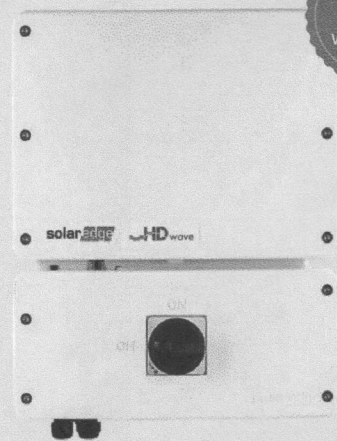


# Single Phase Energy Hub Inverter with Prism Technology

For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US<sup>(1)</sup>



HOME BACKUP

## Optimized battery storage with HD-Wave technology

- // Record-breaking 99% weighted efficiency with 200% DC oversizing
- // Small, lightweight, and easy to install
- // Modular design, future ready with optional upgrades to:
  - // DC-coupled storage for full or partial home backup
  - // Built-in consumption monitoring
  - // Direct connection to the SolarEdge smart EV charger
- // Multi-inverter, scalable storage solution
  - // With enhanced battery power up to 10kW
- // Integrated arc fault protection and rapid shutdown for NEC 2014, NEC 2017 and NEC 2020, per article 690.11 and 690.12
- // Embedded revenue grade production data, ANSI C12.20 Class 0.5

solaredge.com



# / Single Phase Energy Hub Inverter with Prism Technology

## For North America

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US<sup>(1)</sup>

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	UNITS
<b>OUTPUT - AC ON GRID</b>							
Rated AC Power	3000	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	W
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	W
AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5 <sup>(2)</sup>						Hz
Maximum Continuous Output Current @ 240V	12.5	16	25	32	42	47.5	A
Maximum Continuous Output Current @ 208V	-	16	24	-	-	48.5	A
GFDI Threshold	1						A
Total Harmonic Distortion (THD)	<3						%
Power Factor	1, adjustable -0.85 to 0.85						
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes						
Charge Battery from AC (if allowed)	Yes						
Typical Nighttime Power Consumption	<2.5						W
<b>OUTPUT - AC BACKUP<sup>(3)</sup></b>							
Rated AC Power in Backup Operation <sup>(4)</sup>	3000	3800 7600*	6000	7600 10300*	10000	10300	W
AC L-L Output Voltage Range in Backup	211 - 264						Vac
AC L-N Output Voltage Range in Backup	105 - 132						Vac
AC Frequency Range in Backup (min - nom - max)	55 - 60 - 65						Hz
Maximum Continuous Output Current in Backup Operation	12.5	16 32*	25	32 43*	42	43	A
GFDI	1						A
THD	<5						%
<b>OUTPUT - SMART EV CHARGER AC</b>							
Rated AC Power	9600						W
AC Output Voltage Range	211 - 264						Vac
On-Grid AC Frequency Range (min - nom - max)	59.3 - 60 - 60.5						Hz
Maximum Continuous Output Current @ 240V (grid, PV and battery)	40						Aac
<b>INPUT - DC (PV AND BATTERY)</b>							
Transformer-less, Ungrounded	Yes						
Max Input Voltage	480						Vdc
Nom DC Input Voltage	380						Vdc
Reverse-Polarity Protection	Yes						
Ground-Fault Isolation Detection	600kΩ Sensitivity						
<b>INPUT - DC (PV)</b>							
Maximum DC Power @ 240V	6000	7600 15200*	12000	15200 22800*	22000	22800	W
Maximum DC Power @ 208V	-	6600	10000	-	-	20000	W
Maximum Input Current <sup>(5)</sup> @ 240V	8.5	10.5 20*	16.5	20 31*	27	31	Adc
Maximum Input Current <sup>(5)</sup> @ 208V	-	9	13.5	-	-	27	Adc
Max. Input Short Circuit Current	45						Adc
Maximum Inverter Efficiency	99	99.2				99 @ 240V 98.5 @ 208V	%
CEC Weighted Efficiency	99						%
2-pole Disconnection	Yes						

\* Supported with PN SExxxxH-USMxxxxx or SExxxxH-USMxxxxx  
 (1) These specifications apply to inverters with part numbers SExxxxH-USMxxxxx or SExxxxH-USNxxxxx and connection unit model number DCD-1PH-US-PxH-F-x  
 (2) For other regional settings please contact SolarEdge support  
 (3) Not designed for standalone applications and requires AC for commissioning. Backup functionality is only supported for 240V grid  
 (4) Rated AC power in Backup Operation are valid for installations with multiple inverters. For a single backup inverter operation, rated AC power in Backup is 90% of the value stated  
 (5) A higher current source may be used; the inverter will limit its input current to the values stated



LICENSE NO: MHIC 126915

### CUSTOMER INFORMATION

NAME: NATALIE ZIEGLER

ADDRESS: 4044 MANOR LN, ELLICOTT CITY, MD 21042

39.258151, -76.899804  
 APN: 1403322173

AHJ: MD-COUNTY HOWARD

UTILITY: BGE

PRN NUMBER: SES-49782

### INVERTER SPEC SHEET

DRAFTED BY: D.XAVIER  
 QC'ED BY: S.GOPAL  
 PAPER SIZE: 17"X11"

