

Application Number	18-50043596	Page	2
Property Address	51 MAGNOLIA FARM DR	Date	4/10/18
PARCEL NUMBER	08-0654- - -0247- -01-		
Application description . . .	CP ADD & ALTER RESIDENTIAL		
Subdivision Name			
Property Zoning	RES/AGRI DIST - RA-40		

Required Inspections

Seq	Phone Insp#	Insp Code	Description	Initials	Date
Permit type RESIDENTIAL ELECTRICAL PERMIT					
999	211	E211	R*ELEC ABOVE CEILING	_____	__/__/__
999	217	E217	R*ELEC RECONNECT	_____	__/__/__
999	205	E205	R*ELEC UNDER SLAB	_____	__/__/__
999	215	E215	R*ELEC. UND. POOL	_____	__/__/__
999	213	E213	R*ELECTRICAL UNDERGROUND	_____	__/__/__
999	131	R131	ONE TRADE FINAL	_____	__/__/__
999	125	R125	ONE TRADE ROUGH IN	_____	__/__/__
Permit type LAND USE PERMIT					
999	818	Z818	PZ*ZONING INSPECTION	_____	__/__/__
999	820	Z820	PZ*ZONING/FINAL INSPECTION	_____	__/__/__

HARNETT COUNTY CENTRAL PERMITTING

P.O. BOX 65

LILLINGTON, NC 27546

For Inspections Call: (910) 893-7525 Fax: (910) 893-2793

Application Number 18-50043596 Date 4/10/18
 Property Address 51 MAGNOLIA FARM DR
 PARCEL NUMBER 08-0654- - -0247- -01-
 Application type description CP ADD & ALTER RESIDENTIAL
 Subdivision Name
 Property Zoning RES/AGRI DIST - RA-40

Owner

YEAGER EDWIN P & KELLY
 6075 RAWLS CHURCH RD
 FUQUAY-VARINA NC 27526

Contractor

NC SOLAR NOW
 3401-101 ATLANTIC AVE
 RALEIGH NC 27604
 (919) 833-9096

Applicant

NC SOLAR NOW
 3401-101 ATLANTIC AVE
 RALEIGH NC 27604
 (919) 833-9096

--- Structure Information 000 000 GROUND MOUNT SOLOR PV ARRAY (668 SQFT)
 Flood Zone FLOOD ZONE X
 Other struct info # BATHS 6
 # BEDROOMS 9.00
 PROPOSED USE ELECTRICAL
 SEPTIC - EXISTING? EXIST
 WATER SUPPLY COUNTY

Permit RESIDENTIAL ELECTRICAL PERMIT

Additional desc . .
 Phone Access Code . 1237569
 Issue Date 4/10/18 Valuation 0
 Expiration Date . . 4/10/19

Permit LAND USE PERMIT

Additional desc . .
 Phone Access Code . 1237577
 Issue Date 4/10/18 Valuation 0
 Expiration Date . . 10/07/18

Special Notes and Comments

T/S: 03/20/2018 10:23 AM LLUCAS ----
 OFF RAWLS CHURCH RD

HARNETT COUNTY CASH RECEIPTS

*** CUSTOMER RECEIPT ***

Oper: LLUCAS Type: CP Drawer: 1
Date: 4/10/18 53 Receipt no: 316487

Year	Number	Amount
2018	50043596	
51 MAGNOLIA FARM DR		
FUGUAY-VARINA, NC 27526		
B1	BP - PERMIT FEES	
		\$105.00

