GENERAL NOTES

AERIAL VIEW

1. INSTALLATION OF SOLAR PHOTOVOLTAIC SYSTEM SHALL BE IN ACCORDANCE WITH NEC ARTICLE 690, AND ALL OTHER APPLICABLE NEC CODES WHERE NOTED OR EXISTING.

2. PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL COMPLY WITH NEC ARTICLE 110. 3. ALL WIRES, INCLUDING THE GROUNDING ELECTRODE CONDUCTOR SHALL BE PROTECTED FROM PHYSICAL DAMAGE IN ACCORDANCE WITH NEC ARTICLE 250

4. THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE; THIS SYSTEM IS UTILITY INTERACTIVE PER UL 1741 AND DOES NOT INCLUDE STORAGE BATTERIES OR OTHER ALTERNATIVE STORAGE SOURCES.

5. ALL DC WIRES SHALL BE SIZED ACCORDING TO [NEC 690.8]

6. DC CONDUCTORS SHALL BE WITHIN PROTECTED RACEWAYS IN ACCORDANCE WITH [NEC 690.31]

7. ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL JURISDICTIONAL BUILDING CODE.

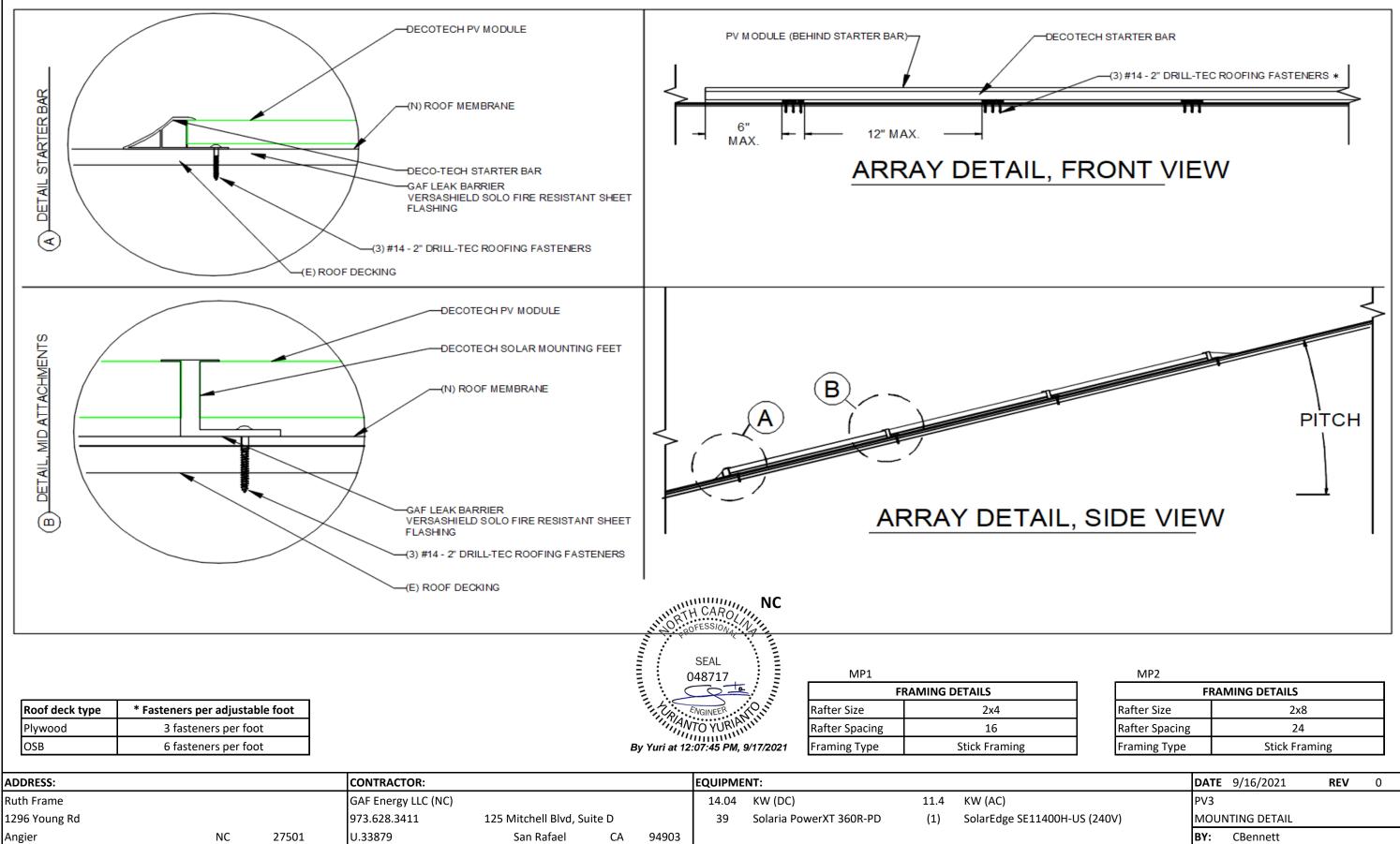


	APPLICABLE CODES	:					DESCRIPT	ION OF DESIGN:		
	2017 NORTH CARO	LINA ELECTRICAL C	ODE				INSTALLAT	TION OF GRID TIED, UTILITY	(INTERACTIVE	PHOTOVOLTAIC SYSTEM
CAE	2018 NORTH CARO	LINA BUILDING CO	DE							
	2018 NORTH CARO	LINA FIRE CODE					EQUIPME	NT: DC SYSTEM SIZE:	14.04 KW	(39) PV Module
ENERGY	2018 NORTH CARO	LINA RESIDENTIAL	CODE					AC SYSTEM SIZE:	11.4 KW	(1) Inverter:
ADDRESS:	•		CONTRACTOR:				EQUIPME	NT:		
Ruth Frame			GAF Energy LLC (NC)				14.04	KW (DC)	11.4	KW (AC)
1296 Young Rd			973.628.3411	125 Mitchell Blvd, S	uite D		(39)	Solaria PowerXT 360R-PD	(1)	SolarEdge SE11400H-U
Angier	NC	27501	U.33879	San Rafael	CA	94903				

	SHEET IND	EX		
	SHEET IND PV1 PV2 PV4 PV5 PV6	EX Cover Page Site Plan Mounting Deta Electrical Diagr Labels Placard		
EM.				
