 NO.107	
Emissions	FCC part 15 Class B	
<b>INSTALLATION SPECIFICATIONS</b>		
Altitude [ft / m]	9843 / 3000 MAX	
Operating temperature range [°F / °C]	-13 to +140 / -25 to +60	
Protection class	NEMA 3R	
Typical noise emission [dBA]	< 50	

① To be released in Q4 2022. ② To be released in Q2 2023. ③ To be released in Q3 2023.

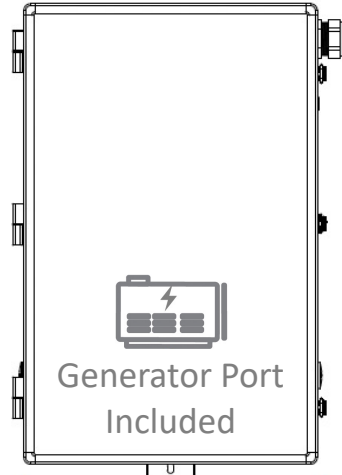
④ Test Conditions: 90% DOD, 0.2C charge & discharge at +25 °C. ⑤ Maximum Charge/Discharge power may be variant with different inverter models.

\*V1.2 Information may be subject to change without notice.6500002400

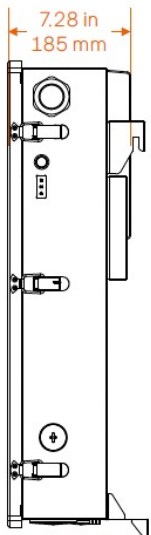


System for  
Outdoor  
or Indoor

27.79 in  
706 mm



17.71 in  
450 mm

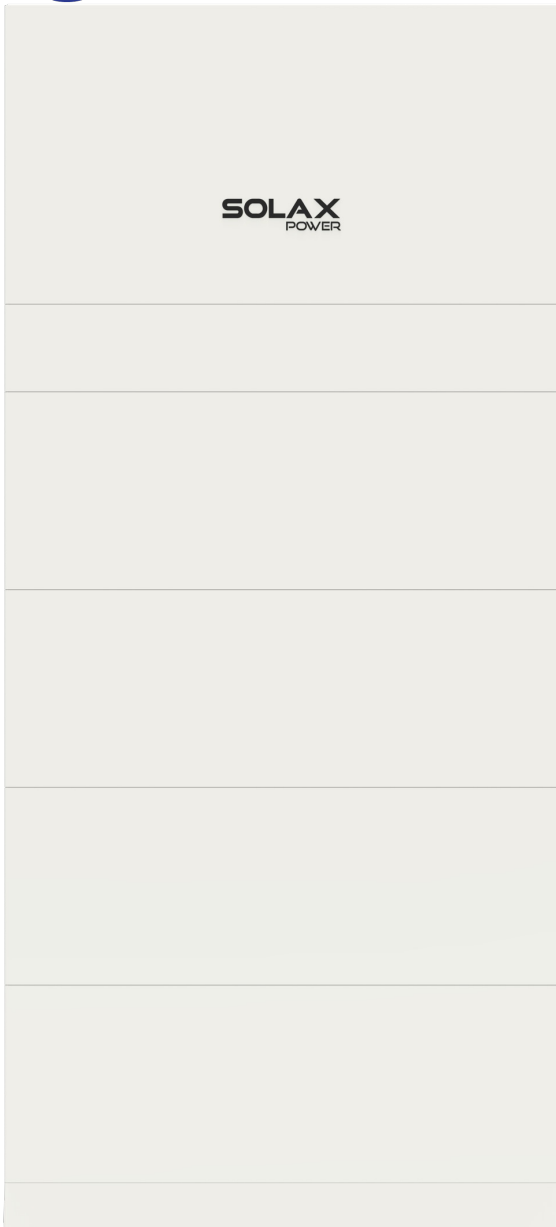


7.28 in  
185 mm

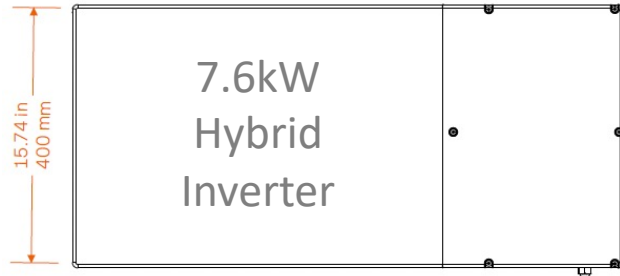
5.94 in  
151 mm



ENERGY DEPOT  
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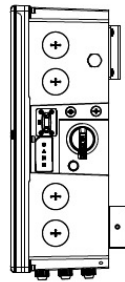