ELECTRICAL

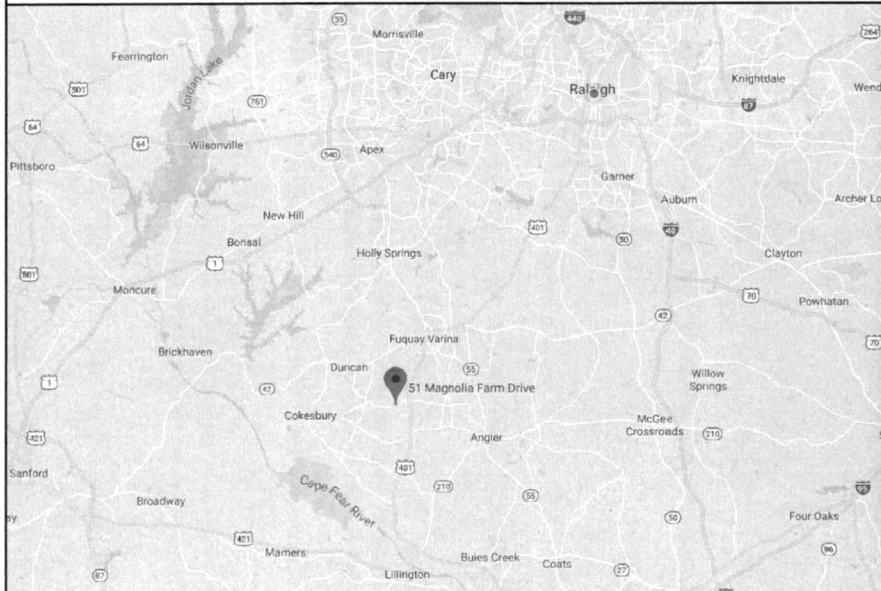
NC SOLAR NOW

Tender detail	
CP CREDIT CARD	\$105.00
Total tendered	\$105.00
Total payment	\$105.00

Trans date: 4/10/18 Time: 9:04:42

** THANK YOU FOR YOUR PAYMENT **

VICINITY MAP



PROPERTY MAP



ENGINEER:



MODEL ENERGY

702 E. FRANKLIN ST.
RALEIGH, NC 27604
919-274-9905
MODELENERGY1.COM

P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
11.04 kW DC INPUT
10.0 kW AC EXPORT

Kelly A. Yaeger
51 MAGNOLIA FARM DR.
FUQUAY-VARINA, NC 27526

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 INSTALLED 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, BOTH LOCATED AT THE SAME LOCATION.
- ALL MODULE GROUND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH NEC SECTION 690.4 (C)

FILE
HARVEST CODE: 0550135960
APPLICATION: 0550135960
JOB NAME NC Solar Now
DATE PLANS RECEIVED 3/20/18
SITE PLANS APPROVED _____
APPROVED BY MAC 3/27/18

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
DC	DIRECT CURRENT
EGC	EQUIPMENT GROUNDING CONDUCTOR
EMT	ELECTRICAL METAL TUBING
GALV	GALVANIZED
GEC	GROUNDING ELECTRODE CONDUCTOR
GND	GROUND
I	CURRENT
I _{MP}	CURRENT AT MAXIMUM POWER
I _{SC}	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
V _{MP}	VOLTAGE AT MAXIMUM POWER
V _{OC}	OPEN-CIRCUIT VOLTAGE
W	WATT

CODE REFERENCES

2014 NATIONAL ELECTRIC CODE
2012 NORTH CAROLINA BUILDING CODE
2012 NORTH CAROLINA RESIDENTIAL CODE
2012 NORTH CAROLINA FIRE CODE

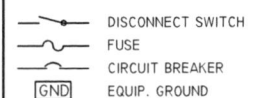
SHEET INDEX

PV1.1 - PROJECT INFORMATION
PV2.1 - SITE INFORMATION
PV3.1 - STRUCTURAL INFORMATION
PV4.1 - ELECTRICAL INFORMATION
PV5.1 - EQUIPMENT LABELS

SITE CONDITIONS

ASCE 7-10 WIND SPEED - 116 MPH
EXPOSURE CATEGORY - B
RISK CATEGORY - II

LEGEND



CLIENT:



ISSUED FOR: PERMIT DATE: 1/3/17

PROJECT INFORMATION

PV1.1

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ROOF FASTENERS	
MAKE	RED HEAD
TYPE	WEDGE ANCHOR
MATERIAL	304 SS
SIZE	3/8" X 3.5"
WEIGHT	0.1 LBS.
MAXIMUM PULL-OUT FORCE	2,800 LBS.
SAFETY FACTOR	3
DESIGN PULL-OUT FORCE	933 LBS.

