

### VICINITY MAP



### PROPERTY MAP



ENGINEER:



**MODEL ENERGY**

300 FAYETTEVILLE ST.  
#1430  
RALEIGH, NC 27602  
919-274-9905  
MODELENERGY.COM

P-1194

JOB TITLE:

**NEW SOLAR PV SYSTEM**  
10.08 KW DC INPUT  
10.00 KW AC EXPORT

**Brandon Voytek**  
44 Seabiscuit Ct  
LILLINGTON, NC 27546

### CONSTRUCTION NOTES

- ALL WORK AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL, STATE, AND LOCAL CODES AND ORDINANCES
- FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS, BEST PRACTICES, AND SPECIFICATIONS
- WIRES SHALL BE RATED AND LABELED "SUNLIGHT RESISTANT" WHERE EXPOSED TO AMBIENT CONDITIONS
- THE PHOTOVOLTAIC SYSTEM SHALL NOT EXCEED 600 VOLTS OR 800 AMPS
- EACH ELECTRICAL APPLIANCE SHALL BE PROVIDED WITH A NAMEPLATE GIVING THE IDENTIFYING NAME AND THE RATING IN VOLTS AND AMPERES, OR VOLTS AND WATTS. IF THE APPLIANCE IS TO BE USED ON A SPECIFIC FREQUENCY OR FREQUENCIES, IT SHALL BE SO MARKED. WHERE MOTOR OVERLOAD PROTECTION EXTERNAL TO THE APPLIANCES IS REQUIRED, THE APPLIANCE SHALL BE SO MARKED
- WHERE APPLICABLE, GROUNDING ELECTRODE CONDUCTOR TO BE CONTINUOUS. GROUNDING CRIMPS TO BE IRREVERSIBLE
- GROUNDING DC PHOTOVOLTAIC ARRAYS SHALL BE PROVIDED WITH DC GROUND-FAULT PROTECTION THAT MEETS THE REQUIREMENTS OF NEC SECTION 690.5. UNGROUNDED DC PHOTOVOLTAIC ARRAYS SHALL COMPLY WITH NEC SECTION 690.35
- IN ONE- AND TWO-FAMILY DWELLINGS, LIVE PARTS IN PHOTOVOLTAIC SOURCE CIRCUITS AND PHOTOVOLTAIC OUTPUT CIRCUITS OVER 150 VOLTS TO GROUND, SHALL ONLY BE ACCESSIBLE TO QUALIFIED PERSONS WHILE ENERGIZED.
- PHOTOVOLTAIC SYSTEMS SHALL BE PERMANENTLY MARKED AT VARIOUS EQUIPMENT LOCATIONS TO IDENTIFY THAT A PHOTOVOLTAIC SYSTEM IS INSTALLED AND THAT VARIOUS DANGERS ARE PRESENT.
- EACH PHOTOVOLTAIC SYSTEM DISCONNECTING MEANS SHALL BE PERMANENTLY MARKED TO IDENTIFY IT AS A PHOTOVOLTAIC SYSTEM DISCONNECT
- WHERE ALL TERMINALS OF A DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION, A WARNING SIGN SHALL BE MOUNTED ON OR ADJACENT TO THE DISCONNECT
- A PERMANENT LABEL FOR THE DIRECT-CURRENT PHOTOVOLTAIC POWER SOURCE SHALL BE PROVIDED BY THE INSTALLER AT THE DC DISCONNECT MEANS
- A PERMANENT PLAQUE OR DIRECTORY, DENOTING ALL ELECTRIC POWER SOURCES SERVING THE PREMISES, SHALL BE INSTALLED AT EACH SERVICE EQUIPMENT LOCATION AND AT LOCATIONS OF ALL POWER PRODUCTION SOURCES.
- A PERMANENT PLAQUE OR DIRECTORY SHALL BE PROVIDED DENOTING THE LOCATIONS OF THE SERVICE DISCONNECT MEANS AND THE PHOTOVOLTAIC SYSTEM DISCONNECT MEANS IF THEY ARE NOT LOCATED AT THE SAME LOCATION.
- ALL MODULE GROUND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH NEC SECTION 690.4 (C)

### ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
DC	DIRECT CURRENT
ECC	EQUIPMENT GROUNDING CONDUCTOR
EMT	ELECTRICAL METAL TUBING
GALV	GALVANIZED
GEC	GROUNDING ELECTRODE CONDUCTOR
GND	GROUND
I	CURRENT
IMP	CURRENT AT MAXIMUM POWER
Isc	SHORT-CIRCUIT CURRENT
kVA	KILOVOLT AMPERE
kW	KILOWATT
MAX	MAXIMUM
MIN	MINIMUM
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
NOM	NOMINAL
NTS	NOT TO SCALE
Pnom	NOMINAL POWER
PV	PHOTOVOLTAIC
PVC	POLYVINYL CHLORIDE
SN	SOLAR NOON
STC	STANDARD TEST CONDITIONS
TYP	TYPICAL
V	VOLT
VMP	VOLTAGE AT MAXIMUM POWER
Voc	OPEN-CIRCUIT VOLTAGE
W	WATT