SOLAX  
POWER



15.74 in  
400 mm

32.95 in  
837 mm



5.74 in  
146 mm

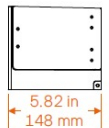
7.6kW  
Hybrid  
Inverter

12 Years Warranty



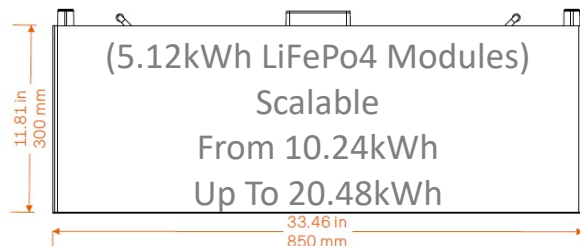
5.23 in  
133 mm

33.46 in  
850 mm



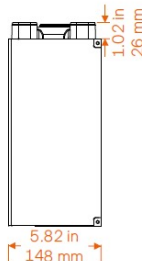
5.82 in  
148 mm

BMS  
(TBMS-MCS60060)



11.81 in  
300 mm

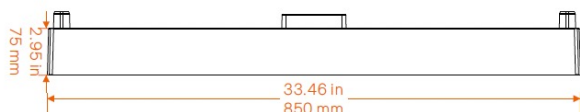
33.46 in  
850 mm



1.02 in  
26 mm

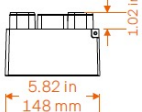
5.82 in  
148 mm

Battery Module  
(TP-HS50)



2.96 in  
75 mm

33.46 in  
850 mm



1.02 in  
26 mm

5.82 in  
148 mm

Base

# Certificación de Equipos de Energía Renovable

### Datos de la Solicitud

De acuerdo a la información suministrada se solicita la certificación para equipo(s) de energía renovable Comercial-Privado, en territorio del Estado Libre Asociado de Puerto Rico, según indicado(s) a continuación:

**Solicitante:** Gilberto Diaz

**Correo Electrónico:** [gil.diaz@energydepotpr.com](mailto:gil.diaz@energydepotpr.com)

**Compañía:** Energy Depot LLC

## Datos de Equipo Certificado

**Tipo de Equipo(s):** Inversor

**Clasificación:** Equipo Nuevo

MARCA	MODELO	CERTIFICACIONES	ESPECIFICACIONES
Solax Power	A1-HYB-5.0K-G2	Certificación de Seguridad: UL 1741 Núm. Certificación: 80089797 Laboratorio: CSA	Interconectable: Sí Voltaje(s) Salida: 240 VAC Voltaje(s) Máximo Entrada: 240 VDC Eficiencia Máxima: 97.5% Tipo de Gabinete(NEMA): NEMA 4X Potencia Nominal: 5016Watts Garantía Manufactura: 10 año(s)
Solax Power	A1-HYB-7.6K-G2	Certificación de Seguridad: UL 1741 Núm. Certificación: 80089797 Laboratorio: CSA	Interconectable: Sí Voltaje(s) Salida: 240 VAC Voltaje(s) Máximo Entrada: 240 VDC Eficiencia Máxima: 97.5% Tipo de Gabinete(NEMA): NEMA 4X Potencia Nominal: 7608Watts Garantía Manufactura: 10 año(s)
Solax Power	A1-HYB-6.0K-G2	Certificación de Seguridad: UL 1741 Núm. Certificación: 80089797 Laboratorio: CSA	Interconectable: Sí Voltaje(s) Salida: 240 VAC Voltaje(s) Máximo Entrada: 240 VDC Eficiencia Máxima: 97.5% Tipo de Gabinete(NEMA): NEMA 4X Potencia Nominal: 6000Watts Garantía Manufactura: 10 año(s)
Solax Power	A1-HYB-3.8K-G2	Certificación de Seguridad: UL 1741 Núm. Certificación: 80089797 Laboratorio: CSA	Interconectable: Sí Voltaje(s) Salida: 240 VAC Voltaje(s) Máximo Entrada: 240 VDC Eficiencia Máxima: 97% Tipo de Gabinete(NEMA): NEMA 4X Potencia Nominal: 3816Watts Garantía Manufactura: 10 año(s)

## División de Edificabilidad

Se recomienda la instalación del equipo de fuente de energía renovable sometido ante la OGP, a tenor con el Reglamento para la Certificación de Sistemas de Energía Renovable y el Reglamento Conjunto para Obras de Construcción y Usos de Terrenos, vigentes.