dules: Solaria PowerXT 3 r: SE11400H-US	50R-PD			
	DATE 9/1	6/2021	REV	0
	PV1			
)H-US (240V)	COVER PAG	GE		
		ennett		
	рт. СВ			

	MP#2		MP#1 MP#2		8.5 /12 154 ° 9.5 /12 65 °
	WEWAY		M UI	TILITY METE	ER
DRIVEWAY	DRIVEWAY 56.0 h 56.0 h 56.0 h 56.0 h	LBOY		DAD CENTER C DISCONNE ETER SOCKI TILITY PV M	ECT
	MP#1		BAT BA	INCTION BC ATTERY(IES) RE ACCESS F ' TYP.))
ADDRESS: CONTRACTOR		MENT:	DATE 9/16/2	2021 F	REV 0
Ruth FrameGAF Energy LL1296 Young Rd973.628.3411	(NC) 14.0 125 Mitchell Blvd, Suite D 39		PV2 SITE PLAN		
Angier NC 27501 U.33879	San Rafael CA 94903	(-)	BY: CBenn	ett	

ADDRESS:			CONTRACTOR:				EQUIPME	NT:		
Ruth Frame			GAF Energy LLC (NC)				14.04	KW (DC)	11.4	KW (AC)
1296 Young Rd			973.628.3411	125 Mitchell Blvd, S	uite D		39	Solaria PowerXT 360R-PD	(1)	SolarEdge SE11400H-U
Angier	NC	27501	U.33879	San Rafael	CA	94903				

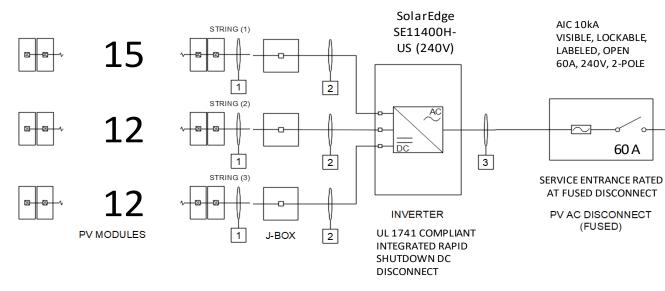


Angier

	DATE	9/16/2021	REV	0
	PV3			
DH-US (240V)	MOUN	ITING DETAIL		
	BY:	CBennett		

					WIRE SCHEDULE				
1	 #10 AWG PV-WIRE, USE-2 COPPER (POS) #10 AWG PV-WIRE, USE-2 COPPER (NEG) #12 AWG BARE, COPPER (GROUND) 3/4in EMT CONDUIT 	2	 #10 AWG THWN-2 (POS) #10 AWG THWN-2 (NEG) #10 AWG THWN-2 (GND) 3/4in EMT CONDUIT 	3	 (1) #6 AWG THWN-2 (L1) (1) #6 AWG THWN-2 (L2) (1) #6 AWG THWN-2 (NEUT) (1) #10 AWG THWN-2 (GND) (1) 3/4in EMT CONDUIT 	4	 #6 AWG THWN-2 (L1) #6 AWG THWN-2 (L2) #6 AWG THWN-2 (NEUT) #10 AWG THWN-2 (NEUT) #10 AWG THWN-2 (GND) 3/4in ALUMINUM EMT CONDUIT 	5	
	(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPROVED EQUIVALENT)		(OR CODE APPR
				Voc ((Vdc): 400 Imp (Adc): 13.50 : (Vdc): 480 Isc (Adc): 30.50 / (Vac): 240 I (Aac): 47.5				