### CODE REFERENCES

2017 NATIONAL ELECTRIC CODE  
2012 NORTH CAROLINA BUILDING CODE  
2012 NORTH CAROLINA RESIDENTIAL CODE  
2012 NORTH CAROLINA FIRE CODE

### SHEET INDEX

PV1.1 - PROJECT INFORMATION  
PV2.1 - SITE & STRUCTURAL INFORMATION  
PV3.1 - ELECTRICAL INFORMATION  
PV4.1 - EQUIPMENT LABELS

### SITE CONDITIONS

ASCE 7-10 WIND SPEED - 115 MPH  
EXPOSURE CATEGORY - B  
RISK CATEGORY - II

### LEGEND

	DISCONNECT SWITCH
	FUSE
	CIRCUIT BREAKER
	EQUIP. GROUND

CLIENT:



ISSUED FOR:	DATE:
PERMIT	8/08/18

PROJECT INFORMATION

# PV1.1

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ROOF MOUNT & FASTENER	
ROOF MOUNT:	SOLAR ROOF HOOK
MAKE	SOLAR ROOF HOOK
MODEL	L-FOOT
MATERIAL	ALUMINUM
FASTENER	
MAKE	SOLAR ROOF HOOK
MODEL	QUICKBOLT
MATERIAL	304 SS
SIZE	5/16-18 X 7"
GENERAL	
WEIGHT	1 LBS
FASTENERS PER MOUNT	1 PER MOUNT
MAX. PULL-OUT FORCE	960 LBS.
SAFETY FACTOR	2.0
DESIGN PULL-OUT FORCE	480 LBS.

ARRAY SUMMARY	
# MODULES	28
MOD. ATT. MID	50
MOD. ATT. END	12
ROOF MOUNTS	42
RAIL LENGTH	195 FT.
ARRAY AREA	586 SQFT.
ARRAY WEIGHT	1868 LBS.
AZIMUTH @ SN	176°
TILT ANGLE	32°

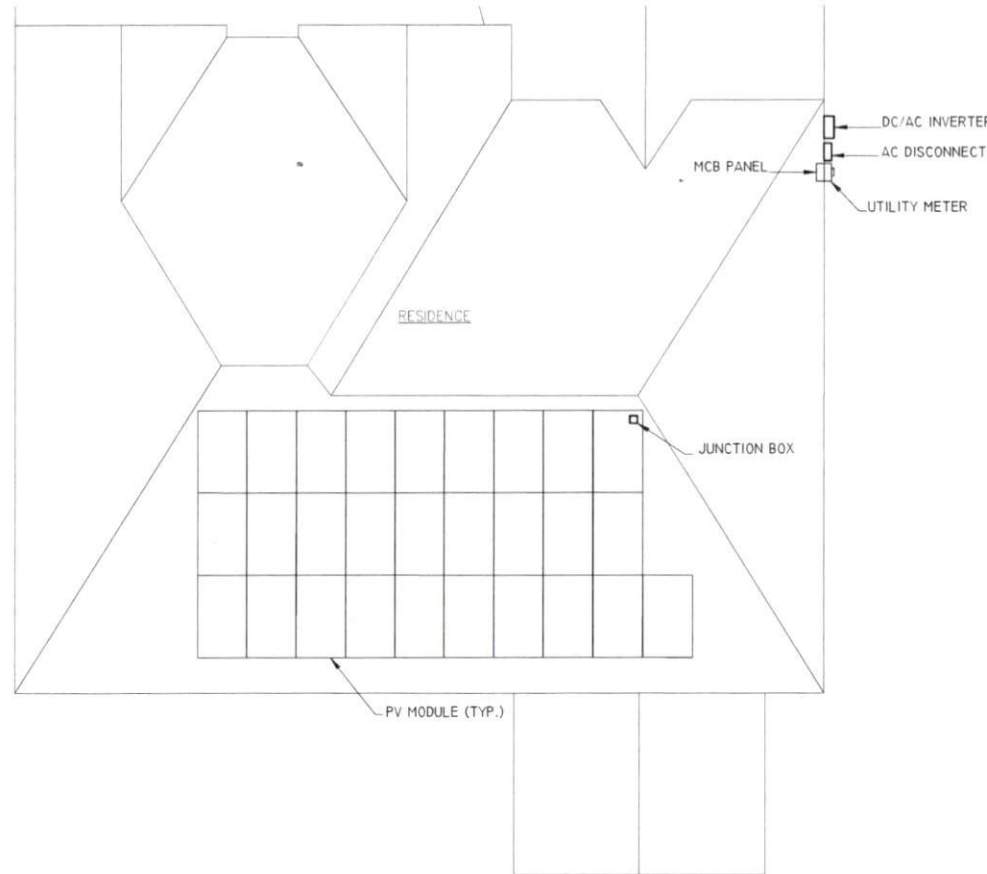
ROOF SUMMARY	
STRUCTURE:	
TYPE	TRUSSES
MATERIAL	SOUTHERN PINE #2
SIZE	2" X 4"
SPACING	24" o.c.
EFF. SPAN	10'-4"
PITCH	8 / 12
DENSITY	30 LBS./CU.FT.
DECKING:	
TYPE	OSB
MATERIAL	WOOD COMPOSITE
THICKNESS	7/16"
WEIGHT	1.6 LBS./SQFT.
ROOFING:	
TYPE	ARCH SHINGLE
MATERIAL	ASPHALT
WEIGHT	2.3 LBS./SQFT.