SCALE: AS NOTED  
 REV: D

DATE: 5/6/2022  
 SS-02

**SPEC SHEET**

**/ Single Phase Energy Hub Inverter  
with Prism Technology  
For North America**

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US<sup>(1)</sup>

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	UNITS
<b>INPUT - DC (BATTERY)</b>							
Supported Battery Types	SolarEdge Energy Bank, LG RESU Prime <sup>®</sup>						
Number of Batteries per Inverter	Up to 3 SolarEdge Energy Bank, up to 2 LG RESU Prime						
Continuous Power <sup>(7)</sup>	6000	7600		10000			W
Peak Power <sup>(7)</sup>	6000	7600		10000			W
Max Input Current	16	20		26.5			Adc
2-pole Disconnection	Yes						
<b>SMART ENERGY CAPABILITIES</b>							
Consumption Metering	Built - in <sup>®</sup>						
Backup & Battery Storage	With Backup Interface (purchased separately) for service up to 200A; Up to 3 inverters						
EV Charging	Direct connection to Smart EV charger						
<b>ADDITIONAL FEATURES</b>							
Supported Communication Interfaces	RS485, Ethernet, Cellular <sup>®</sup> , Wi-Fi (optional), SolarEdge Energy Net (optional)						
Revenue Grade Metering, ANSI C12.20	Built - in <sup>®</sup>						
Integrated AC, DC and Communication Connection Unit	Yes						
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi Access Point for local connection						
DC Voltage Rapid Shutdown (PV and Battery)	Yes, according to NEC 2014, NEC 2017 and NEC 2020 690.12						
<b>STANDARD COMPLIANCE</b>							
Safety	UL1741, UL1741 SA, UL1741 PCS, UL1699B, UL1998, UL9540, CSA 22.2						
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H						
Emissions	FCC part 15 class B						
<b>INSTALLATION SPECIFICATIONS</b>							
AC Output and EV AC Output Conduit Size / AWG Range	1" maximum / 14-4 AWG						
DC Input (PV and Battery) Conduit Size / AWG Range	1" maximum / 14-6 AWG						
Dimensions with Connection Unit (H x W x D)	17.7 x 14.6 x 6.8 / 450 x 370 x 174		17.7 x 14.6 x 6.8 / 450 x 370 x 174		17.7 x 14.6 x 6.8 / 450 x 370 x 174		in / mm
Weight with Connection Unit	26 / 11.8		26 / 11.8		41.7 / 18.9		lb / kg
Noise	< 25	< 25 < 50*	< 25	< 50			dB(A)
Cooling	Natural Convection						
Operating Temperature Range	-40 to +140 / -40 to +60 <sup>(10)</sup>						
Protection Rating	NEMA 4						

(6) The part numbers SExxxxH-USxMxxxx only support the SolarEdge Energy Bank. The part numbers SExxxxH-USxNxxxx support both SolarEdge Energy Bank and LG RESU Prime batteries. Requires supporting inverter firmware.  
 (7) Discharge power is limited up to the inverter rated AC power for on-grid and backup applications.  
 (8) For consumption metering current transformers should be ordered separately: SECT-SPL-225A-T-20 or SEACT0750-400NA-20 units per box. Revenue grade metering is only for production metering.  
 (9) Information concerning the Data Plan's terms & conditions is available in the following link:  
<https://www.solaredge.com/sites/default/files/se-communication-plan-terms-and-conditions-eng.pdf>  
 (10) Full power up to at least 50°C / 122°F; for power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>



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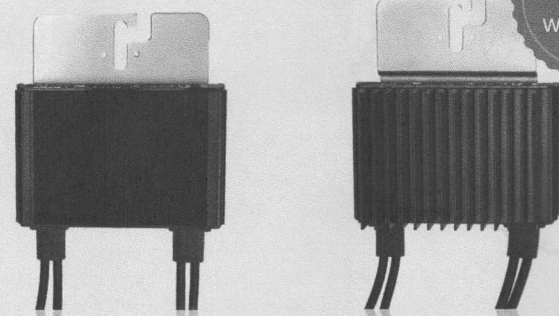
**INVERTER SPEC SHEET**

DRAFTED BY: D.XAVIER	PAPER SIZE: 17"X11"
QC'ED BY: S.GOPAL	
SCALE: AS NOTED	REV: D
DATE: 5/6/2022	SS-03

# Power Optimizer

For North America

P320 / P340 / P370 / P400 / P405 / P485 / P505



25  
YEAR  
WARRANTY

POWEROPTIMIZER

## PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module-level monitoring
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Module-level voltage shutdown for installer and firefighter safety

solaredge.com



## / Power Optimizer For North America

P320 / P340 / P370 / P400 / P405 / P485 / P505

Optimizer model (typical module compatibility)	P320 (for 60-cell modules)	P340 (for high-power 60-cell modules)	P370 (for higher-power 60 and 72-cell modules)	P400 (for 72 & 96-cell modules)	P405 (for high-voltage modules)	P485 (for high-voltage modules)	P505 (for higher current modules)
--	----------------------------	---------------------------------------	--	---------------------------------	---------------------------------	---------------------------------	-----------------------------------

INPUT								
Rated Input DC Power <sup>1)</sup>	320	340	370	400	405	485	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60	80	125 <sup>2)</sup>	83 <sup>3)</sup>			Vdc
MPPT Operating Range	8 - 48	8 - 60	8 - 80	12.5 - 105	12.5 - 83			Vdc
Maximum Short Circuit Current (Isc)	11			10.1	14			Adc
Maximum DC Input Current	13.75			12.5	17.5			Adc
Maximum Efficiency				99.5				%
Weighted Efficiency				98.8			98.6	%
Overvoltage Category				II				

OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)								
Maximum Output Current				15				Adc
Maximum Output Voltage		60			85			Vdc

OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)								
Safety Output Voltage per Power Optimizer				1 ± 0.1				Vdc

STANDARD COMPLIANCE								
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3							
Safety	IEC62109-1 (class II safety), UL1741							
Material	UL94 V-0, UV Resistant							
RoHS	Yes							

INSTALLATION SPECIFICATIONS									
Maximum Allowed System Voltage	1000								
Compatible inverters	All SolarEdge Single Phase and Three Phase inverters								
Dimensions (W x L x H)	129 x 153 x 27.5 / 5.1 x 6 x 1.1	129 x 153 x 33.5 / 5.1 x 6 x 1.3	129 x 159 x 49.5 / 5.1 x 6.3 x 1.9	129 x 162 x 59 / 5.1 x 6.4 x 2.3					mm / in
Weight (including cables)	630 / 1.4	750 / 1.7	845 / 1.9	1064 / 2.3					gr / lb
Input Connector	MC4 <sup>4)</sup>			Single or dual MC4 <sup>5)</sup>	MC4 <sup>6)</sup>				
Input Wire Length	0.16 / 0.52								m / ft
Output Wire Type / Connector	Double Insulated / MC4								
Output Wire Length	0.9 / 2.95	1.2 / 3.9	1.2 / 3.9	1.2 / 3.9	1.2 / 3.9				m / ft
Operating Temperature Range <sup>7)</sup>	-40 - +85 / -40 - +185								°C / °F
Protection Rating	IP68 / NEMA6P								
Relative Humidity	0 - 100								%

<sup>1)</sup> Rated power of the module at STC will not exceed the optimizer "Rated input DC Power". Modules with up to +5% power tolerance are allowed.  
<sup>2)</sup> NEC 2017 requires max input voltage be not more than 80V.  
<sup>3)</sup> For other connector types please contact SolarEdge.  
<sup>4)</sup> For dual version for parallel connection of two modules use the P485. In the case of an odd number of PV modules in one string, installing one P485 dual version power optimizer.  
<sup>5)</sup> For ambient temperature above +85°C / +185°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.