## Condiciones Especiales

Bajo ninguna circunstancia, deberá interpretarse que esta certificación implique la aprobación de instalación de equipos en un proyecto de construcción, ni que se autorice iniciar obras de construcción de clase alguna, sin el trámite del correspondiente permiso de construcción.

## Firmas / Sellos

**Fecha de Expedición:**

06/JUL/2023





## Certificación de Equipos de Energía Renovable



**Lcdo. Félix E. Rivera Torres**  
**Secretario Auxiliar de la OGPe**







## Certificación de Equipos de Energía Renovable

### Datos de la Solicitud

De acuerdo a la información suministrada se solicita la certificación para equipo(s) de energía renovable Comercial-Privado, en territorio del Estado Libre Asociado de Puerto Rico, según indicado(s) a continuación:

**Solicitante:** Gilberto Diaz

**Correo Electrónico:** gil.diaz@energydepotpr.com

**Compañía:** Energy Depot LLC

### Datos de Equipo Certificado

**Tipo de Equipo(s):** Batería

**Clasificación:** Equipo Nuevo

MARCA	MODELO	CERTIFICACIONES	ESPECIFICACIONES
Solax Power	T-BAT H 10.0		Capacidad: 100 Ah Voltaje Nominal: 102 VDC Tipo de Batería: Litio Tipo de Carga y Descarga: Voltaje y Corriente Constante Dimensiones Nominales: 800mm X 837mm x 146mm Peso nominal: 63 lbs. Garantía Manufactura: 12 año(s)
Solax Power	T-BAT H 20.0		Capacidad: 100 Ah Voltaje Nominal: 204 VDC Tipo de Batería: Litio Tipo de Carga y Descarga: Voltaje y Corriente Constante Dimensiones Nominales: 1600mm X 837mm x 146mm Peso nominal: 125 lbs. Garantía Manufactura: 12 año(s)
Solax Power	T-BAT H 15.0		Capacidad: 100 Ah Voltaje Nominal: 153 VDC Tipo de Batería: Litio Tipo de Carga y Descarga: Voltaje y Corriente Constante Dimensiones Nominales: 1200mm X 837mm x 146mm Peso nominal: 94 lbs. Garantía Manufactura: 12 año(s)

### División de Edificabilidad

Se recomienda la instalación del equipo de fuente de energía renovable sometido ante la OGPe, a tenor con el Reglamento para la Certificación de Sistemas de Energía Renovable y el Reglamento Conjunto para Obras de Construcción y Usos de Terrenos, vigentes.

### Condiciones Especiales

Bajo ninguna circunstancia, deberá interpretar que esta certificación implique la aprobación de instalación de equipos en un proyecto de construcción, ni que se autorice iniciar obras de construcción de clase alguna, sin el trámite del correspondientes permiso de construcción.

### Firmas / Sellos

**Fecha de Expedición:**

12/JUL/2023





## Certificación de Equipos de Energía Renovable

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**Lcdo. Félix E. Rivera Torres**  
**Secretario Auxiliar de la OGPe**





## **MANUFACTURER'S LIMITED PRODUCT WARRANTY**

Unirac, Inc., ("Unirac") warrants to the buyer ("Buyer") at the original installation site ("Site") that any of the **ROOFMOUNT** components designed and manufactured by Unirac and installed at the Site ("Product") shall be free from defects in material and workmanship which substantially impair their ability to perform their intended function, as referenced in the Unirac Product Information, for a period of twenty five (25) years – from the earlier of 1) the date the installation of the Product at the Site is substantially complete, or 2) 120 days after the purchase of the Product by the original Buyer of the Product ("Warranty Period").

### **WARRANTY TRANSFERENCE**

Buyer may transfer this Warranty to subsequent Site owners, or if original Buyer is a contractor to the Site owner, so long as the transferee agrees to the terms of the Limited Warranty as if it were the Buyer. Proof of purchase is required for any warranty claim.