NOTES:

- EMBED ANCHOR BETWEEN 2.5 AND 3.0 INCHES INTO THE CONCRETE

ARRAY SUMMARY	
# MODULES	32
# ROOF MOUNTS	48
# FASTENERS	48
RAIL LENGTH	N/A
ARRAY AREA	668 sqft.
ARRAY WEIGHT	1568 LBS.
AZIMUTH @ SN	180°
TILT ANGLE	30°

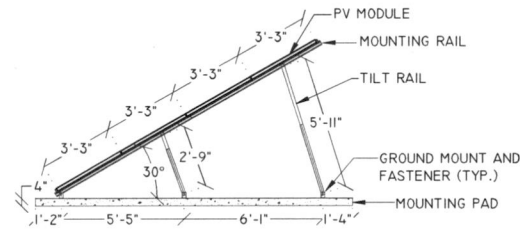
PV MODULES	
MAKE	CAN. SOLAR
MODEL	CS6U-345M
WIDTH	39 in.
LENGTH	77 in.
THICKNESS	1.6 in.
WEIGHT	49 LBS.

GROUND MOUNTS	
MAKE	UNIRACK
MODEL	L-FOOT
MATERIAL	ALUMINUM
WEIGHT	0.25 LBS.
FASTENERS	1 PER MOUNT

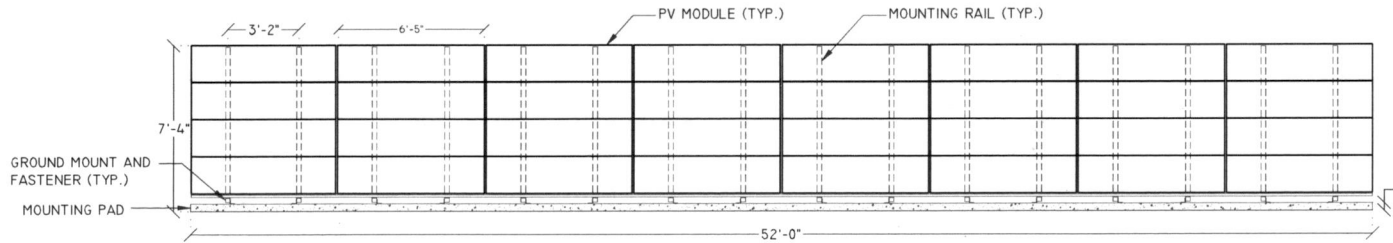
MOUNTING RAILS	
MAKE	UNIRACK
MODEL	SM STANDARD
MATERIAL	ALUMINUM
WEIGHT	1.25 LBS./sqft.
SPACING	38 in.

GROUND MOUNT	
TYPE	POURED PAD
MATERIAL	CONCRETE
LENGTH	52'-0"
WIDTH	14'-0"
DEPTH	4"
STRENGTH	2,000 PSI
DENSITY	150 LBS./cu.ft.
WEIGHT	36,500 LBS.

LOADING SUMMARY	
DEAD LOAD:	
MOUNTING PAD	50.1 LBS./sqft.
PV ARRAY	2.6 LBS./sqft.
TOTAL	54.6 LBS./sqft.
WIND LOAD:	
UPLIFT	-33.8 LBS./sqft.
DOWNWARD	21.2 LBS./sqft.
FASTENER LOAD:	
UPLIFT	-345 LBS.
DOWNWARD	216 LBS.