Inverter 1



INTERCONNECTION NOTES

1. GROUND FAULT PROTECTION IN ACCORDANCE WITH [NEC 215.9] & [NEC 230.95]

2. SUPPLY SIDE INTERCONNECTION ACCORDING TO[NEC705.12(A)] WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH [NEC 240.21(B)]

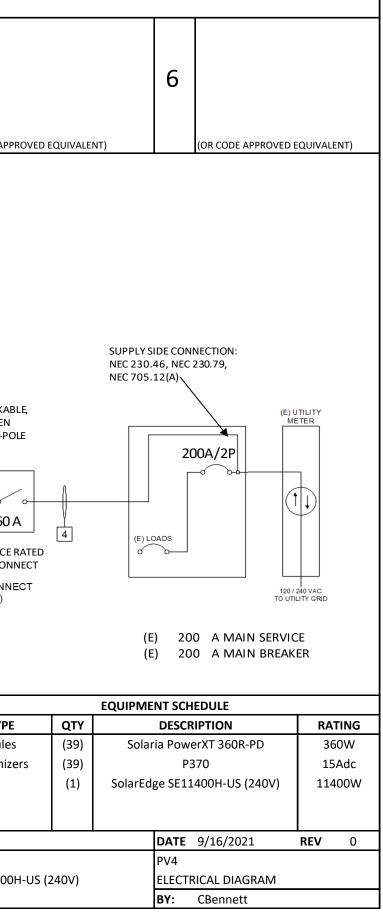
GROUNDING & GENERAL NOTES

1.A SECOND FACILITY GROUNDING ELECTRODE IS NOT REQUIRED PER [NEC 690.47(C)(3)]	
2.PV INVERTER IS UNGROUNDED, TRANSFORMER-LESS TYPE.	
3.DC GEC AND AC EGC TO REMAIN UNSPLICED, OR SPLICED TO EXISTING ELECTRODE	TYP
4.ANY EXISTING WIRING INVOLVED WITH PV SYSTEM CONNECTION THAT IS FOUND TO BE INADEQUATE PER CODE	PV Module
SHALL BE CORRECTED PRIOR TO FINAL INSPECTION.	
5. JUNCTION BOX QUANTITIES, AND PLACEMENT SUBJECT TO CHANGE IN THE FIELD - JUNCTION BOXES DEPICTED ON	DC Optimiz
ELECTRICAL DIAGRAM REPRESENT WIRE TYPE TRANSITIONS.	Inverter
6.AC DISCONNECT NOTED IN EQUIPMENT SCHEDULE OPTIONAL IF OTHER AC DISCONNECTING MEANS IS LOCATED	inverter
WITHIN 10' OF SERVICE DISCONNECT.	
7.SOLAREDGE INVERTERS WHEN USED WILL INCLUDE RS-485 OR ETHERNET COMMUNICATIONS PORT.	

DISCONNECT NOTES

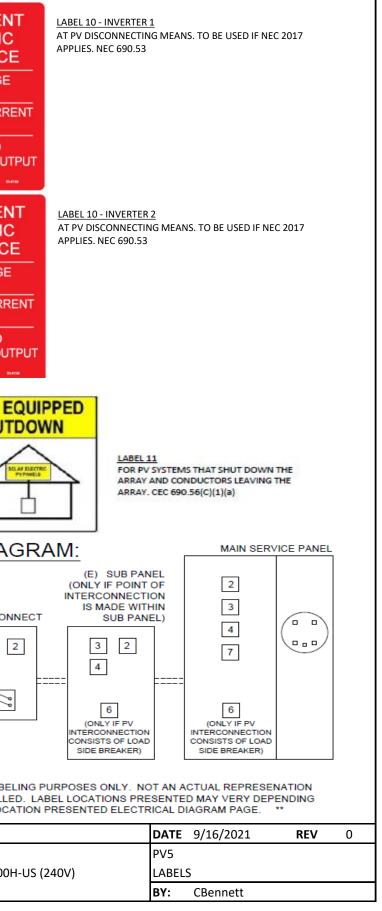
1. DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING LIVE ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS) 2. AC DISCONNECT MUST BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH

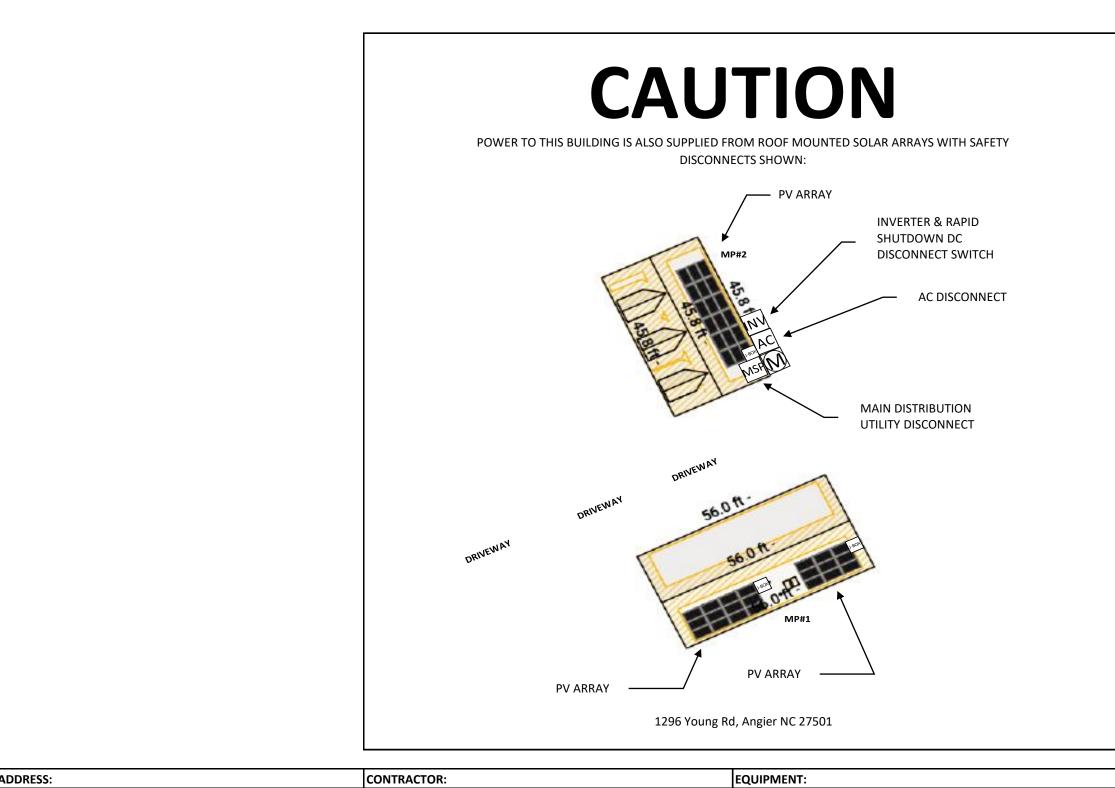
ADDRESS:			CONTRACTOR:				EQUIPME	NT:		
Ruth Frame			GAF Energy LLC (NC)				14.04	KW (DC)	11.4	KW (AC)
1296 Young Rd			973.628.3411	125 Mitchell Blvd, Su	ite D		39	Solaria PowerXT 360R-PD	(1)	SolarEdge SE11400H-
Angier	NC	27501	U.33879	San Rafael	CA	94903				