### **WARRANTY LIMITATIONS**

**This Limited Warranty covers only the Product, and not PV modules, electrical components and or wiring used in conjunction with the Product or any other materials not provided by Unirac.** Goods which may be sold by Unirac, but which are not designed or manufactured by Unirac are not warranted by Unirac, are sold only with the warranties, if any, of the original manufacturers thereof. This Limited Warranty does not cover damage to the Product that occurs during its shipment, storage, installation or use, or from force majeure acts including fire, flood, earthquake, storm, hurricane or other natural disaster, war, terrorist activities, acts of foreign enemies and criminal acts. This Limited Warranty does not cover damages or problems caused by the connection to or use of alternative materials not purchased from Unirac Price List. This Limited Warranty shall be void if A) installation of the Product is not performed in accordance with the Unirac Product Information, B) if the Product has been modified, repaired, or reworked in a manner not previously authorized by Unirac in writing, or C) the Product is installed in an environment for which it was not designed, each as determined by Unirac in its sole discretion.

### **WARRANTY CLAIMS**

If, within the Warranty Period, the Product shall be proven at Unirac's sole discretion to be nonconforming, then Unirac shall repair or provide a replacement for the nonconforming Product, or any nonconforming part thereof, at Unirac's option. Any such repair or replacement does not cause the beginning of new warranty terms, nor shall the Warranty Period of this Limited Warranty be extended. Unirac's aggregate liability for all warranty claims shall not exceed the original Purchase Price of the nonconforming Product. Buyer shall bear all costs of shipment or transportation related to the repair or replacement of the nonconforming product. Such repair or replacement shall be Buyer's sole remedy and shall fulfill all of Unirac's obligations with respect to the Product and all warranty claims.

EXCEPT FOR THE LIMITED WARRANTY EXPRESSED ABOVE, UNIRAC MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND WHATSOEVER AND HEREBY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.

UNIRAC SHALL NOT BE LIABLE FOR LOSS OF USE, REVENUE OR PROFIT, OR FOR DIRECT, INDIRECT, SPECIAL, PUNITIVE, LIQUIDATED, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR ANY OTHER LOSS OR COST OF A SIMILAR TYPE, OR FOR CLAIMS BY BUYER FOR DAMAGES OF BUYER'S CUSTOMERS, CLAIMS OF THIRD PARTIES OR INJURY TO PERSONS OR PROPERTY ARISING OUT OF ANY DEFECT OR NONCONFORMITY IN THE PRODUCT COVERED BY THIS WARRANTY, EVEN IF CAUSED BY THE NEGLIGENCE OF UNIRAC. ALL SUCH DAMAGES AND EXPENSES ARE HEREBY EXCLUDED.

**EFFECTIVE DATE: FEBRUARY 28, 2017**

12  
kW

**POWERPROTECT**  
Standby Generators



**YOU.POWERED.**

# RESIDENTIAL

## Standby Generators



## SPECIFICATIONS

OVERVIEW	
Brand	Briggs & Stratton®
Series Name	Power Protect™
Model Name	PP12
Model Number	040666
Rated AC Voltage (Volts)	120 / 240
Frequency (Hz)	60
Generator Breaker (Amps)	60
Operating Ambient Temperature (°C / °F)	-28 - 40 / -20 - 104
Running Amperage, Standby (LP / NG) (Amps)	50 / 45
Running Watts, Standby (LP / NG) (kW)	12 <sup>1</sup> / 10.8
Power Factor	1.0
Exercise Duration	16 seconds
Engine	
Engine Brand/Manufacturer	Vanguard®
Model Type	M38
Aspiration	Naturally Aspirated
Speed (RPM)	3600
Displacement (ci/cc)	38 / 623
Compression Ratio	8.3:1
Governor Type	Electronic



# 12

kW

## POWERPROTECT<sup>™</sup>

### Standby Generators

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RESIDENTIAL STANDBY GENERATORS SPECIFICATIONS



Engine	
Bore & Stroke (mm / in)	75.5 x 70.1 / 2.97 x 2.76
Cylinder Block	Aluminum with Cast Iron Sleeve
Valve Arrangement	OHV
Engine Cylinder Configuration	V
Number of Cylinders	2
Start Type	Automatic
Frequency Regulation Steady State, No Load to Full Load (%)	+/- 1.0
Air Filter Type	Dry
Low Oil Pressure Switch	Yes
Engine Oil Heater	Yes
Rated Temperature (°C / °F)	25 / 77
Sound Rating <sup>2</sup>	
Low Idle Mode Sound dB(A)	64
Normal Operating Sound <sup>2</sup> dB(A)	70
Lubrication System	
Type	Full Pressure
Oil Capacity (oz / L)	48 / 1.42
Oil Filter (Quantity / Type)	1 / Cartridge
Oil Brand	Schaeffer
Recommended Oil	5W30 Full Synthetic
Electrical System	
Ignition System	Fixed Timing
Battery Quantity	1
Battery Voltage (VDC)	12
Battery CCA (Amps)	540
Battery Grouping Size	26 or 51
Starter Motor Voltage (VDC)	12
Fuel System	
Fuel Type	NG / LPV
Fuel Supply Line Inlet	3/4" NPT
Recommended Fuel, Lower Heating Value Minimum (MJ/m <sup>3</sup> / BTU/ft <sup>3</sup> )	NG: 34.3 / 904 LPV: 87.1 / 2338
Fuel Supply Pressure (mbar / in H2O)	NG: 9-17 / 3.5-7 LPV: 28-34 / 11-14