PV MODULES	
MAKE	TRINA
MODEL	TSM-DD14A (II) PERC MONO
WIDTH	39 1"
LENGTH	77"
THICKNESS	1.57"
WEIGHT	57.3 LBS

MOUNTING RAILS	
MAKE	UNIRAC
MODEL	SM STANDARD
MATERIAL	ALUMINUM
WEIGHT	1.25 LBS./FT.
SPACING	34 IN.

ROOF LOADING	
DEAD LOAD:	
ROOFING	3.9 LBS./SQFT.
PV ARRAY	2.8 LBS./SQFT.
TOTAL	6.7 LBS./SQFT.
WIND LOAD:	
UPLIFT ZONE 1	-24.6 LBS./SQFT.
UPLIFT ZONE 2	-29.0 LBS./SQFT.
UPLIFT ZONE 3	-29.0 LBS./SQFT.
DOWNWARD	25.0 LBS./SQFT.
FASTENER LOAD:	
UPLIFT ZONE 1	-474 LBS.
UPLIFT ZONE 2	-372 LBS.
UPLIFT ZONE 3	-186 LBS.
DOWNWARD	321 LBS.

ROOF ZONES:	
ALL ZONES	MAX. OVERHANG = 16"
ZONE 1	MAX. FASTENER SPAN ZONE 1 = 72"
ZONE 2	MAX. FASTENER SPAN ZONE 2 = 48"
ZONE 3	MAX. FASTENER SPAN ZONE 3 = 24"



**STATEMENT OF STRUCTURAL COMPLIANCE**

THE EXISTING ROOF STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE ADDITIONAL LOADS OF THE PURPOSED PV SYSTEM. IN ADDITION, THE RACKING AND FASTENING SYSTEM SHALL BE CAPABLE OF SECURING THE SYSTEM TO THE STRUCTURE UNDER DESIGN CONDITIONS WHEN INSTALLED PROPERLY AND IN ACCORDANCE WITH THE RACKING AND FASTENING ARRANGEMENT DETAILED WITHIN THESE DRAWINGS.

SIGNED: *Andrew W. King*  
 NAME: ANDREW W. KING, PE  
 TITLE: PROFESSIONAL ENGINEER

ENGINEER:



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ISSUED FOR: PERMIT  
 DATE: 8/08/18

SITE & STRUCTURAL INFORMATION

PV2.1

PV MODULES	
MAKE	TRINA
MODEL	TSM-DD14A (II) PERC MONO
TECHNOLOGY	MONOCRYST.
NOM. POWER (P <sub>NOH</sub> )	360 WATTS
NOM. VOLT. (V <sub>MP</sub> )	38.9 VOLTS
O.C. VOLT. (V <sub>OC</sub> )	47.2 VOLTS
MAX. SYS. VOLT.	1000 V (UL)
TEMP. COEF. (Voc)	-0.137 %/°C
NOM. CURR. (I <sub>MP</sub> )	9.26 AMPS
S.C. CURR. (I <sub>SC</sub> )	9.79 AMPS
MAX. SERIES FUSE	20 AMPS

MODULE OPTIMIZER	
MAKE	SOLAREEDGE
MODEL	P400
DC INPUT:	
NOM. POWER	400 WATTS
VOLT. RANGE	8-80
MAX. CURR.	10.0 AMPS
DC OUTPUT:	
NOM. POWER	400 WATTS
MAX. VOLT.	60 VOLTS
MAX. CURR.	15 AMPS
MIN. STRING	8 OPTIMIZERS
MAX. STRING	25 OPTIMIZERS
MAX. POWER	5250 WATTS

JUNCTION BOX	
MAKE	SOLADECK
MODEL	0783-3R
PROT. RATING	NEMA 3R
VOLT. RATING	600 VOLTS
AMP RATING	120 AMPS
UL LISTING	UL 50