ith Frame	GAF Energy LLC (N	IC)	14.04 KW (DC)	11.4 KW (AC)
DDRESS:	CONTRACTOR:		EQUIPMENT:	
VOLVED [NEC 110.21] LABELS TO BE A MINIMUM LETTER HEIGHT (FLECTIVE, AND PERMANENTLY AFFIXED [IFC	605.11.1.1]		OF EQUIP ON TYPE	AL DIAGRAM SHOWN ABOVE IS FOR LABS MENT AND CONNECTIONS TO BE INSTALL OF INTERCONNECTION METHOD AND LOC
MATERIAL BASED ON THE REQUIREMENTS C LABELS TO BE OF SUFFICIENT DURABILITY TO	F THE AUTHORITY HAVING JURISDICTION.			
DDES AND MAKE APPROPRIATE ADJUSTMENT LABELING REQUIREMENTS BASED ON THE (N				
LABELS CALLED OUT ACCORDING TO ALL CO DETERMINE EXACT REQUIREMENTS IN THE	FIELD PER CURRENT NEC AND LOCAL			5 8
BELING NOTES:			JUNCTION BOX	2 4 5 8
	CEILINGS, OR FLOORS.NEC 690.31(G)(3&4)	Added.am (B.11)		SUBPANEL - IF USED TO COMBINE PV OUTPUT CIRCUITS AC DISCO
	BOXES, AND OTHER WIRING METHODS; SPACED AT MAXIMUM 10FT SECTION OR WHERE SEPARATED BY ENCLOSURES, WALLS, PARTITIONS,	SHORT CIRCUIT CURRENT 0 AMPS CHARGE CONTROLLER MAX AMPS		
POWER SOURCE	AT DIRECT-CURRENT EXPOSED RACEWAYS, CABLE TRAYS, COVERS AND ENCLOSURES OF JUNCTION	OPERATING CURRENT AMPS MAX SYSTEM VOLTAGE VDC		
WARNING: PHOTOVOLTA	LABEL 5		AT PV DISCONNECTING MEANS. TO BE USED IF NEC APPLIES. NEC 690.53	2014 SHUTDOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY
PV SOLAR ELECTRIC SYSTEM		PHOTOVOLTAIC SYSTEM	LABEL 9 - INVERTER 2	TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO
DUAL POWER SUPPLY SOURCES: UTILITY GRID AND	SUPPLIED FROM MULTIPLE SOURCES, EACHSERVICE EQUIPMENT AND ALL ELECTRIC POWER PRODUCTION SOURCE LOCATIONS.NEC 705.12(D)(3	SHORT CIRCUIT CURRENT 30.5 AMPS		WITH RAPID SHU
WARNING	AT POINT OF INTERCONNECTION FOR EQUIPMENT CONTAINING OVERCURRENT DEVICES IN CIRCUTS SUPPLYING POWER TO A BUSBAR OR CONDUCTOR	OPERATING CURRENT 13.5 AMPS MAX SYSTEM VOLTAGE 480 VDC	6	SOLAR PV SYSTEM
NOMINAL OPERATING AC VOLTAGE 240 V	LABEL 4		AT PV DISCONNECTING MEANS. TO BE USED IF NEC 2 APPLIES. NEC 690.53	2014 MAXIMUM RATED DC TO DC CONVERTER OL XX AMPS
RATED AC OUTPUT CURRENT 47.5 A		PHOTOVOLTAIC SYSTEM	LABEL 9 - INVERTER 1	
	DISCONNECTING MEANS.NEC 690.54, NEC 690.13 (B)	DEVICE, SHALL NOT EXCEED AMPACITY OF BUSBAR.		MAXIMUM VOLTAG
IN THE OPEN POSITION	<u>LABEL 3</u> AT POINT OF INTERCONNECTION, MARKED AT AC	SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT	705.12(D)(2)(3)(C)	PHOTOVOLTAI POWER SOURC
TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED		WARNING	(ONLY IF 3 OR MORE SUPPLY SOURCES TO A BUSBAR)SIGN LOCATED AT LOAD CENTER IF CONTAINING 3 OR MORE POWER SOURCES. NEC	DIRECT CURRE
WARNING	OF THE DISCONNECTING MEANS WHERE ALL TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION.NEC 690.17(E), NEC 705.22	RAPID SHUTDOWN	LABEL 8	DC TO DC CONVERTER OU
	LABEL 2 FOR PV DISCONNECTING MEANS WHERE ALL TERMINALS	PHOTOVOLTAIC SYSTEM EQUIPPED WITH	SIGN LOCATED AT UTILITY SERVICE EQUIPMENT.NEC 690.56(C)	30.5 AMPS MAXIMUM RATED
THIS PHOTOVOLTAIC SYSTEM ARE UNGROUNDED AND MAY BE ENERGIZED			LABEL 7	480 VDC MAXIMUM CIRCUIT CUR
ELECTRIC SHOCK HAZARD THE DC CONDUCTORS OF	CONDUCTORS MAY BE EXPOSED DURING SERVICE. NEC. 690.35(F)	DO NOT RELOCATE THIS OVERCURRENT DEVICE	TO BUSBAR.NEC 705.12(D)(2)(3)(B)	
	AND DEVICE WHERE ENERGIZED UNGROUNDED	INVERTER OUTPUT CONNECTION	PLACED ADJACENT TO THE BACK-FED BREAKER FROM INVERTER IF TIE IN CONSISTS OF LOAD SIDE CONNEC	