# 12

kW

**POWERPROTECT**  
Standby Generators  
**RESIDENTIAL STANDBY GENERATORS SPECIFICATIONS**



Fuel Consumption <sup>3</sup>	
No Load, NG (BTU/hr)	66,000
No Load, NG (ft <sup>3</sup> /hr)	66
Half Load, NG (BTU/hr)	117,000
Half Load, NG (ft <sup>3</sup> /hr)	117
Full Load, NG (BTU/hr)	172,000
Full Load, NG (ft <sup>3</sup> /hr)	172
No Load, LP (BTU/hr)	57,000
No Load, LP (ft <sup>3</sup> /hr)	23
No Load, LP (gal/hr)	0.70
Half Load, LP (BTU/hr)	155,000
Half Load, LP (ft <sup>3</sup> /hr)	62
Half Load, LP (gal/hr)	1.7
Full Load, LP (BTU/hr)	209,000
Full Load, LP (ft <sup>3</sup> /hr)	84
Full Load, LP (gal/hr)	2.3
Alternator Specifications	
Alternator Type	Self-Excited, Rotating Field
Alternator Manufacturer	Briggs & Stratton
Frequency (Hz)	60
Phase	1
Insulation Rating (Class)	F
Designed Temperature Rise (°C)	105
Bearing (Quantity / Type)	1 / Sealed
Number of Poles	2
Voltage Regulator	Brushed / Electronic
Motor Starting Capability (kVA)	37 (35% Voltage Dip)
Total Harmonic Distortion (THD), NL to FL (%)	< 5
Controls/Instrumentation	
Controller	GC-1032
Charger	Stand Alone
Starting	AMF or 2-wire
LED Digital Display	Yes
Alternator Frequency	Yes
Real Time Clock	Yes
Engine Hour Counter	Yes

# 12

kW

**POWERPROTECT™**  
Standby Generators  
**RESIDENTIAL STANDBY GENERATORS SPECIFICATIONS**



Controls/Instrumentation	
Engine Runtime Scheduler	Yes
Low Oil Pressure Shutdown	Yes
High Temperature Shutdown	Yes
Fault Code Display	Yes
Other Features	
Battery Rack and Cables	Yes
Fuel Solenoid Valve	Yes
Integral Vibration Isolation	Yes
Oil Drain Extension	Yes
Operation and Installation Manual(s)	Yes
Wind Speed Rating (mph)	175
Accessories	
Battery Warmer	6578
Maintenance Kit	6035
Fuel Regulator Warmer	6845
Surge Protector	6631
Gateway	6520
UPS	6581
InfoHub™ Universal - Cellular	6574
Gateway Range Extender	6839
Limited Warranty <sup>4</sup>	
Warranty: Generator, Domestic & Canada (Parts / Labor / Travel) – Years	6
Warranty: Generator, International (Parts / Labor / Travel) – Years/Hours	3 / 1000
Warranty: Enclosure, Surface Rust and Corrosion (Parts / Labor / Travel) – Years	1
Warranty: Enclosure, Rust Through (Parts / Labor / Travel) – Years	2
Certifications	
UL	Yes
cUL	Yes
Massachusetts Plumbers and Gasfitters Listing	Yes