PV System Design Using a SolarEdge Inverter <sup>8)</sup>	Single Phase HD-Wave	Single phase	Three Phase for 208V grid	Three Phase for 277/480V grid	
Minimum String Length (Power Optimizers)	P320, P340, P370, P400 P405, P485, P505	8	10	18	
Maximum String Length (Power Optimizers)		6	8	14	
Maximum String Length (Power Optimizers)		25	25	50 <sup>9)</sup>	
Maximum Power per String	5700 (6000 with SE7600-US - SE11400-US)	5250	6000 <sup>10)</sup>	12750 <sup>10)</sup>	W
Parallel Strings of Different Lengths or Orientations	Yes				

<sup>8)</sup> For detailed string sizing information refer to: [http://www.solaredge.com/sites/default/files/string\\_sizing\\_na.pdf](http://www.solaredge.com/sites/default/files/string_sizing_na.pdf)  
<sup>9)</sup> It is not allowed to mix P405/P485/P505 with P320/P340/P370/P400 in one string.  
<sup>10)</sup> A string with more than 30 optimizers does not meet NEC rapid shutdown requirements: safety voltage will be above the 30V requirement.  
<sup>11)</sup> For 208V grid: it is allowed to install up to 6,500W per string when the maximum power difference between each string is 1,000W.  
<sup>12)</sup> For 277/480V grid: it is allowed to install up to 17,550W per string when the maximum power difference between each string is 2,000W.



LICENSE NO: MHC 126915

### CUSTOMER INFORMATION

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 AHJ: MD-COUNTY HOWARD  
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### OPTIMIZER SPEC SHEET

DRAFTED BY: D.XAVIER QC'ED BY: S.GOPAL	PAPER SIZE: 17"X11"
SCALE: AS NOTED	REV: D
DATE: 5/6/2022	SS-04

**SPEC SHEET**

**/ Single Phase Energy Hub Inverter  
with Prism Technology  
For North America**

SE3000H-US / SE3800H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US<sup>(1)</sup>

	SE3000H-US	SE3800H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	UNITS
<b>INPUT - DC (BATTERY)</b>							
Supported Battery Types	SolarEdge Energy Bank, LG RESU Prime <sup>®</sup>						
Number of Batteries per Inverter	Up to 3 SolarEdge Energy Bank, up to 2 LG RESU Prime						
Continuous Power <sup>(7)</sup>	6000	7600		10000			W
Peak Power <sup>(7)</sup>	6000	7600		10000			W
Max Input Current	16	20		26.5			Adc
2-pole Disconnection	Yes						
<b>SMART ENERGY CAPABILITIES</b>							
Consumption Metering	Built - in <sup>®</sup>						
Backup & Battery Storage	With Backup Interface (purchased separately) for service up to 200A; Up to 3 inverters						
EV Charging	Direct connection to Smart EV charger						
<b>ADDITIONAL FEATURES</b>							
Supported Communication Interfaces	RS485, Ethernet, Cellular <sup>®</sup> , Wi-Fi (optional), SolarEdge Energy Net (optional)						
Revenue Grade Metering, ANSI C12.20	Built - in <sup>®</sup>						
Integrated AC, DC and Communication Connection Unit	Yes						
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi Access Point for local connection						
DC Voltage Rapid Shutdown (PV and Battery)	Yes, according to NEC 2014, NEC 2017 and NEC 2020 690.12						
<b>STANDARD COMPLIANCE</b>							
Safety	UL1741, UL1741 SA, UL1741 PCS, UL1699B, UL1998, UL9540, CSA 22.2						
Grid Connection Standards	IEEE1547, Rule 21, Rule 14H						
Emissions	FCC part 15 class B						
<b>INSTALLATION SPECIFICATIONS</b>							
AC Output and EV AC Output Conduit Size / AWG Range	1" maximum / 14-4 AWG						
DC Input (PV and Battery) Conduit Size / AWG Range	1" maximum / 14-6 AWG						
Dimensions with Connection Unit (H x W x D)	17.7 x 14.6 x 6.8 / 450 x 370 x 174		17.7 x 14.6 x 6.8 / 450 x 370 x 174		17.7 x 14.6 x 6.8 / 450 x 370 x 174		in / mm
Weight with Connection Unit	26 / 11.8		26 / 11.8		41.7 / 18.9		lb / kg
Noise	< 25	< 25 < 50*	< 25	< 50			dBa
Cooling	Natural Convection						
Operating Temperature Range	-40 to +140 / -40 to +60 <sup>(10)</sup>						
Protection Rating	NEMA 4						

(6) The part numbers SExxxxH-USxMxxxx only support the SolarEdge Energy Bank. The part numbers SExxxxH-USxNxxxx support both SolarEdge Energy Bank and LG RESU Prime batteries. Requires supporting inverter firmware.  
 (7) Discharge power is limited up to the inverter rated AC power for on-grid and backup applications.  
 (8) For consumption metering current transformers should be ordered separately: SECT-SPL-225A-T-20 or SEACT0750-400NA-20 units per box. Revenue grade metering is only for production metering.  
 (9) Information concerning the Data Plan's terms & conditions is available in the following link:  
<https://www.solaredge.com/sites/default/files/se-communication-plan-terms-and-conditions-eng.pdf>  
 (10) Full power up to at least 50°C / 122°F; for power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>



Solar Energy Services, Inc.