ADDRESS:			CONTRACTOR:				EQUIPME	NT:		
Ruth Frame			GAF Energy LLC (NC)				14.04	KW (DC)	11.4	KW (AC)
1296 Young Rd			973.628.3411	125 Mitchell Blvd, Su	ite D		39	Solaria PowerXT 360R-PD	(1)	SolarEdge SE11400H
Angier	NC	27501	U.33879	San Rafael	CA	94903				





ADDRESS:			CONTRACTOR:				EQUIPME	NT:			DATE 9/16/2021	REV	0
Ruth Frame			GAF Energy LLC (NC)				14.04	KW (DC)	11.4	KW (AC)	PV6		
1296 Young Rd			973.628.3411	125 Mitchell Blvd, Sui	te D		39	Solaria PowerXT 360R-PD	(1)	SolarEdge SE11400H-US (240V)	PLACARD		
Angier	NC	27501	U.33879	San Rafael	CA	94903					BY: CBennett		

Single Phase Inverter with HD-Wave Technology

for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US / SE7600H-US / SE10000H-US / SE11400H-US



Optimized installation with HD-Wave technology

- Specifically designed to work with power optimizers
- Record-breaking efficiency
- Fixed voltage inverter for longer strings
- / Integrated arc fault protection and rapid shutdown for / Optional: Revenue grade data, ANSI C12.20 NEC 2014 and 2017, per article 690.11 and 690.12
- / UL1741 SA certified, for CPUC Rule 21 grid compliance

- Extremely small
- Built-in module-level monitoring
- Outdoor and indoor installation
- Class 0.5 (0.5% accuracy)



INVERTERS

/ Single Phase Inverter with HD-Wave Technology for North America

SE3000H-US / SE3800H-US / SE5000H-US / SE6000H-US/ SE7600H-US / SE10000H-US / SE11400H-US

	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	SE11400H-US	
OUTPUT								
Rated AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
Maximum AC Power Output	3000	3800 @ 240V 3300 @ 208V	5000	6000 @ 240V 5000 @ 208V	7600	10000	11400 @ 240V 10000 @ 208V	VA
AC Output Voltage MinNomMax. (211 - 240 - 264)	~	~	~	~	~	~	~	Vac
AC Output Voltage MinNomMax. (183 - 208 - 229)	-	~	-	~	-	-	~	Vac
AC Frequency (Nominal)				59.3 - 60 - 60.5(1)				Hz
Maximum Continuous Output Current @240V	12.5	16	21	25	32	42	47.5	A
Maximum Continuous Output Current @208V	-	16	-	24		-	48.5	A
GFDI Threshold			~	1				A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds				Yes				
INPUT								
Maximum DC Power @240V	4650	5900	7750	9300	11800	15500	17650	W
Maximum DC Power @208V	-	5100	- 1	7750		-	15500	W
Transformer-less, Ungrounded				Yes				
Maximum Input Voltage				480				Vdc
Nominal DC Input Voltage		3	80			400		Vdc
Maximum Input Current @240V ⁽²⁾	8.5	10.5	13.5	16.5	20	27	30.5	Adc
Maximum Input Current @208V ⁽²⁾	-	9	-	13.5	-		27	Adc
Max. Input Short Circuit Current				45				Adc
Reverse-Polarity Protection				Yes				
Ground-Fault Isolation Detection				600kΩ Sensitivity				
Maximum Inverter Efficiency	99			S	99.2			%
CEC Weighted Efficiency			9	99			99 @ 240V 98.5 @ 208V	%
Nighttime Power Consumption				< 2.5				W
ADDITIONAL FEATURES								
Supported Communication Interfaces			RS485, Etherne	et, ZigBee (optional), (Cellular (optional)			
Revenue Grade Data, ANSI C12.20				Optional ⁽³⁾				
Rapid Shutdown - NEC 2014 and 2017 690.12			Automatic Rap	id Shutdown upon AC	C Grid Disconnect			
STANDARD COMPLIANCE								
Safety		UL1741	, UL1741 SA, UL1699B	, CSA C22.2, Canadia	n AFCI according to T.	I.L. M-07		
Grid Connection Standards			IEE	E1547, Rule 21, Rule 1-	4 (HI)			
Emissions				FCC Part 15 Class B				
INSTALLATION SPECIFICATIO	ONS							
AC Output Conduit Size / AWG Range		1	" Maximum / 14-6 AW	/G		1" Maximur	m /14-4 AWG	
DC Input Conduit Size / # of Strings / AWG Range		1" Maxi	mum / 1-2 strings / 14	-6 AWG		1" Maximum / 1-3	strings / 14-6 AWG	
Dimensions with Safety Switch (HxWxD)		17.7 x	14.6 x 6.8 / 450 x 37	0 x 174		21.3 x 14.6 x 7.3	/ 540 x 370 x 185	in / mm
Weight with Safety Switch	22	/ 10	25.1 / 11.4	26.2	! / 11.9	38.8	/ 17.6	lb / kg
Noise		<	25			<50		dBA
Cooling				Natural Convection	1			
Operating Temperature Range			-13 to +140 /	-25 to +60 ⁽⁴⁾ (-40°F /	-40°C option)(5)			°F / °C
Protection Rating			NEMA	4X (Inverter with Safe	ty Switch)			