SIDE VIEW



FRONT VIEW

ENGINEER:



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702 E. FRANKLIN ST.
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919-274-9905
MODELENERGY1.COM

P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
11.04 kW DC INPUT
10.0 kW AC EXPORT

Kelly A. Yaeger
51 MAGNOLIA FARM DR.
FUQUAY-VARINA, NC 27526

CLIENT:



ISSUED FOR: DATE:
PERMIT 1/3/17

ELECTRICAL
INFORMATION

PV3.1

PV MODULES	
MAKE	CAN. SOLAR
MODEL	CS6U-345M
TECHNOLOGY	MONO-CRYST.
NOM. POWER (P _{NOM})	345 WATTS
NOM. VOLT. (V _{MP})	38.1 VOLTS
O.C. VOLT. (V _{OC})	46.4 VOLTS
MAX. SYS. VOLT.	1000 V (UL)
TEMP. COEF. (V _{TC})	-0.31 %/°C
NOM. CURR. (I _{MP})	9.06 AMPS
S.C. CURR. (I _{SC})	9.56 AMPS
MAX. SERIES FUSE	15 AMPS

MODULE OPTIMIZER	
MAKE	SOLAR EDGE
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.	15.0 AMPS
MIN. STRING	8 OPTIMIZERS
MAX. STRING	25 OPTIMIZERS
MAX. POWER	5250 WATTS

JUNCTION BOX	
MAKE	SOLADECK
MODEL	0785-3R
PRO. 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	6	10 AWG	COPPER	PV WIRE	1	6 AWG	COPPER	BARE	-	-	-	FREE AIR	1
C2	6	10 AWG	COPPER	THWN-2	1	10 AWG	COPPER	THWN-2	1	3/4"	PVC	BURIED	2
C3	3	6 AWG	COPPER	THWN	1	10 AWG	COPPER	THWN	1	1"	EMT	EXT	2
C4	3	6 AWG	COPPER	THWN	1	-	-	-	1	1"	EMT	EXT	2
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

DC/AC INVERTER	
MAKE	SOLAREGE
MODEL	SE10000A-US
TECHNOLOGY	TRANSFORMER-LESS
DC INPUT:	
MAX. POWER	13500 WATTS
VOLT. RANGE	350-500 VOLTS
NOM. VOLT.	350 VOLTS
MAX. CURRENT	30.5 AMPS
STRING INPUTS	3 STRINGS
AC OUTPUT:	
NOM. POWER	10000 WATTS
NOM. VOLT.	240 VOLTS
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