CONDUCTOR SCHEDULE													
TAG	CURRENT CARRYING CONDUCTORS				GROUNDING CONDUCTORS				CONDUIT/RACEWAY			NOTES	
	QTY.	SIZE	MATERIAL	INSULATION	QTY.	SIZE	MATERIAL	INSULATION	QTY.	SIZE	MATERIAL		LOCATION
C1	4	10 AWG	COPPER	PV WIRE	1	6 AWG	COPPER	BARE	-	-	-	FREE AIR	1
C2	4	10 AWG	COPPER	THWN-2	1	10 AWG	COPPER	THWN-2	1	1/2"	EMT	EXT	2.4
C3	3	6 AWG	COPPER	THWN	1	10 AWG	COPPER	THWN	1	3/4"	EMT	EXT	2.4
C4	3	6 AWG	COPPER	THWN	-	-	-	-	1	3/4"	EMT	EXT	2.4
XC	-	-	-	-	-	-	-	-	-	-	-	-	3

NOTES:

1. MANUFACTURER PROVIDED. UL LISTED WIRING HARNESS FOR USE ON EXPOSED ROOFS
2. CONDUIT SIZE SHOWN IS CODE MINIMUM. LARGER SIZES ARE ALLOWED.
3. EXISTING CONDUCTORS. FIELD VERIFY
4. EQUIPMENT TERMINAL RATING SHALL BE A MINIMUM OF 75°C AT BOTH END OF CONDUCTOR

DC/AC INVERTER	
MAKE	SOLAREEDGE
MODEL	SE10000H-US
TECHNOLOGY	TRANSFORMER-LESS
DC INPUT:	
MAX. POWER	15500 WATTS
VOLT. RANGE	380-480 VOLTS
NOM. VOLT.	400 VOLTS
MAX. CURRENT	27 AMPS
STRING INPUTS	3 STRINGS
AC OUTPUT:	
NOM. POWER	10000 WATTS
NOM. VOLT.	240 VOLTS
MAX. POWER	10000 WATTS
MAX. CURR.	42 AMPS
GFP (Y/N)	YES
GFCI (Y/N)	YES
AFCI (Y/N)	YES
DC DISC. (Y/N)	YES
RAPID SHUTDOWN	YES
FUSE RATING	15 AMPS
PROTECT. RATING	NEMA 3R

AC DISCONNECT	
MAKE	GENERIC
MODEL	N/A
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
AMP RATING	60 AMPS
UL LIST. (Y/N)	YES
FUSED (Y/N)	YES
FUSE RATING	60 AMPS

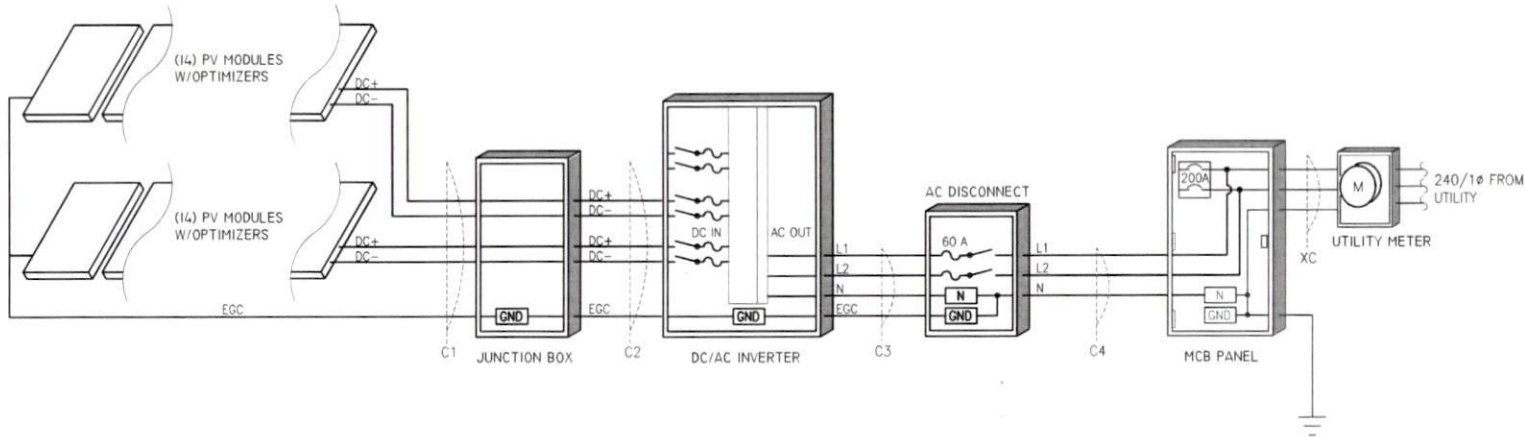
NOTES:

- LOAD-BREAK RATED
- VISIBLE OPEN
- LOCKABLE IN OPEN POSITION
- INSTALL ADJACENT TO METER
- SERVICE RATED
- PROVIDE NEUTRAL/GROUND BONDING JUMPER
- PROVIDE PLAQUE SHOWING SERVICE DISCONNECT LOCATIONS

MCB PANEL/SERVICE DISCONNECT (EXISTING)	
MAKE	EATON
MODEL	N/A
ENCL. RATING	NEMA 3R
VOLT. RATING	240 VOLTS
BUS RATING	200 AMPS
UL LIST. (Y/N)	YES
MAIN BREAKER (Y/N)	YES
BREAKER RATING	200 AMPS

NOTES:

- BACK-FEED SOLAR OUTPUT VIA SUPPLY SIDE TAP INSIDE OF MCB PANEL.