For other regional settings please contact SolarEdge support
 A higher current source may be used; the inverter will limit its input current to the values stated
 Revenue grade inverter P/N: SExxxH-US000NNC2
 For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf
 -40 version P/N: SExxxH-US000NNU4

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solaredge.com

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RoHS

Power Optimizer

For North America

P320 / P340 / P370 / P400 / P405 / P505



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
- I Next generation maintenance with modulelevel monitoring
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)
- Module-level voltage shutdown for installer and firefighter safety



POWER OPTIMIZER

/ Power Optimizer For North America

P320 / P340 / P370 / P400 / P405 / 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 thin film modules)	P505 (for higher current modules)	
INPUT							
Rated Input DC Power®	320	340	370	400	405	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48		60	80	125(2)	87(2)	Vdc
MPPT Operating Range	8 -	48	8 - 60	8 - 80	12.5 - 105	12.5 - 87	Vdc
Maximum Short Circuit Current (lsc)		11		10).1	14	Adc
Maximum DC Input Current		13.75		12	2.5	17.5	Adc
Maximum Efficiency			99	9.5			%
Weighted Efficiency			98.8			98.6	%
Overvoltage Category			I	I			
OUTPUT DURING OPER	RATION (POWE	R OPTIMIZER CO	ONNECTED TO	OPERATING SO	LAREDGE INVER	RTER)	
Maximum Output Current			1	5			Adc
Maximum Output Voltage		6	i0		8	5	Vdc
OUTPUT DURING STAN INVERTER OFF)	IDBY (POWER C	OPTIMIZER DISC	CONNECTED FR	OM SOLAREDG	E INVERTER OR	SOLAREDGE	
Safety Output Voltage per							
Power Optimizer	1 ± 0.1				Vdc		
STANDARD COMPLIAN	CE						
EMC		FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3					
Safety			IEC62109-1 (class	i II safety), UL1741			
Materia	UL94 V-0 , UV Resistant						
RoHS	Yes						
INSTALLATION SPECIFIC	CATIONS						
Maximum Allowed System Voltage	1000			Vdc			
Compatible inverters		All Sc	olarEdge Single Phase	and Three Phase inv	erters		
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			Single or c	lual MC4(3)			
Input Wire Length			0.16 /	0.52			m / ft
Output Wire Type / Connector			Double Insu	lated / MC4			
Output Wire Length	0.9 / 2.95 1.2 / 3.9				m / ft		
Operating Temperature Range	-40 - +85 / -40 - +185			°C / °F			
Protection Rating	IP68 / NEMA6P						
Relative Humidity	0 - 100			%			
⁽¹⁾ Rated power of the module at STC ⁽²⁾ ⁽²⁾ NEC 2017 requires max input voltag ⁽³⁾ For other connector types please co	e be not more than 80V		ver". Modules with up to	+5% power tolerance are	e allowed		