# 12

kW

## POWERPROTECT<sup>™</sup>

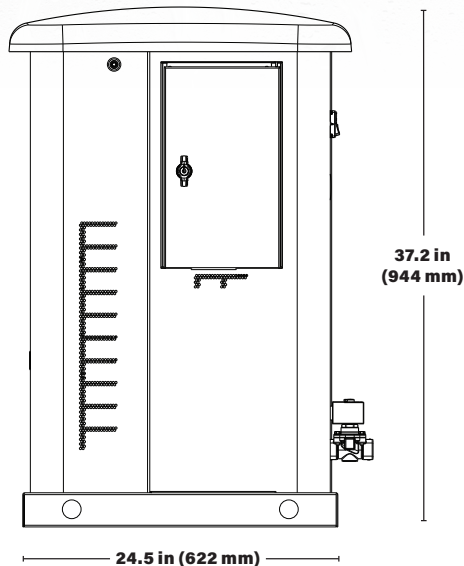
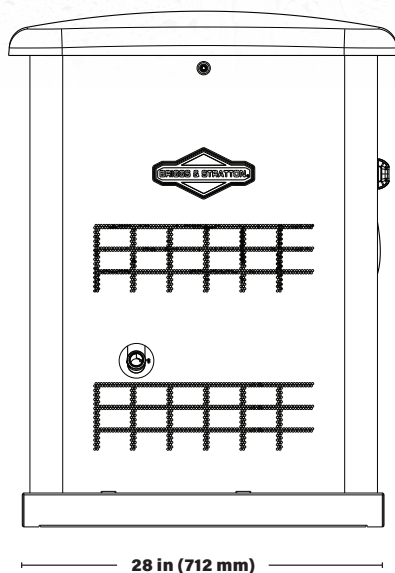
### Standby Generators

RESIDENTIAL STANDBY GENERATORS SPECIFICATIONS



#### Weights & Dimensions

<b>Assembled Dimensions (Length x Width x Height) (in / mm)</b>	28 x 24.5 x 37.2 / 712 x 622 x 944
<b>Assembled Weight (lbs / kg)</b>	361 / 164
<b>Packaged Dimensions (Length x Width x Height) (in / mm)</b>	39 x 33.5 x 45 / 991 x 851 x 1143
<b>Packaged Weight (lbs / kg)</b>	423 / 192
<b>Outline and Pad Layout Drawing</b>	80104459



<sup>1</sup> This generator is rated in accordance with UL (Underwriters Laboratories) 2200 (stationary engine generator assemblies) and CSA (Canadian Standards Association) standard C22.2 No. 100-14 (motor and generators).

<sup>2</sup> Per ISO 3744, Sound level measurement at other locations around generator may differ depending on installation, based on lowest microphone at 7m. Normal operation based on average household usage.

<sup>3</sup> Fuel consumption rates are estimated based on normal operating conditions. Generator operation may be greatly affected by elevation and the cycling operation of multiple electrical appliances — fuel flow rates may vary depending on these factors.

<sup>4</sup> See operator's manual or BRIGGSandSTRATTON.com for complete warranty details.

Briggs & Stratton has a policy of continuous product improvement and reserves the right to modify its specifications at any time and without prior notice.

This standby generator is not for Prime Power applications.

Published August 2021. Please visit BRIGGSandSTRATTON.com for the latest information.

BS1303 - 8/21

**BRIGGS & STRATTON**  
POST OFFICE BOX 702  
MILWAUKEE, WI 53201 USA

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# 20kW<sup>1</sup> STANDBY GENERATOR

CORROSION RESISTANT

## BRIGGS & STRATTON® THE SMART CHOICE

For the discerning homeowner that is looking for the smartest, most reliable permanent backup power solution.



### FORTRESS™

#### Corrosion Resistant Enclosure & Base

- Rust resistant aluminum and a stainless steel base to protect the generator from the elements. Robust protection against damage from the elements caused by strong winds, high humidity and salt air.
- Powder-coated paint for years of protection against chips and abrasions
- Certified to withstand hurricane-force winds up to 175 mph



#### Unique Airflow Technology

- Making these models 50% quieter than most portable generators
- The unique design pushes engine exhaust out the front, directly away from your home

#### Symphony® II Power Management System

- Customizable to your home's needs
- Automatically balances the power of your home's electrical load including high wattage items like air conditioning units and electric ovens
- Offers whole house power with a more affordable home generator

#### Commercial-Grade Briggs & Stratton Vanguard™ Engine

- Powerful V-Twin OHV engine
- Easy conversion between natural gas (NG) and liquid propane gas (LP) during installation

#### Quality Clean Power

- Ensures your electronics are safely powered

#### Flexible Placement

- Approved for installation as close as 18" to a building<sup>2</sup>



### GENERATOR SET RATINGS

MODEL	VOLTAGE	PHASE	HZ	BREAKER	LIQUID PROPANE GAS		NATURAL GAS		LIMITED WARRANTY <sup>3</sup>
					LP kW	LP AMPS	NG kW	NG AMPS	PARTS, LABOR, TRAVEL
Fortress 040573	120/240	1	60	100	20	83.3	18	75	6 Year
Briggs & Stratton 040574	120/240	1	60	100	20	83.3	18	75	5 Year

<sup>1</sup> This generator is rated in accordance with UL (Underwriters Laboratories) 2200 (stationary engine generator assemblies) and CSA (Canadian Standards Association) standard C22.2 No. 100-14 (motors and generators).