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ELECTRICAL INFORMATION

PV3.1

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**PHOTOVOLTAIC ARRAY AC DISCONNECT**

MAXIMUM OPERATING AC VOLTAGE: 240V  
MAXIMUM OPERATING CURRENT: 42 AMPS

PLACE ON COVER OF AC DISCONNECT SWITCH

**WARNING!**  
**ELECTRIC SHOCK HAZARD!**  
**DO NOT TOUCH TERMINALS!**

TERMINALS ON BOTH THE LINE AND LOAD SIDES  
MAY BE ENERGIZED IN THE OPEN POSITION.

PLACE ON JUNCTION BOX

**WARNING!**  
**PHOTOVOLTAIC POWER SOURCE**

PLACE ON DC CONDUIT

**WARNING!**  
**ELECTRIC SHOCK HAZARD!**  
**DO NOT TOUCH TERMINALS!**

DUAL POWER SOURCE. PHOTOVOLTAIC  
SYSTEM IS SECONDARY POWER SOURCE.  
TERMINALS ON BOTH THE LINE AND LOAD SIDES  
MAY BE ENERGIZED IN THE OPEN POSITION.

PLACE ON MCB PANEL

**WARNING!**  
**INVERTER OUTPUT CONNECTION:**  
**DO NOT RELOCATE THIS OVER-CURRENT DEVICE**

LABEL FOR PV INPUT BREAKER

**PHOTOVOLTAIC SYSTEM EQUIPPED  
WITH RAPID SHUTDOWN**

RAPID SHUTDOWN LABEL

**WARNING!**  
**ELECTRIC SHOCK HAZARD. THE DC  
CONDUCTORS OF THIS PHOTOVOLTAIC SYSTEM  
ARE UNGROUNDED AND MAY BE ENERGIZED.**

PLACE ON JUNCTION BOXES, COMBINER BOXES, DISCONNECTS AND  
EQUIPMENT THAT ARE CONNECTED TO UNGROUNDED CIRCUITS.

**WARNING!**  
**ELECTRIC SHOCK HAZARD!**  
**DO NOT TOUCH TERMINALS!**

TERMINALS ON BOTH THE LINE AND LOAD SIDES MAY BE ENERGIZED  
IN THE OPEN POSITION. THE DC CONDUCTORS OF THIS  
PHOTOVOLTAIC SYSTEM ARE UNGROUNDED AND MAY BE  
ENERGIZED.

**PHOTOVOLTAIC POWER SOURCE**

OPERATING AC VOLTAGE: 240V  
MAX OPERATING AC OUTPUT CURRENT: 42 AMPS

**PHOTOVOLTAIC ARRAY DC DISCONNECT**

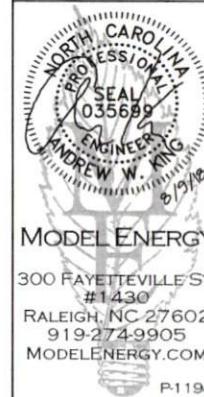
OPERATING DC VOLTAGE: 380 VOLTS  
OPERATING CURRENT: 26.5 AMPS  
MAX SYSTEM VOLTAGE: 480 VOLTS  
SHORT-CIRCUIT CURRENT: 30 AMPS

PLACE ON THE COVER OF INVERTER/DC DISCONNECT SWITCH

*EQUIPMENT LABEL NOTES*

1. LABELS SHALL HAVE A RED BACKGROUND COLOR WITH WHITE LETTERING, TEXT SHALL BE IN ALL CAPITAL LETTERS AND NOT BE BOLD FONT
2. LABEL MATERIAL SHALL BE SUITABLE FOR THE EQUIPMENT ENVIRONMENT
3. CONDUIT SHALL BE MARKED WITH REQUIRED LABEL EVERY 10 FEET

ENGINEER:



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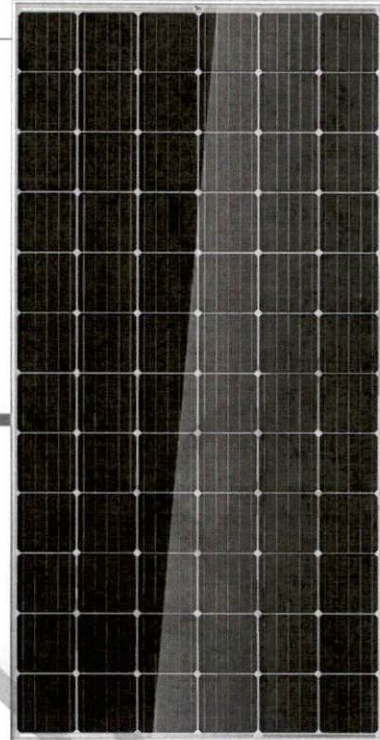
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EQUIPMENT LABELS

**PV4.1**

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THE  
**TALLMAX<sup>M</sup> plus<sup>t</sup>**  
 FRAMED 72-CELL MODULE(1500V)



**72 CELL**  
 MONOCRYSTALLINE MODULE

**340-375W**  
 POWER OUTPUT RANGE

**19.3%**  
 MAXIMUM EFFICIENCY

**0~+5W**  
 POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

**Comprehensive Products And System Certificates**

IEC61215/IEC61730/UL1703/IEC61701/IEC62716  
 ISO 9001: Quality Management System  
 ISO 14001: Environmental Management System  
 ISO14064: Greenhouse gases Emissions Verification  
 OHSAS 18001: Occupation Health and Safety Management System



**Ideal for large scale installations**

- Reduce BOS cost by connecting more modules in a string
- 1500V UL/1500V IEC certified



**Maximize limited space with top-end efficiency**

- Up to 193 W/m<sup>2</sup> power density
- Low thermal coefficients for greater energy production at high operating temperatures



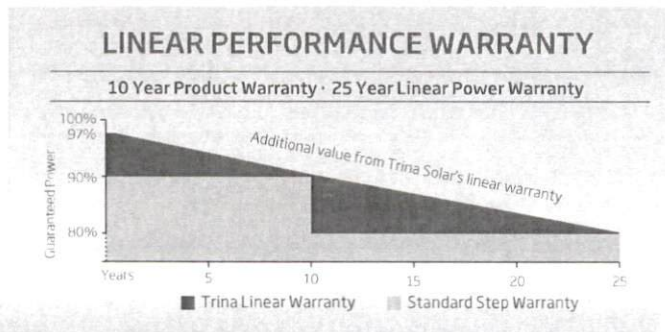
**Highly reliable due to stringent quality control**

- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- 100% EL double inspection



**Certified to withstand the most challenging environmental conditions**

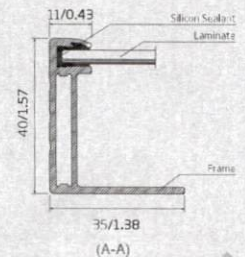
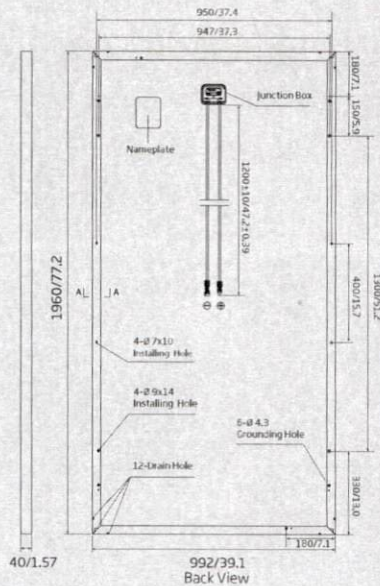
- 2400 Pa wind load
- 5400 Pa snow load



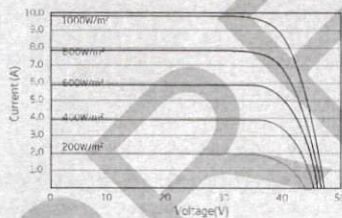
### PRODUCTS POWER RANGE

TSM-DE14A(II) STD MONO	340-350W
TSM-DE14A(II) PERC MONO	355-375W

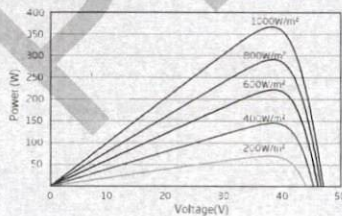
### DIMENSIONS OF PV MODULE(mm/inches)



### I-V CURVES OF PV MODULE(365W)



### P-V CURVES OF PV MODULE(365W)



### ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}$ (Wp)*	340	345	350	355	360	365	370	375
Power Output Tolerance- $P_{MAX}$ (W)	0 ~ +5							
Maximum Power Voltage- $V_{MPP}$ (V)	38.2	38.5	38.7	38.8	39.0	39.3	39.7	40.0
Maximum Power Current- $I_{MPP}$ (A)	8.90	8.96	9.04	9.14	9.24	9.30	9.33	9.37
Open Circuit Voltage- $V_{OC}$ (V)	46.2	46.7	47.0	47.4	47.7	48.0	48.3	48.5
Short Circuit Current- $I_{SC}$ (A)	9.50	9.55	9.60	9.65	9.70	9.77	9.83	9.88
Module Efficiency $\eta_m$ (%)	17.5	17.7	18.0	18.3	18.5	18.8	19.0	19.3

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.  
\*Measuring tolerance: ±3%.