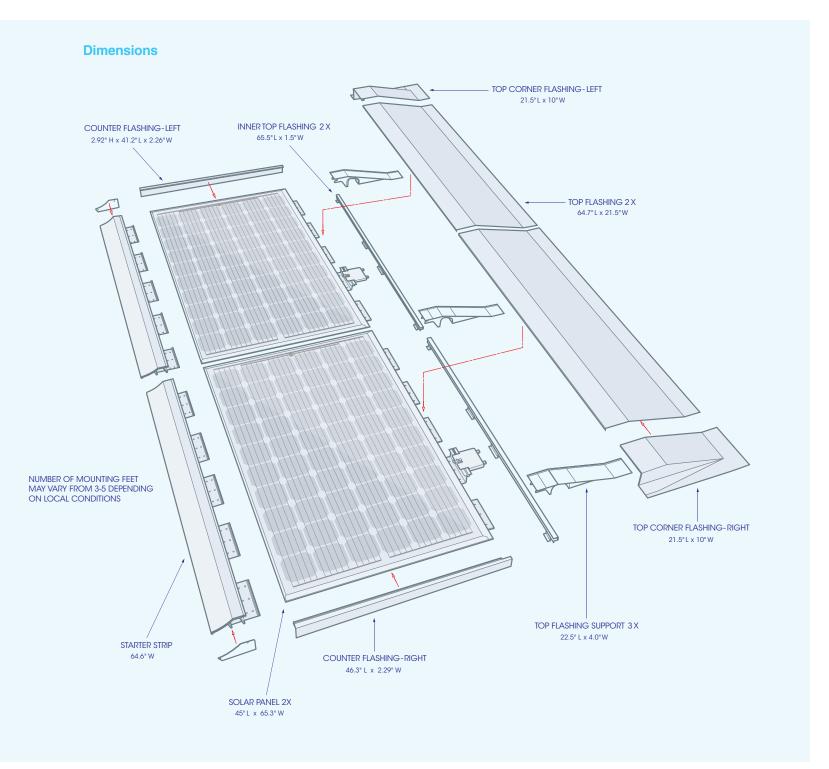
PV System Design Using a SolarEdge Inverter ⁽⁴⁾⁽⁵⁾		Single Phase HD-Wave	Single phase	Three Phase 208V	Three Phase 480V	
Minimum String Length	P320, P340, P370, P400	8		10	18	
(Power Optimizers)	P405 / P505	6		13 (12 with SE3K)	14	
Maximum String Length (Power Optimizers)		25	ō	25	50(6)	
Maximum Power per String		5700 (6000 with SE7600-US - SE11400- US)	5250	6000 ⁽⁷⁾	12750(8)	W
Parallel Strings of Different Lengths		Yes				

 ⁴⁰ For detailed string sizing information refer to: http://www.solaredge.com/sites/default/files/string_sizing_na.pdf
 ⁴⁰ It is not allowed to mix P405/P505 with P320/P340/P370/P400 in one string
 ⁴⁰ A string with more than 30 optimizers does not meet NEC rapid shutdown requirements; safety voltage will be above the 30V requirement
 ⁴⁰ For SE14.4KUS/SE43.2KUS: It is allowed to install up to 6,500W per string when 3 strings are connected to the inverter (3 strings per unit for SE43.2KUS) and when the maximum power difference between the strings is up to 1,000W
 ⁴⁰ For SE30KUS/SE53.3KUS/SE66.6KUS/SE100KUS: It is allowed to install up to 15,000W per string when 3 strings are connected to the inverter (3 strings per unit for SE66.6KUS/SE100KUS) and when the maximum power difference between the strings is up to 1,000W
 ⁴⁰ For SE30KUS/SE53.3KUS/SE66.6KUS/SE100KUS; It is allowed to install up to 15,000W per string when 3 strings are connected to the inverter (3 strings per unit for SE66.6KUS/SE100KUS); and when the maximum power difference between the strings is up to 2,000W

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GAF

Solar Energy System



Design Considerations

- GAF Energy solar energy system must be installed in landscape orientation.
- Certified for direct attachment to roof deck. The roof deck must be a minimum of 15/32" thick plywood or 7/16" thick OSB.
- System is installed directly to the roof deck without engaging rafters.
- GAF Energy solar energy system is intended for use solely on roofs having a slope between 4:12 and 12:12.
- DC optimizers and AC inverters can be used. ٠
- Asphalt shingle installations only. •

Technical Specifications

Model Number	GAF Solar Energy System
PV Laminate	Solaria PowerXT
Maximum Power under STC* (Pmax)	360 Wp
Open Circuit Voltage under STC (Voc)	47.7 V
Maximum Power Point Voltage under STC (Vmpp)	39.5 V
Short Circuit Current under STC (Isc)	9.56 A
Maximum Power Point Current under STC (Impp)	9.13 A
Module Efficiency under STC (ηm)	19.9%
Temperature Correction Factor TC Voc	-0.29%/C



TECH DATA

Description

The sleek, low-profile design of the GAF Energy solar energy system delivers performance and curb appeal at an affordable price.

Product Installation

Refer to the Application Instructions for details on how to install the GAF Energy solar energy system.



Cells per module	60
Cell type	Monocrystalline
PV Connector Type	PV wire with MC4 compatible
PV Laminate Front	3.2 mm high transmittance, tempered, ar coating
PV Laminate Back	Multi-layer Polymer Backsheet
Frame	Black Powder Coated Aluminum
Weight	40.0 lb. (22.2 kg)
Operating Temperatures	-40 to +185°F (-40 to +85°C)
Design Loading	50 lb./ft² (244 kg/m²) Positive Design Load
Certifications	PowerXT-360-R-PD-L UL 1703
Fire Rating	UL 2703 Class A

*STC: Standard Test Conditions 1000W/m², 25°C, AM 1.5. For additional parameters and certifications, refer to the latest version of the GAF Energy solar system Application Instructions