LICENSE NO: MHIC 126915

**CUSTOMER INFORMATION**

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ADDRESS: 4044 MANOR LN, ELLICOTT CITY, MD 21042

39.258151, -76.899804  
APN: 1403322173

AHJ: MD-COUNTY HOWARD

UTILITY: BGE

PRN NUMBER: SES-49782

**INVERTER SPEC SHEET**

DRAFTED BY:  
D.XAVIER  
QC'ED BY: S.GOPAL

PAPER SIZE: 17"X11"

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REV: D

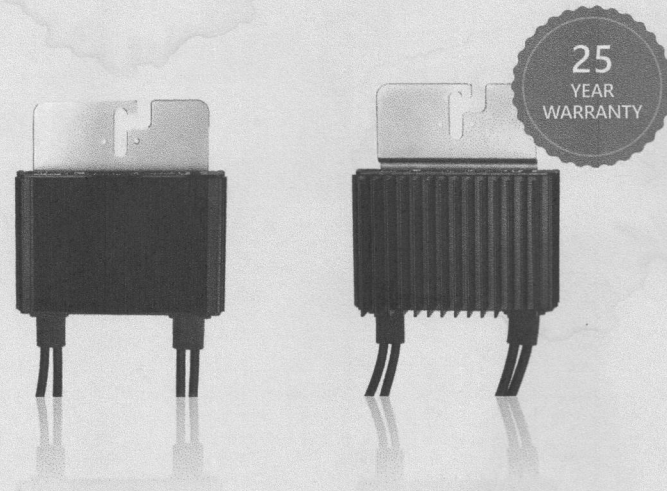
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SS-03

# Power Optimizer

For North America

P320 / P340 / P370 / P400 / P405 / P485 / P505



POWEROPTIMIZER

## PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module-level monitoring
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Module-level voltage shutdown for installer and firefighter safety

[solaredge.com](http://solaredge.com)



## / Power Optimizer For North America

P320 / P340 / P370 / P400 / P405 / P485 / P505

Optimizer model (typical module compatibility)	P320 (for 60-cell modules)	P340 (for high-power 60-cell modules)	P370 (for higher-power 60 and 72-cell modules)	P400 (for 72 & 96-cell modules)	P405 (for high-voltage modules)	P485 (for high-voltage modules)	P505 (for higher current modules)
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INPUT								
Rated Input DC Power <sup>1)</sup>	320	340	370	400	405	485	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48		60	80	125 <sup>2)</sup>		83 <sup>3)</sup>	Vdc
MPPT Operating Range	8 - 48		8 - 60	8 - 80	12.5 - 105		12.5 - 83	Vdc
Maximum Short Circuit Current (Isc)		11			10.1		14	Adc
Maximum DC Input Current		13.75			12.5		17.5	Adc
Maximum Efficiency				99.5				%
Weighted Efficiency				98.8			98.6	%
Overvoltage Category				II				

OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)								
Maximum Output Current				15				Adc
Maximum Output Voltage		60				85		Vdc

OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)								
Safety Output Voltage per Power Optimizer				1 ± 0.1				Vdc

STANDARD COMPLIANCE								
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3							
Safety	IEC62109-1 (class II safety), UL1741							
Material	UL94 V-0, UV Resistant							
RoHS	Yes							

INSTALLATION SPECIFICATIONS									
Maximum Allowed System Voltage	1000								
Compatible inverters	All SolarEdge Single Phase and Three Phase inverters								
Dimensions (W x L x H)	129 x 153 x 27.5 / 5.1 x 6 x 1.1	129 x 153 x 33.5 / 5.1 x 6 x 1.3	129 x 159 x 49.5 / 5.1 x 6.3 x 1.9	129 x 162 x 59 / 5.1 x 6.4 x 2.3					mm / in
Weight (including cables)	630 / 1.4	750 / 1.7	845 / 1.9	1064 / 2.3					gr / lb
Input Connector	MC4 <sup>4)</sup>			Single or dual MC4 <sup>5)</sup>	MC4 <sup>6)</sup>				
Input Wire Length	0.16 / 0.52								m / ft
Output Wire Type / Connector	Double Insulated / MC4								
Output Wire Length	0.9 / 2.95	1.2 / 3.9	1.2 / 3.9	1.2 / 3.9	1.2 / 3.9				m / ft
Operating Temperature Range <sup>7)</sup>	-40 - +85 / -40 - +185								°C / °F
Protection Rating	IP68 / NEMA6P								
Relative Humidity	0 - 100								%

<sup>1)</sup> Rated power of the module at STC will not exceed the optimizer "Rated input DC Power". Modules with up to +5% power tolerance are allowed.  
<sup>2)</sup> NEC 2017 requires max input voltage be not more than 80V.  
<sup>3)</sup> For other connector types please contact SolarEdge.  
<sup>4)</sup> For dual version for parallel connection of two modules use the P485. In the case of an odd number of PV modules in one string, installing one P485 dual version power optimizer.  
<sup>5)</sup> For ambient temperature above +85°C / +185°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Technical Note for more details.

PV System Design Using a SolarEdge Inverter <sup>8)</sup>	Single Phase HD-Wave	Single phase	Three Phase for 208V grid	Three Phase for 277/480V grid	
Minimum String Length (Power Optimizers)	P320, P340, P370, P400 P405, P485, P505	8	10	18	
Maximum String Length (Power Optimizers)		6	8	14	
Maximum String Length (Power Optimizers)		25	25	50 <sup>9)</sup>	
Maximum Power per String	5700 (6000 with SE7600-US - SE11400-US)	5250	6000 <sup>10)</sup>	12750 <sup>10)</sup>	W
Parallel Strings of Different Lengths or Orientations	Yes				

<sup>8)</sup> For detailed string sizing information refer to: [http://www.solaredge.com/sites/default/files/string\\_sizing\\_na.pdf](http://www.solaredge.com/sites/default/files/string_sizing_na.pdf)  
<sup>9)</sup> It is not allowed to mix P405/P485/P505 with P320/P340/P370/P400 in one string.  
<sup>10)</sup> A string with more than 30 optimizers does not meet NEC rapid shutdown requirements: safety voltage will be above the 30V requirement.  
<sup>11)</sup> For 208V grid: it is allowed to install up to 6,500W per string when the maximum power difference between each string is 1,000W.  
<sup>12)</sup> For 277/480V grid: it is allowed to install up to 17,550W per string when the maximum power difference between each string is 2,000W.