<sup>2</sup> The installation manual contains specific instructions related to generator placement in addition to NFPA 37, including the requirement that carbon monoxide detectors be installed and maintained in your home.

<sup>3</sup> Warranty details available at [www.briggsandstratton.com](http://www.briggsandstratton.com)



## ENGINE SPECIFICATIONS

ENGINE		LUBRICATION	
Engine Model	Briggs & Stratton Vanguard™	Oil Capacity (oz)	79
Engine Model Type Trim Number	613275-0003-E1	Lubrication System	Full Pressure
Engine Speed (RPM)	3600	Recommended Oil	5W30 Full Synthetic
Engine Fuel	Liquid Propane (LP) or Natural Gas (NG)	Low Oil Pressure Sensor	Yes
Engine Cylinder Configuration	OHV	ALTERNATOR SPECS	
Number of Cylinders	2	Manufacturer	Briggs & Stratton
Displacement (cc)	60.6 / 993	Type	Self-Excited, Rotation Field
Bore & Stroke (in)	3.37 / 3.41	Voltage Regulator	Automatic
Compression Ratio	8.5:1	Insulation	Class F
Governor Type	Electronic	CONTROLLER FEATURES	
Frequency Regulation	+/- 1%	Hour Meter	Yes
Valves	OHV with Hardened Seats	LED Digital Display	Yes
Ignition System	Fixed timing Magnetron® Electric Ignition	Fault Code Display	Yes
Starter Motor Rating Voltage	12 Volt	Weekly Exerciser	Yes
Battery	12 Volt		

## OPERATIONS

FUEL CONSUMPTION <sup>1</sup>					SOUND RATING AT 7 METERS PER ISO 3744	
50% Load			100% Load		64dB(A)	
Liquid Propane	83 ft <sup>3</sup> / hr	2.31 gal / hr	135 ft <sup>3</sup> / hr	3.75 gal / hr	Lowest measurement of 12 microphones around generator. Sound level measurement at other locations around generator may be different depending upon installation configuration.	
Natural Gas	187 ft <sup>3</sup> / hr	—	260 ft <sup>3</sup> / hr	—		

<sup>1</sup> Fuel consumption rates are estimated based on normal operating conditions. Generator operation may be greatly affected by elevation and the cycling operation of multiple electrical appliances – fuel flow rates may vary depending on these factors.



## ADDITIONAL INFORMATION

## OTHER FEATURES

Enclosure Material	Aluminum with Corrosion Resistant Paint
Overcrank Protection	Yes
Engine Warm Up (sec)	20 or 50 Automatic Transfer Switch Controlled
Engine Cool Down (min)	1
Response Time (sec)	26 or 56 Automatic Transfer Switch Controlled
Monitoring Options (Only available with optional monitoring kits)	Basic Wireless Monitor InfoHub™ Monitor
Continuous Battery Charging	Yes