### ELECTRICAL DATA (NOCT)

Maximum Power- $P_{MAX}$ (Wp)	253	257	261	264	268	272	276	279
Maximum Power Voltage- $V_{MPP}$ (V)	35.4	35.7	35.9	36.0	36.2	36.4	36.8	37.1
Maximum Power Current- $I_{MPP}$ (A)	7.15	7.20	7.26	7.34	7.42	7.47	7.50	7.53
Open Circuit Voltage- $V_{OC}$ (V)	42.9	43.4	43.7	44.1	44.3	44.6	44.9	45.1
Short Circuit Current- $I_{SC}$ (A)	7.67	7.71	7.75	7.79	7.83	7.89	7.94	7.98

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

### MECHANICAL DATA

Solar Cells	Monocrystalline 156.75 × 156.75 mm (6 inches)
Cell Orientation	72 cells (6 × 12)
Module Dimensions	1960 × 992 × 40 mm (77.2 × 39.1 × 1.57 inches)
Weight	26.0 kg (57.3 lb) with 4.0 mm glass; 22.5 kg (49.6 lb) with 3.2 mm
Glass	glass 4.0 mm (0.16 inches) for PERC Mono; 3.2 mm (0.13 inches) for Std Mono, High Transmission, AR Coated Tempered Glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm <sup>2</sup> (0.006 inches <sup>2</sup> ), 1200 mm (47.2 inches)
Connector	Trina TS4
Fire Type	Type 1 or Type 2

### TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	44°C (±2°C)
Temperature Coefficient of $P_{MAX}$	-0.39%/°C
Temperature Coefficient of $V_{OC}$	-0.29%/°C
Temperature Coefficient of $I_{SC}$	0.05%/°C

### MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	15A (Power ≤ 350W) 20A (Power ≥ 355W)

(DO NOT connect Fuse in Combine Box with two or more strings in parallel connection)

### WARRANTY

- 10 year Product Workmanship Warranty
- 25 year Linear Power Warranty

(Please refer to product warranty for details)

### PACKAGING CONFIGURATION

- Modules per box: 27 pieces
- Modules per 40' container: 648 pieces

# solar**edge**

## Single Phase Inverters

for North America

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

INVERTERS



### 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 NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Extremely small
- High reliability without any electrolytic capacitors
- Built-in module-level monitoring
- Outdoor and indoor installation
- Optional: Revenue grade data, ANSI C12.20 Class 0.5 (0.5% accuracy)





# Single Phase Inverters for North America

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

	SE3000H-US	SE3800H-US	SE5000H-US	SE6000H-US	SE7600H-US	SE10000H-US	
<b>OUTPUT</b>							
Rated AC Power Output	3000	3800	5000	6000	7600	10000	VA
Max. AC Power Output	3000	3800	5000	6000	7600	10000	VA
AC Output Voltage Min.-Nom.-Max. (211 - 240 - 264)	✓	✓	✓	✓	✓	✓	Vac
AC Frequency (Nominal)	59.3 - 60 - 60.5 <sup>(1)</sup>						Hz
Maximum Continuous Output Current@240V	12.5	16	21	25	32	42	A
GFDI Threshold	1						A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes						
<b>INPUT</b>							
Maximum DC Power	4650	5900	7750	9300	11800	15500	W
Transformer-less, Ungrounded	Yes						
Maximum Input Voltage	480						Vdc
Nominal DC Input Voltage	380			400			Vdc
Maximum Input Current@240V	8.5	10.5	13.5	16.5	20	27	Adc
Max. Input Short Circuit Current	45						Adc
Reverse-Polarity Protection	Yes						
Ground-Fault Isolation Detection	600ka Sensitivity						
Maximum Inverter Efficiency	99					99.2	%
CEC Weighted Efficiency	99						%
Nighttime Power Consumption	< 2.5						W
<b>ADDITIONAL FEATURES</b>							
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional), Cellular (optional)						
Revenue Grade Data, ANSI C12.20 Rapid Shutdown - NEC 2014 and 2017 690.12	Optional <sup>(2)</sup> Automatic Rapid Shutdown upon AC Grid Disconnect						
<b>STANDARD COMPLIANCE</b>							
Safety	UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07						
Grid Connection Standards	IEEE1547, Rule 21, Rule 14 (HI)						
Emissions	FCC Part 15 Class B						
<b>INSTALLATION SPECIFICATIONS</b>							
AC Output Conduit Size / AWG Range	3/4" minimum / 20-4 AWG						
DC Input Conduit Size / # of Strings / AWG Range	3/4" minimum / 1-2 strings / 14-6 AWG					3/4" minimum / 1-3 strings / 14-6 AWG	
Dimensions with Safety Switch (HxWxD)	17.7 x 14.6 x 6.8 / 450 x 370 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			Natural convection			
Operating Temperature Range	-13 to +140 / -25 to +60 <sup>(3)</sup> (-40°F / -40°C option) <sup>(4)</sup>						°F / °C
Protection Rating	NEMA 3R (inverter with Safety Switch)						