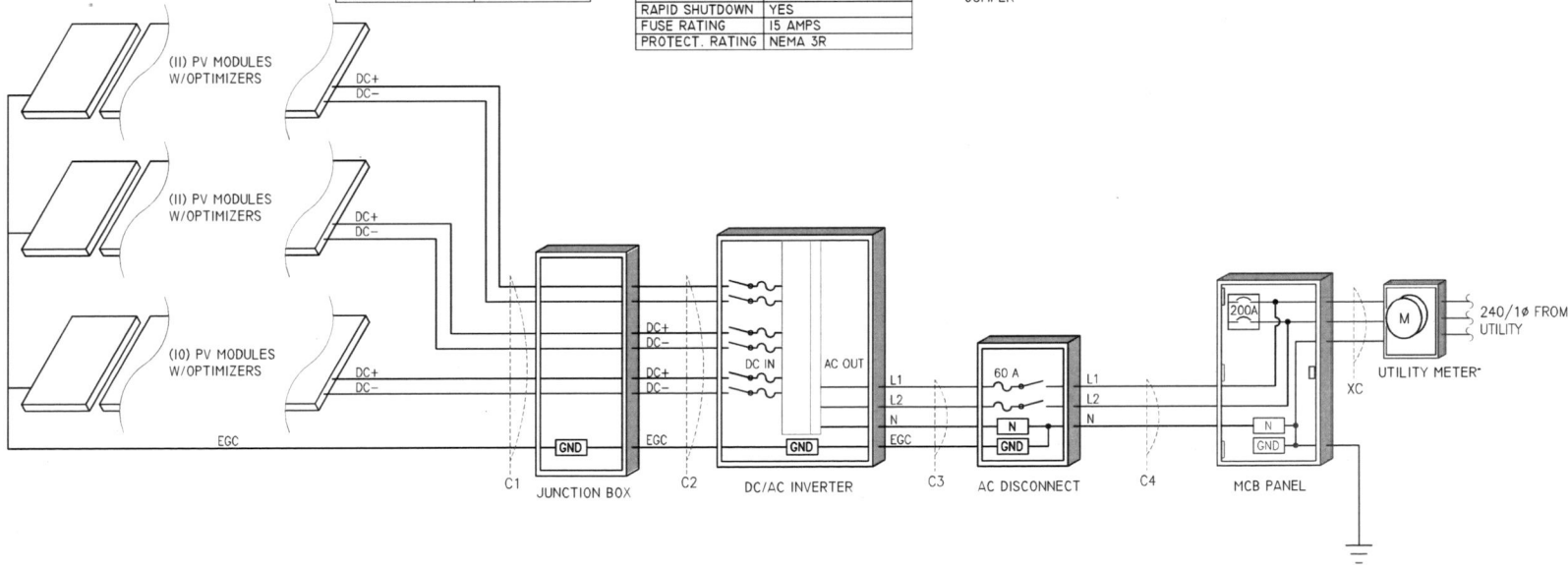
NOTES:

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

MCB PANEL (EXISTING)	
MAKE	GE
MODEL	TM3220CCUM0D6
ENCL. RATING	NEMA 3R
VOLT. RATING	600 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.



1 PV SYSTEM ELECTRICAL WIRING SCHEMATIC

SCALE : NTS

ENGINEER:



MODEL ENERGY

702 E. FRANKLIN ST.
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919-274-9905
MODELENERGY1.COM

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11.04 KW DC INPUT
10.0 KW AC EXPORT

Kelly A. Yaeger
51 MAGNOLIA FARM DR.,
FUQUAY-VARINA, NC 27526

CLIENT:



ISSUED FOR: DATE:
PERMIT 1/3/17

EQUIPMENT LABELS

PV4.1

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

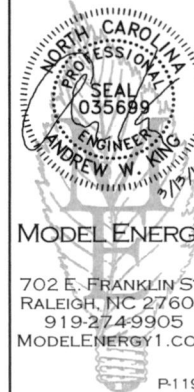
PHOTOVOLTAIC ARRAY DC DISCONNECT
 OPERATING DC VOLTAGE: 350 VOLTS
 OPERATING CURRENT: 31.5 AMPS
 MAX SYSTEM VOLTAGE: 500 VOLTS
 SHORT-CIRCUIT CURRENT: 45 AMPS

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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ISSUED FOR: PERMIT
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EQUIPMENT LABELS