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SCALE: AS NOTED	REV: D
DATE: 5/6/2022	SS-04

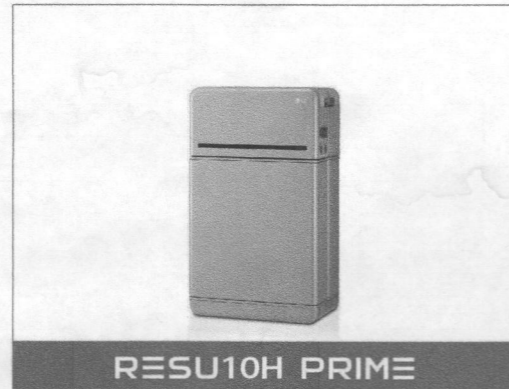
**SPEC SHEET**

**Specification**



**RESU16H PRIME**

Usable Energy (DoD 100%) [kWh]	16	
Power (Rated/Peak) [kW]	7 / 11	
Voltage [V]	350-450	
Round-trip Efficiency [%]	> 90	
Storage Power Consumption [W]	< 0.1	
Dimension [W x H x D, inch]	19.8 x 42.8 x 11.6	
Weight [lb]	Total	352
	Module	286 (143 x 2EA)
	Control Unit	55
	Connect Plate	11
Installation Type	Floor-standing	
Scalability	Up to 2 units (32kWh / 14kW)	
Operational Temperature [°F]	-50-122	
Ingress Rating	IP55	
Warranty	70% @10 years (Global)	
Communication	CAN & RS485	
Certification	Cell	UL 1642
	Product	CE/FCC/RCM/IEC62619/ UL1973/IEC62477



**RESU10H PRIME**

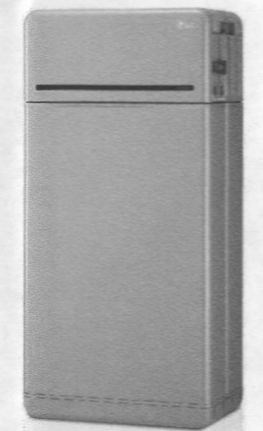
Usable Energy (DoD 100%) [kWh]	9.6	
Power (Rated/Peak) [kW]	5 / 7	
Voltage [V]	350-450	
Round-trip Efficiency [%]	> 90	
Storage Power Consumption [W]	< 0.1	
Dimension [W x H x D, inch]	19.8 x 32.1 x 11.6	
Weight [lb]	Total	246
	Module	180 (90 x 2EA)
	Control Unit	55
	Connect Plate	11
Installation Type	Floor-standing & Wall-mounted	
Scalability	Up to 2 units (19 kWh / 10 kW)	
Operational Temperature [°F]	-50-122	
Ingress Rating	IP55	
Warranty	70% @10 years (Global)	
Communication	CAN & RS485	
Certification	Cell	UL 1642
	Product	CE/FCC/RCM/IEC62619/ UL1973/IEC62477

Compatible Inverters : SMA, Solaredge, SUNGROW, GOODWE, Solis  
\*Values provided for 77°F

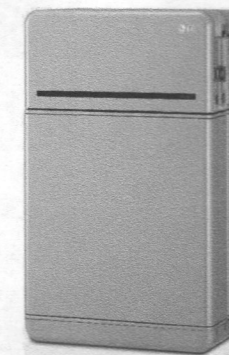
Be Prepared with **RESU PRIME**



Power your home during outages and reduce the amount of energy used during expensive peak hours with RESUhome batteries.

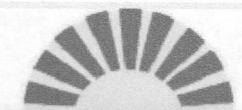


**RESU16H PRIME**



**RESU10H PRIME**

**LG Energy Solution**



Solar Energy Services, Inc.

LICENSE NO: MHIC 126915

**CUSTOMER INFORMATION**

NAME: NATALIE ZIEGLER

ADDRESS: 4044 MANOR LN, ELLICOTT CITY, MD 21042

39.258151, -76.899804  
APN: 1403322173

AHJ: MD-COUNTY HOWARD

UTILITY: BGE

PRN NUMBER: SES-49782

**BATTERY SPEC SHEET**

DRAFTED BY: D.XAVIER  
QC'ED BY: S.GOPAL

PAPER SIZE: 17"X11"