## WEIGHT AND DIMENSIONS

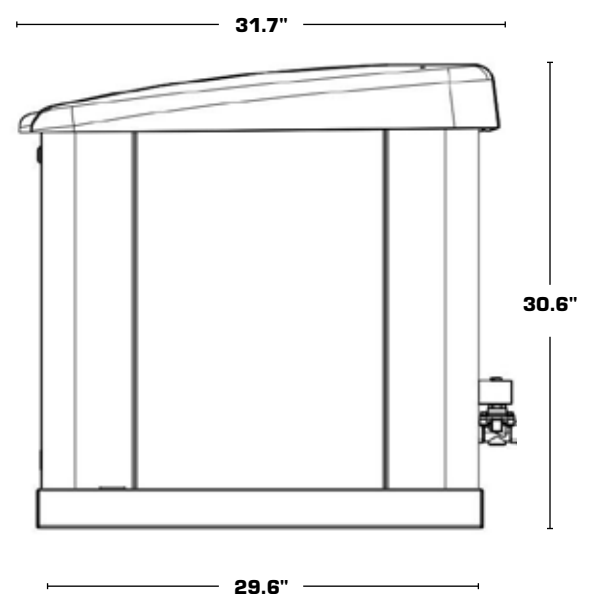
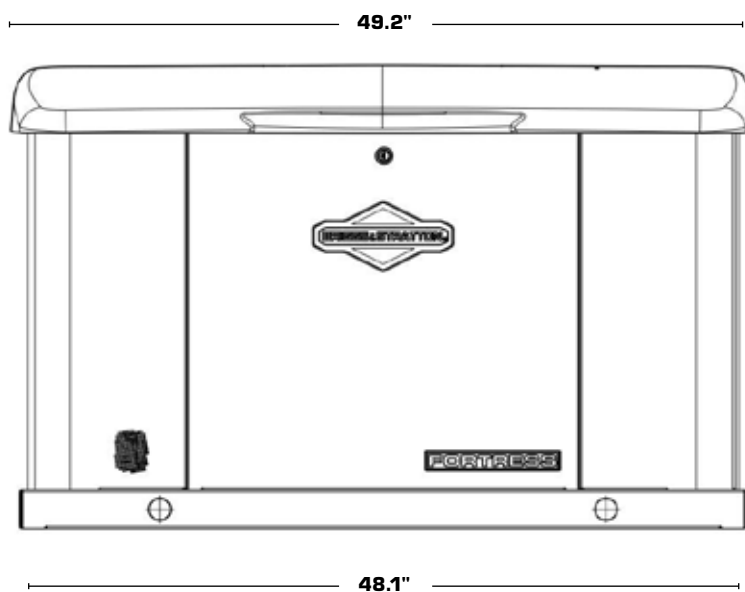
Assembled Weight (lbs)	443
Overall Dimensions (in)	49.2 x 31.7 x 30.6
Packaged Weight (lbs)	588
Packaged Dimensions (in)	68.1 x 41 x 39.5

## CERTIFICATION

CARB Compliant	Yes
NFPA Approved	Yes
cUL Listed to CSA 22.2 NO 100-04	Yes
NEMA Compliant	Yes
EPA Certified Fuel System	Yes

## AVAILABLE ACCESSORIES

Maintenance Kit	6035
Cold Weather Kit	Fortress 6404
	Briggs & Stratton 6231
Basic Wireless Monitor	6276
InfoHub	6260
Remote Status Monitor	6144





## FUEL PIPE SIZE RECOMMENDATION CHART (CAPACITY IN THOUSANDS OF BTU/HOUR)

## Natural Gas/Inlet Pressure less than 2 PSI/ Pressure drop .5" w.c./ Specific Gravity 0.60

	1/2" pipe capacity	3/4" pipe capacity	1" pipe capacity	1-1/4" pipe capacity	1-1/2" pipe capacity	2" pipe capacity
20' Length*	118	247	466	957	1,430	2,760
40' Length*	81	170	320	657	985	1,900
60' Length*	65	137	257	528	791	1,520
80' Length*	56	117	220	452	677	1,300
100' Length*	50	104	195	400	600	1,160

## Liquid Propane / Inlet Pressure 11" Water Column / Pressure Drop 0.5" Water Column / Specific Gravity 1.50

	1/2" pipe capacity	3/4" pipe capacity	1" pipe capacity	1-1/4" pipe capacity	1-1/2" pipe capacity	2" pipe capacity
20' Length*	200	418	788	1,617	2,423	4,666
40' Length*	137	287	541	1,111	1,665	3,207
60' Length*	110	231	435	892	1,337	2,575
80' Length*	94	198	372	764	1,144	2,204
100' Length*	84	175	330	677	1,014	1,954

\*Total length of piping from outlet of regulator to appliance furthest away.

## ADDITIONAL INFORMATION

## TRANSFER SWITCH SPECIFICATIONS

Prewired 16 Circuit	100 AMP	Model #071076
Standard 16 Circuit	100 AMP	Model # 071047
Symphony® II	100 AMP	Model # 071071
Symphony® II	150 AMP	Model # 071070
Symphony® II	200 AMP	Model # 071068
Symphony® II Dual 200 Amp	2x200/400	Model # 071057
Voltage Rating	120/240	
Number of Protected Circuits	Select Circuit: 16 Symphony® II: Whole House	
UL Approved	Yes	
NEMA 3R Rated	Yes	

## SUPPORT EVERY STEP OF THE WAY

## NEED HELP? Just call 800-759-2744

Our technical support team is trained to answer questions on our generators, transfer switches and accessories.

**CALL TODAY FOR A FREE  
IN-HOME ESTIMATE!  
800-743-4115**

**Disclaimer:** Not for Prime Power or use where standby systems are legally required, for serious life safety or health hazards, or where lack of power hampers rescue of fire-fighting operations.

## BRIGGS &amp; STRATTON

BRIGGS & STRATTON CORPORATION

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