PV5.1

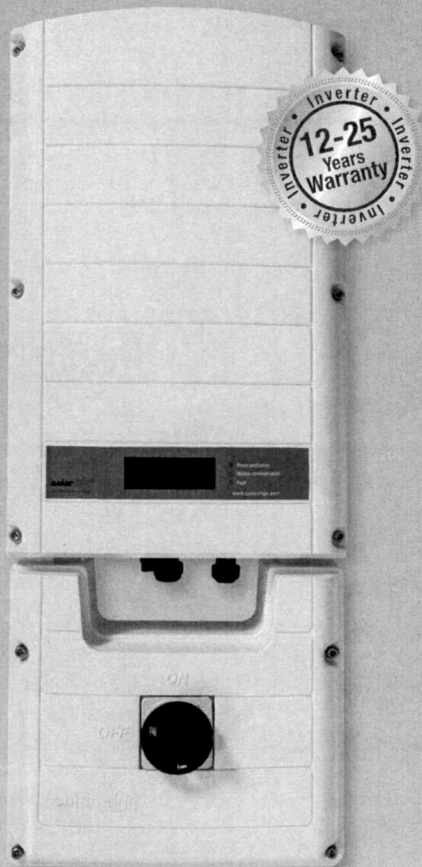


INVERTERS

SolarEdge Single Phase Inverters

For North America

SE3000A-US / SE3800A-US / SE5000A-US / SE6000A-US /
SE7600A-US / SE10000A-US / SE11400A-US



The best choice for SolarEdge enabled systems

- Integrated arc fault protection for NEC 2011 690.11 compliance
- Rapid shutdown for NEC 2014 690.12
- Superior efficiency (98%)
- Small, lightweight and easy to install on provided bracket
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- Outdoor and indoor installation
- Fixed voltage inverter, DC/AC conversion only
- Pre-assembled Safety Switch for faster installation
- Optional – revenue grade data, ANSI C12.1



Single Phase Inverters for North America

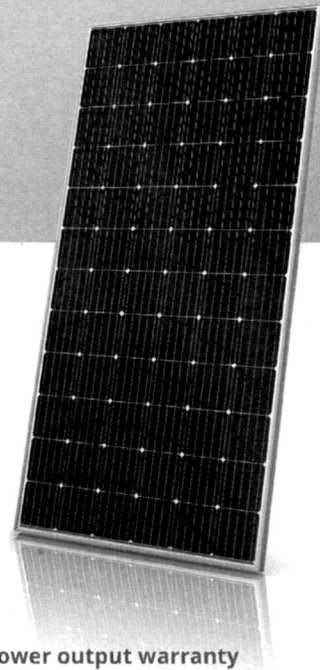
SE3000A-US / SE3800A-US / SE5000A-US / SE6000A-US /
SE7600A-US / SE10000A-US / SE11400A-US

	SE3000A-US	SE3800A-US	SE5000A-US	SE6000A-US	SE7600A-US	SE10000A-US	SE11400A-US	
OUTPUT								
Nominal AC Power Output	3000	3800	5000	6000	7600	9980 @ 208V 10000 @ 240V	11400	VA
Max. AC Power Output	3300	4150	5400 @ 208V 5450 @ 240V	6000	8350	10800 @ 208V 10950 @ 240V	12000	VA
AC Output Voltage Min.-Nom.-Max. ⁽¹⁾ 183 - 208 - 229 Vac	-	-	✓	-	-	✓	-	
AC Output Voltage Min.-Nom.-Max. ⁽¹⁾ 211 - 240 - 264 Vac	✓	✓	✓	✓	✓	✓	✓	
AC Frequency Min.-Nom.-Max. ⁽¹⁾	59.3 - 60 - 60.5							Hz
Max. Continuous Output Current	12.5	16	24 @ 208V 21 @ 240V	25	32	48 @ 208V 42 @ 240V	47.5	A
GFDI Threshold	1							A
Utility Monitoring, Islanding Protection, Country Configurable Thresholds	Yes							Yes
INPUT								
Maximum DC Power (STC)	4050	5100	6750	8100	10250	13500	15350	W
Transformer-less, Ungrounded	Yes							
Max. Input Voltage	500							Vdc
Nom. DC Input Voltage	325 @ 208V / 350 @ 240V							Vdc
Max. Input Current ⁽²⁾	9.5	13	16.5 @ 208V 15.5 @ 240V	18	23	33 @ 208V 30.5 @ 240V	34.5	Adc
Max. Input Short Circuit Current	45							Adc
Reverse-Polarity Protection	Yes							
Ground-Fault Isolation Detection	600kΩ Sensitivity							
Maximum Inverter Efficiency	97.7	98.2	98.3	98.3	98	98	98	%
CEC Weighted Efficiency	97.5	98	97 @ 208V 98 @ 240V	97.5	97.5	97 @ 208V 97.5 @ 240V	97.5	%
Nighttime Power Consumption	< 2.5					< 4		W
ADDITIONAL FEATURES								
Supported Communication Interfaces	RS485, RS232, Ethernet, ZigBee (optional)							
Revenue Grade Data, ANSI C12.1	Optional ⁽³⁾							
Rapid Shutdown – NEC 2014 690.12	Yes							
STANDARD COMPLIANCE								
Safety	UL1741, UL1699B, UL1998, CSA 22.2							
Grid Connection Standards	IEEE1547							
Emissions	FCC part15 class B							
INSTALLATION SPECIFICATIONS								
AC output conduit size / AWG range	3/4" minimum / 16-6 AWG					3/4" minimum / 8-3 AWG		
DC input conduit size / # of strings / AWG range	3/4" minimum / 1-2 strings / 16-6 AWG					3/4" minimum / 1-3 strings / 14-6 AWG		
Dimensions with Safety Switch (HxWxD)	30.5 x 12.5 x 7.2 / 775 x 315 x 184					30.5 x 12.5 x 10.5 / 775 x 315 x 260		in / mm
Weight with Safety Switch	51.2 / 23.2		54.7 / 24.7		88.4 / 40.1		lb / kg	
Cooling	Natural Convection				Natural convection and internal fan (user replaceable)	Fans (user replaceable)		
Noise	< 25					< 50		dBA
Min.-Max. Operating Temperature Range	-13 to +140 / -25 to +60 (-40 to +60 version available ⁽⁴⁾)							°F / °C
Protection Rating	NEMA 3R							