SCALE: AS NOTED

REV: D

DATE: 5/6/2022

SS-05



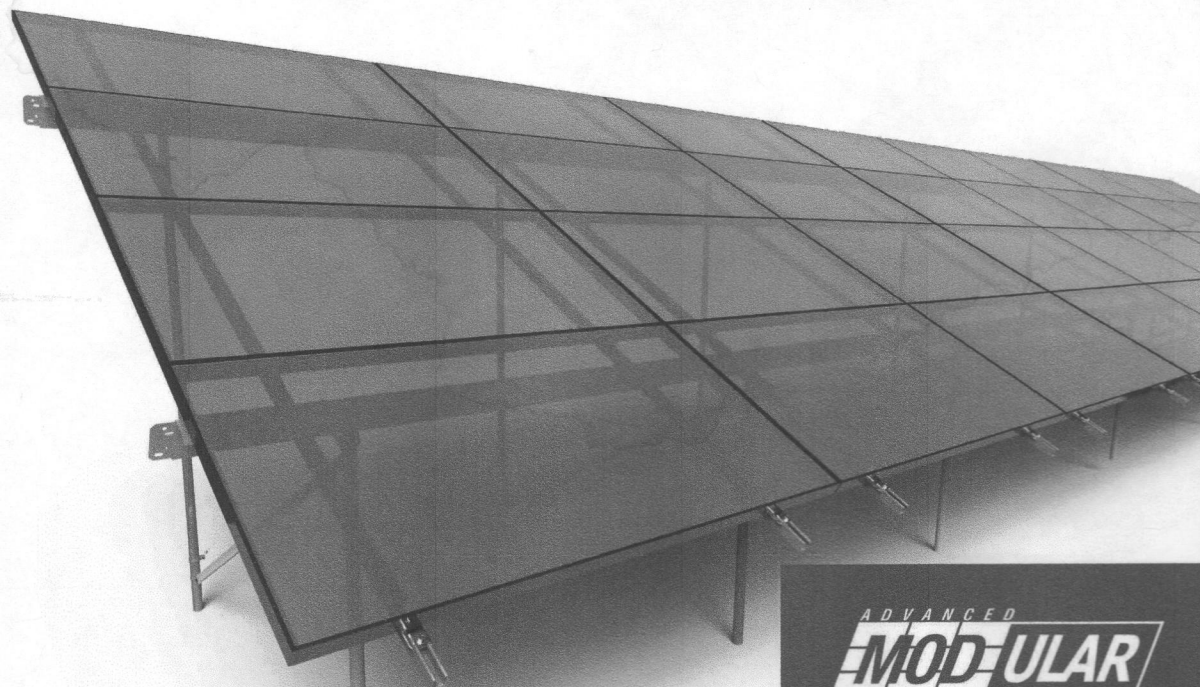
**LG Home Battery RESU**

www.lghomebattery.com

**SPEC SHEET**



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**STANDARD SPECIFICATIONS**

**Racking Material:** High Strength Steel  
**Corrosion Resistance:** Galvanized; G90  
 Higher coatings as required  
**Snow Load:** Up to 100psf  
**Wind Load:** Up to 150mph  
**Mounting Orientation:** 4 in Landscape  
**Tilt Angle:** 5-35 Degree tilt options  
**Anchor Depth:** Based on soil type and frost line  
**Building Code Compliant:** IBC 2012  
**PE Stamp:** APA drawings can be PE stamped for all 50 states and territories

**DUAL POST DESIGN**

APA's Advanced Modular racking is a dual post design making it an ideal choice for challenging sites with heavy wind or snow loads and high topography. Advanced Modular racking comes standard with shallow micro helicals for soft or saturated soils, deep frost lines, shallow bedrock or high water tables. Other foundations with ground screws or ballast are available for sites with rock or non-penetrative soils.



The **Advanced Modular** ground mount system is perfect for large commercial and utility scale solar projects. The robust design has stood the test of time with hundreds of MW's installed in some of the harshest environments across the country.

Innovative features like integrated bonding, cable management trays, and UL certified components reduce electrical costs. Engineered cross bracing, high strength steel and physical testing on every site makes it one of the most rigid systems on the market allowing the highest slope tolerance.

*In business since 2008, APA offers the most versatile line of racking and foundation solutions for projects in even the most challenging environments. With projects nationwide, APA is a trusted quality racking partner.*

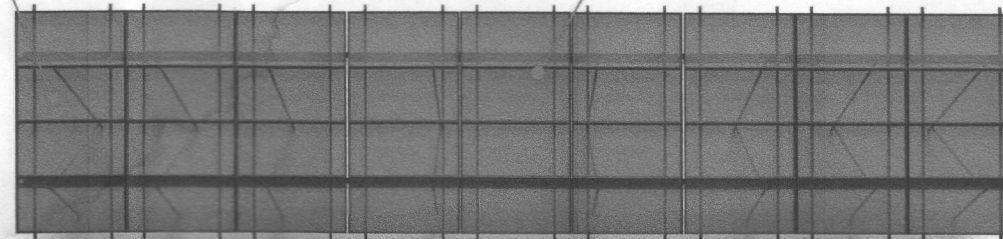
**WHAT MAKES THE <sup>ADVANCED</sup>MODULAR SYSTEM SO SPECIAL?**

**FOUR HIGH LANDSCAPE DESIGN**

How do you fit more content while increasing production and reducing costs? We think 4 panels in landscape is a good place to start.

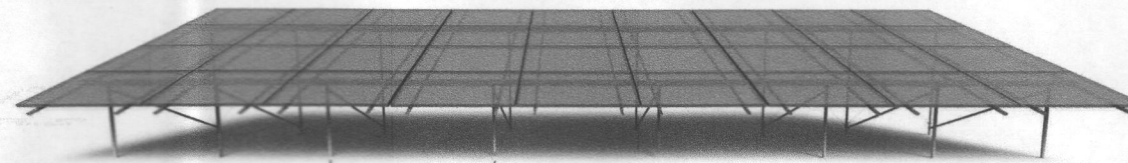
**INTEGRATED GROUNDING/BONDING**

Staying code compliant and safe is important to everyone. Make things easier, faster, and more affordable with our integrated bonding solutions.



**HIGH TERRAIN CAPACITY**

Easily accomodating slopes over 20%, difficult terrain is no longer a problem. Put those extra acres to use, and let it roll.



**INCREASED ANCHOR SPACING**

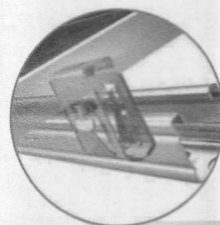
Longer spans mean less parts, faster installation, and more money in your pocket.

**HIGH GROUND CLEARANCE**

Whether your project needs clearance for snow or room for maintenance, our highly adjustable anchors have got you covered.

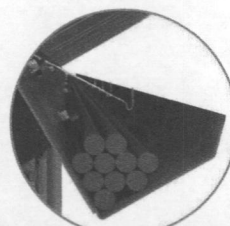
**HIGH STRENGTH PARTS**

Engineered for the toughest northern winters and the harshest southern hurricanes, our racks will still be standing, long after everything else.



**POWERSNAP CLIP**

UL2703 certified. No tools needed, simply slide onto the module and snap into frame, saving on module install time



**WIRE MANAGEMENT**

Integrated cable trays and custom wire clips keep your project tidy, safe, and code compliant for the life of the project, without costly third-party solutions.