<sup>(1)</sup> For other regional settings please contact SolarEdge support

<sup>(2)</sup> Revenue grade inverter P/N: SExxxxH-US000NNG2

<sup>(3)</sup> For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>

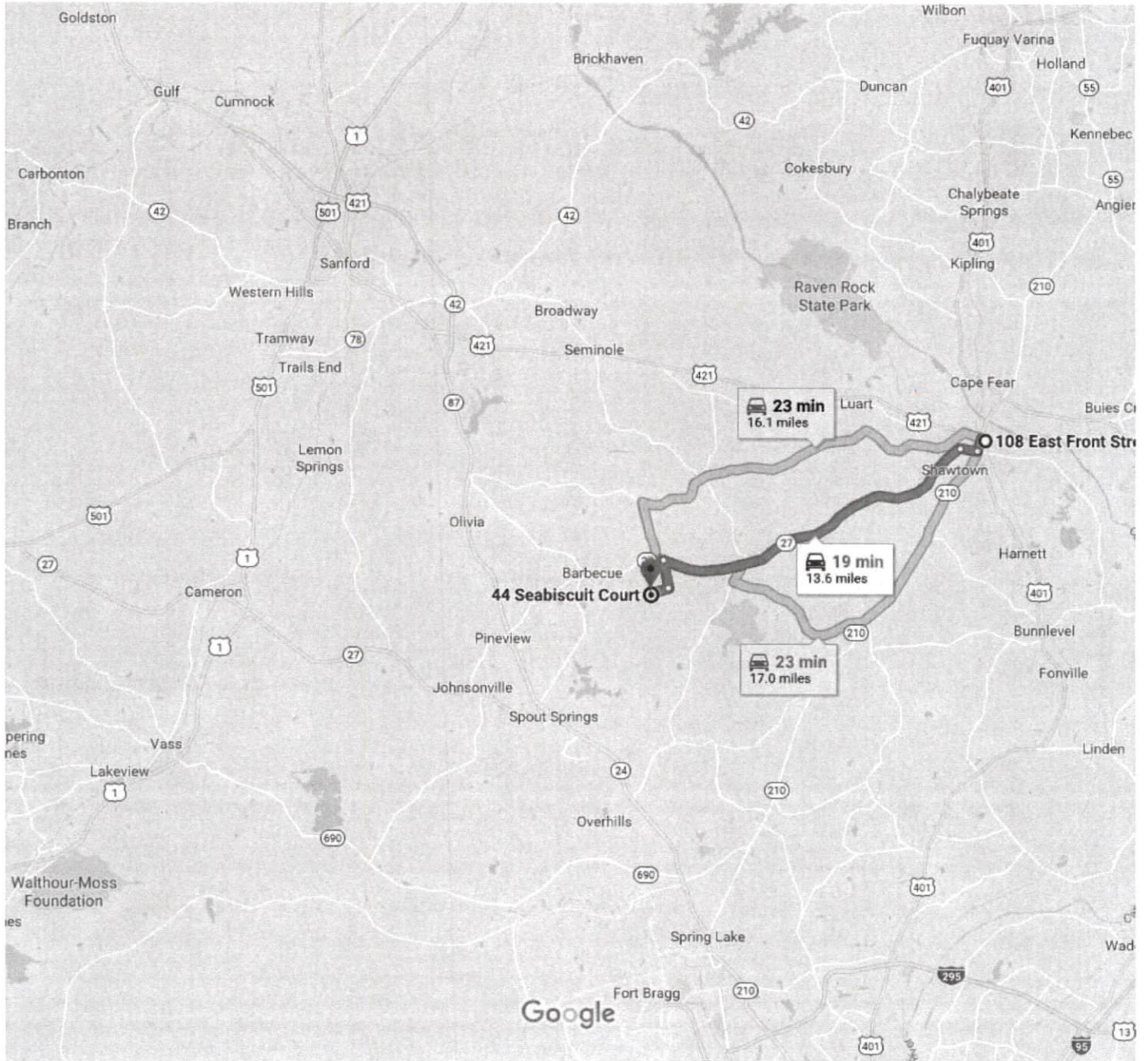
<sup>(4)</sup> -40 version P/N: SExxxxH-US000NNU4





Google Maps

108 E Front St, Lillington, NC 27546 to 44 Seabiscuit Ct, Lillington, NC 27546 Drive 13.6 miles, 19 min



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