⁽¹⁾ For other regional settings please contact SolarEdge support.
⁽²⁾ A higher current source may be used; the inverter will limit its input current to the values stated.
⁽³⁾ Revenue grade inverter P/N: SExxxxA-US000NNR2 (for 7600W inverter:SE7600A-US002NNR2).
⁽⁴⁾ -40 version P/N: SExxxxA-US000NNU4 (for 7600W inverter:SE7600A-US002NNU4).



RoHS



MAXPOWER CS6U-330 | 335 | 340 | 345M

Canadian Solar's modules use the latest innovative cell technology, increasing module power output and system reliability, ensured by 15 years of experience in module manufacturing, well-engineered module design, stringent BOM quality testing, an automated manufacturing process and 100% EL testing.

KEY FEATURES



Excellent module efficiency of up to 17.74 %



Cell efficiency of up to 20.0 %



Outstanding low irradiance performance: 96.5 %



High PTC rating of up to 91.7 %



IP67 junction box for long-term weather endurance



Heavy snow load up to 5400 Pa, wind load up to 2400 Pa



linear power output warranty



product warranty on materials and workmanship

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2008 / Quality management system
ISO 14001:2004 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: VDE / CE / CQC / MCS
UL 1703 / IEC 61215 performance: CEC listed (US)
UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE / Take-e-way
UNI 9177 Reaction to Fire: Class 1



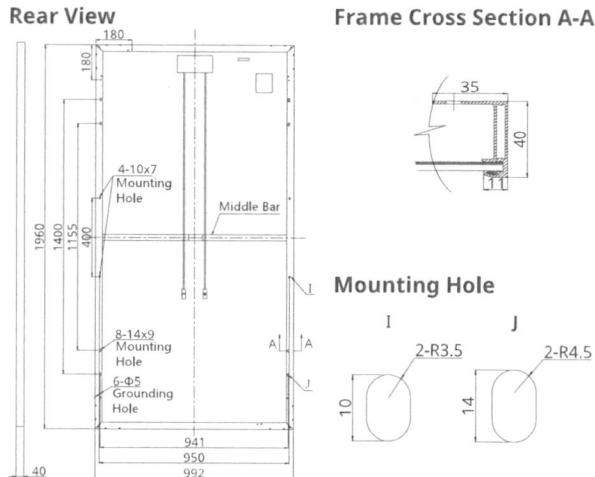
* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 15 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

CANADIAN SOLAR INC.