419.267.5280 // SALES@APALTERNATIVES.COM

20-345 COUNTY ROAD X P.O. BOX 326 RIDGEVILLE CORNERS, OH 43555

419.267.5280 SALES@APALTERNATIVES.COM



LICENSE NO: MHIC 126915

**CUSTOMER INFORMATION**

NAME: NATALIE ZIEGLER  
 ADDRESS: 4044 MANOR LN, ELLICOTT CITY, MD 21042  
 39.258151, -76.899804  
 APN: 1403322173  
 AHJ: MD-COUNTY HOWARD  
 UTILITY: BGE  
 PRN NUMBER: SES-49782

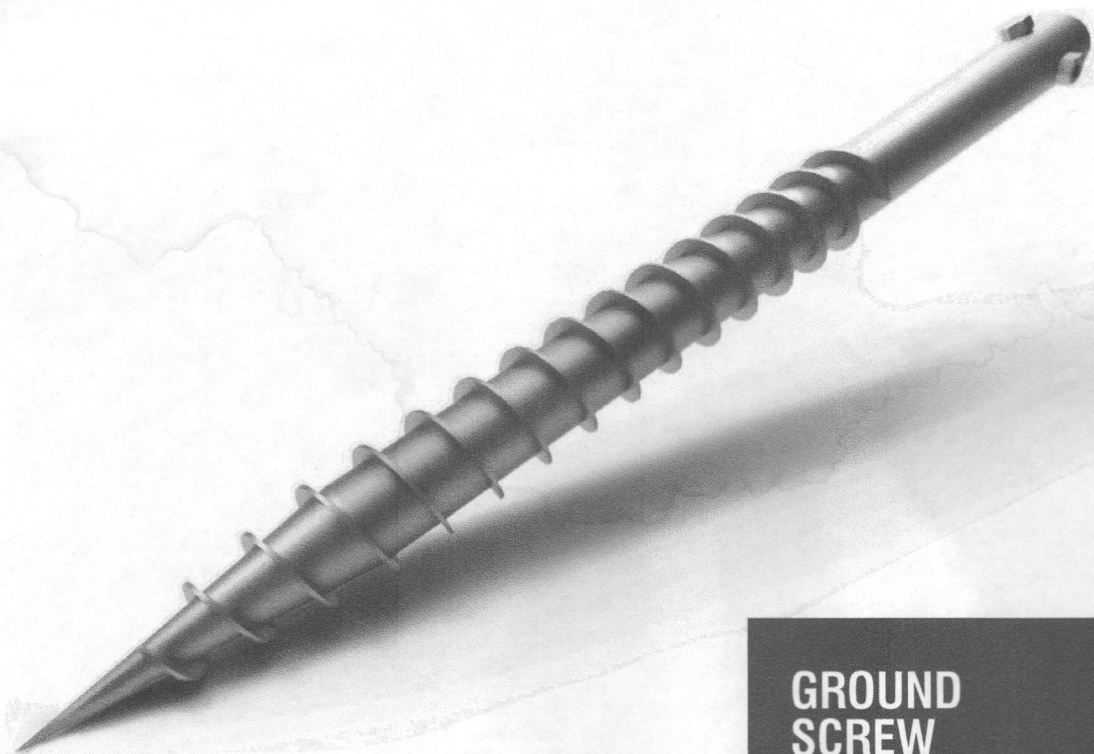
**MOUNTING SPEC SHEET**

DRAFTED BY: D.XAVIER	PAPER SIZE: 17"X11"
QC'ED BY: S.GOPAL	
SCALE: AS NOTED	REV: D
DATE: 5/6/2022	SS-06

**SPEC SHEET**



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WHERE INNOVATION MEETS AUTOMATION



**ROCKY SOIL CONDITIONS**

APA's ground screws are designed for sites with rock. The forged tip helps lead the screw straight and plumb. The threads of the screw bite and hold firmly into the soil without getting caught on rocks and cobbles. The heavy walled tube and welded connections allow massive amounts of torque and downward pressure to be applied helping the screw to advance into even the toughest soils.

**SIMPLE INSTALL**

Several types of equipment can be used to install APA's ground screws. Skid loaders or mini excavators with an auger attachment are among the most common installation equipment. Many drilling contractors can use a simple adaptor to drive ground screws without buying new equipment. Most pile driving rigs can be converted to rotary heads with little effort.



20-345 COUNTY ROAD X P.O. BOX 326 RIDGEVILLE CORNERS, OH 43555

**GROUND SCREW**

APA Ground Screws are manufactured for even the most challenging solar sites. Our ground screws use heavy walled tubing for the main shaft of the screw. The tips of the screw are forged, making them extremely hard, this is essential to help it penetrate into or pass by underground obstructions. The threads are welded with a patented automated welding process to provide a consistent and strong weld along the entire length of the thread. Ground screws come with a durable hot dipped galvanized coating that will protect them from corrosion.

*In business since 2008, APA offers the most versatile line of racking and foundation solutions for projects in even the most challenging environments. With projects nationwide, APA is a trusted quality racking partner.*

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**WHAT MAKES THE GROUND SCREW FOUNDATION SO CAPABLE?**

**HARD SOILS**

Hard soils are why ground screws were designed. The forged tip and heavy duty steel tube allow for thousands of pounds of downforce and turning torque to be applied to the screw. This amount of torque and downforce allows rocks and cobbles to be pushed out of the way during installation

**SOLID ROCK**

Ground screws can be installed into solid rock. By utilizing the method of drilling a pilot hole and adding some gravel backfill. The ground screws are securely installed into the pilot hole using the threads of the screw and the gravel backfill then locks them into the solid rock

**SANDY SOILS**

The granular structure of sand has poor friction value making it hard for driven piles to perform well. However, the shape and threads of a ground screw displace and compact the sand around it when installed. This helps interlock the sand together and provides excellent holding power of the screw threads

**HEIGHT ADJUSTMENT**

Posts can be adjusted to the perfect height by simply raising or lowering the top post in or out of the screw. To secure the top post, simply tighten the three set screws