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ENGINEERING DRAWING (mm)



ELECTRICAL DATA / STC*

CS6U	330M	335M	340M	345M
Nominal Max. Power (Pmax)	330 W	335 W	340 W	345 W
Opt. Operating Voltage (Vmp)	37.5 V	37.8 V	37.9 V	38.1 V
Opt. Operating Current (Imp)	8.80 A	8.87 A	8.97 A	9.06 A
Open Circuit Voltage (Voc)	45.9 V	46.1 V	46.2 V	46.4 V
Short Circuit Current (Isc)	9.31 A	9.41 A	9.48 A	9.56 A
Module Efficiency	16.97%	17.23%	17.49%	17.74%
Operating Temperature	-40°C ~ +85°C			
Max. System Voltage	1000 V (IEC) or 1000 V (UL)			
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)			
Max. Series Fuse Rating	15 A			
Application Classification	Class A			
Power Tolerance	0 ~ + 5 W			

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA / NOCT*

CS6U	330M	335M	340M	345M
Nominal Max. Power (Pmax)	238 W	242 W	245 W	249 W
Opt. Operating Voltage (Vmp)	34.2 V	34.5 V	34.6 V	34.7 V
Opt. Operating Current (Imp)	6.96 A	7.01 A	7.10 A	7.17 A
Open Circuit Voltage (Voc)	42.1 V	42.3 V	42.4 V	42.6 V
Short Circuit Current (Isc)	7.54 A	7.62 A	7.67 A	7.74 A

* Under Nominal Operating Cell Temperature (NOCT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

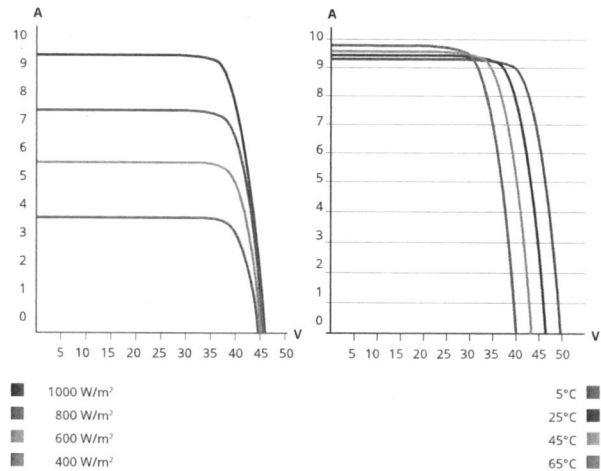
PERFORMANCE AT LOW IRRADIANCE

Outstanding performance at low irradiance, average relative efficiency of 96.5 % from an irradiance of 1000 W/m² to 200 W/m² (AM 1.5, 25°C).

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Caution: For professional use only. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the modules.

CS6U-335M / I-V CURVES



MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline, 6 inch
Cell Arrangement	72 (6×12)
Dimensions	1960×992×40 mm (77.2×39.1×1.57 in)
Weight	22.4 kg (49.4 lbs)
Front Cover	3.2 mm tempered glass
Frame Material	Anodized aluminium alloy
J-Box	IP67, 3 diodes
Cable	4 mm ² (IEC) or 4 mm ² & 12 AWG 1000V (UL), 1160 mm (45.7 in)
Connector	T4 (IEC/UL)
Per Pallet	26 pieces, 635 kg (1400 lbs)
Per container (40' HQ)	624 pieces

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.41 % / °C
Temperature Coefficient (Voc)	-0.31 % / °C
Temperature Coefficient (Isc)	0.053 % / °C
Nominal Operating Cell Temperature	45±2 °C

PARTNER SECTION