**SHALLOW INSTALL**

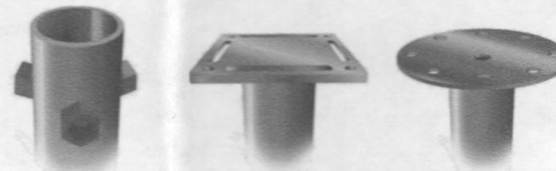
The ground screws can be installed as shallow as 30" depending on the soil. This allows for less chances of hitting underground obstructions

Diameter	Overall Length			
2.35"	40"	61"	73"	85"
3.00"	40"	61"	73"	85"
3.50"	40"	61"	73"	85"
4.00"	61"	73"	85"	
4.50"	61"	73"	85"	

Custom sizes are available - contact us for more information

**SET SCREW OR FLANGE CONNECTION**

Ground screws can be manufactured with a set of three screw nuts or a flange welded to the top of the post. The set screws and flange options allow the screws to be used with fixed tilt, tracking and other solar mounting applications



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LICENSE NO: MHC 126915

**CUSTOMER INFORMATION**

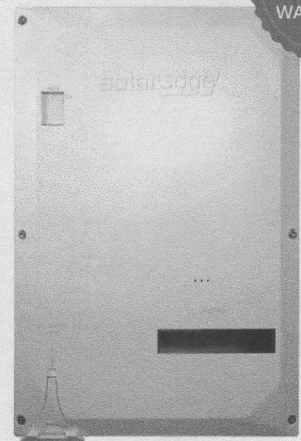
NAME: NATALIE ZIEGLER  
ADDRESS: 4044 MANOR LN, ELLICOTT CITY, MD 21042  
39.258151, -76.899804  
APN: 1403322173  
AHJ: MD-COUNTY HOWARD  
UTILITY: BGE  
PRN NUMBER: SES-49782

**GROUND SCREW SPEC SHEET**

DRAFTED BY: D.XAVIER	PAPER SIZE: 17"X11"
QC'ED BY: S.GOPAL	
SCALE: AS NOTED	REV: D
DATE: 5/6/2022	SS-07

# Backup Interface for North America

BI-EUSGN-01 / BI-NUSGN-01



12  
YEAR  
WARRANTY

STOREDGE®

## Backup Interface for Flexible Backup

- // Automatically provides backup power to home loads in the event of grid interruption
- // Full flexibility in which loads to backup - the entire home or selected loads
- // Scalable solution to support higher power & higher capacity<sup>(\*)</sup>
- // Built-in Auto Transformer and Energy Meter for easier and faster installation
- // Seamless integration with the Energy Hub Inverter with Prism Technology to manage and monitor both PV generation and energy storage
- // Generator connection support<sup>(2)</sup>

(\*) Requires supporting inverter firmware

solaredge.com



## / Backup Interface for North America

BI-EUSGN-01 / BI-NUSGN-01

	BI-EUSGN-01	BI-NUSGN-01	
<b>INPUT FROM GRID</b>			
AC Current Input		200	A
AC Output Voltage (Nominal)		240	Vac
AC Output Voltage Range		211 - 264	Vac
AC Frequency (Nominal)		60	Hz
AC Frequency Range		59.3 - 60.5	Hz
Microgrid Interconnection Device Rated Current		200	A
Service Side AC Main Circuit Breaker Rated Current	200		N/A
Service Side AC Main Circuit Breaker Interrupt Current	10k		N/A
Grid Disconnection Switchover Time		<100	ms
<b>OUTPUT TO MAIN DISTRIBUTION PANEL</b>			
Maximum AC Current Output		200	A
AC L-L Output Voltage (Nominal)		240	Vac
AC L-L Output Voltage Range		211 - 264	Vac
AC Frequency (Nominal)		60	Hz
AC Frequency Range		59.3 - 60.5	Hz
Maximum Inverters AC Current Output in Backup Operation		78	A
Imbalance Compensation in Backup Operation		5000	W
AC L-N Output Voltage in Backup (Nominal)		120	V
AC L-N Output Voltage Range in Backup		105 - 132	V
AC Frequency Range in Backup		55 - 65	Hz
<b>INPUT FROM INVERTER</b>			
Number of Inverter Inputs		3	#
Rated AC Power		7,600	W
Maximum Continuous Input Current @ 240V		32	A
Rated AC Power in Continuous Backup Operation		6,100	W
Maximum Continuous Input Current in Backup Operation		26	A
Peak AC Power (<10 sec) in Backup Operation		7,000	W
Peak AC Current (<10 sec) in Backup Operation		30	A
Inverter Input AC Circuit Breaker		40	A
Upgradability		Up to 3 X 63A CB <sup>(1)</sup>	
<b>GENERATOR<sup>(2)</sup></b>			
Maximum Rated AC Power		15,000	W
Maximum Continuous Input Current		63	Adc
Dry Contact Switch Voltage Rating		250/30	Vac/Vdc
Dry Contact Switch Current Rating		5	A
2-wire Start Switch		Yes	
<b>ADDITIONAL FEATURES</b>			
Installation Type	Suitable for use as service equipment	For main lug only	
Number of Communication Inputs		2	
Communication		RS485	
Energy Meter (for Import/Export)		1% accuracy	
Manual Control Over Microgrid Interconnection Device		Yes	

(1) Each 40A CB supports up to one 7.5kW inverter, with each 63A CB supporting one 10kW and one 11.4kW inverter. The CB upgrade kit is available with the following part numbers: for 40A CB, CB-UPG-40-01; for 63A, CB CB-UPG-63-01  
 (2) Requires supporting inverter firmware



LICENSE NO: MHIC 126915

### CUSTOMER INFORMATION

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 APN: 1403322173

AHJ: MD-COUNTY HOWARD

UTILITY: BGE

PRN NUMBER: SES-49782

### BACKUP INTERFACE SPEC SHEET

DRAFTED BY: D.XAVIER	PAPER SIZE: 17"X11"
QC'ED BY: S.GOPAL	
SCALE: AS NOTED	REV: D
DATE: 5/6/2022	SS-08