

SCOPE OF WORK:
TO INSTALL A ROOF MOUNTED & PV CANOPIES SOLAR PHOTOVOLTAIC SYSTEM AT THE OWNER COMMERCIAL LOCATED AT 2906 POMEROY RD SE, WASHINGTON, DC 20020, USA
THE POWER GENERATED BY THE PV SYSTEM WILL BE INTERCONNECTED WITH THE UTILITY GRID THROUGH THE EXISTING ELECTRICAL SERVICE EQUIPMENT.
THE PV SYSTEM DOES NOT INCLUDE STORAGE BATTERIES

EQUIPMENT SUMMARY
810 JA SOLAR JAM72D40-585/LB MODULES
10 SOLAREEDGE SE40KUS (480V) INVERTERS
810 SOLAREEDGE C651U OPTIMIZER

GOVERNING CODES

2017 NFPA 70 NATIONAL ELECTRICAL CODE
2018 INTERNATIONAL BUILDING CODE
2018 NFPA 101 LIFE SAFETY CODE
2018 NFPA 1 FIRE CODE

SYSTEM RATING

473.85 KWDC

400.00 KWAC

AUTHORITY HAVING JURISDICTION : DISTRICT OF COLUMBIA
UTILITY PROVIDER : PEPCO

SHEET INDEX

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GENERAL NOTES:

- THESE CONSTRUCTION DOCUMENTS HAVE BEEN BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS.
- ARCHITECT HAS NOT BEEN RETAINED TO SUPERVISE ANY CONSTRUCTION OR INSTALLATION OF ANY EQUIPMENT AT SITE.
- CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, OBTAINS ALL PERMITS, LICENSES AND PAY ALL REQUIRED FEES AND COMPLETE INSTALLATION.
- CONTRACTOR HAS THE FULL RESPONSIBILITY TO CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ANY WORK STARTED BEFORE CONSULTATION AND ACCEPTANCE BY THE ENGINEER SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT TO CORRECTION BY THEM WITHOUT ADDITIONAL COMPENSATION.
- DAMAGE CAUSED TO THE EXISTING STRUCTURE, PIPES, DUCTS, WINDOWS, WALL, FLOORS, ETC. SHALL BE REPAIRED TO THE ORIGINAL CONDITION OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WITH APPROVED MATERIALS.
- NO CHANGES ARE TO BE MADE WITHOUT THE CONSULTATION AND APPROVAL OF THE ARCHITECT.
- CONTRACTOR SHALL OBTAIN BULDING PERMIT. NO WORK TO START UNLESS BUILDING PERMIT IS PROPERLY DISPLAYED.
- ALL WORKMANSHIP AND MATERIALS SHALL BE OF FIRST QUALITY AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE DC BUILDING CODE, THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ALL PERTINENT AGENCIES.
- IT IS ESSENTIAL THAT ALL WORK PROCEED WITH THE MAXIMUM COOPERATION OF ALL PARTIES AND WITH MINIMUM INTERFERENCE TO THE OCCUPANTS WITHIN THE BUILDING. THE OWNER'S DIRECTIONS IN THIS REGARD SHALL BE FULLY COMPLIED WITH.
- ALL EXPOSED PLUMBING, HVAC, ELECTRICAL DUCTWORK, PIPING AND CONDUITS ARE TO BE PAINTED BY GENERAL CONTRACTOR.
- THE CONTRACTOR SHALL PERFORM THE WORK IN STRICT CONFORMANCE WITH THE LOCAL LAWS, REGULATIONS AND THE NATIONAL ELECTRIC CODE.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS, APPROVALS, AFFIDAVITS, CERTIFICATIONS, ETC. AND PAY ALL FEES AS REQUIRED BY THE LOCAL AUTHORITIES.
- CONTRACTORS SHALL OBTAIN FIRE CERTIF. UPON COMPLETION OF WORK.

ELECTRICAL NOTES:

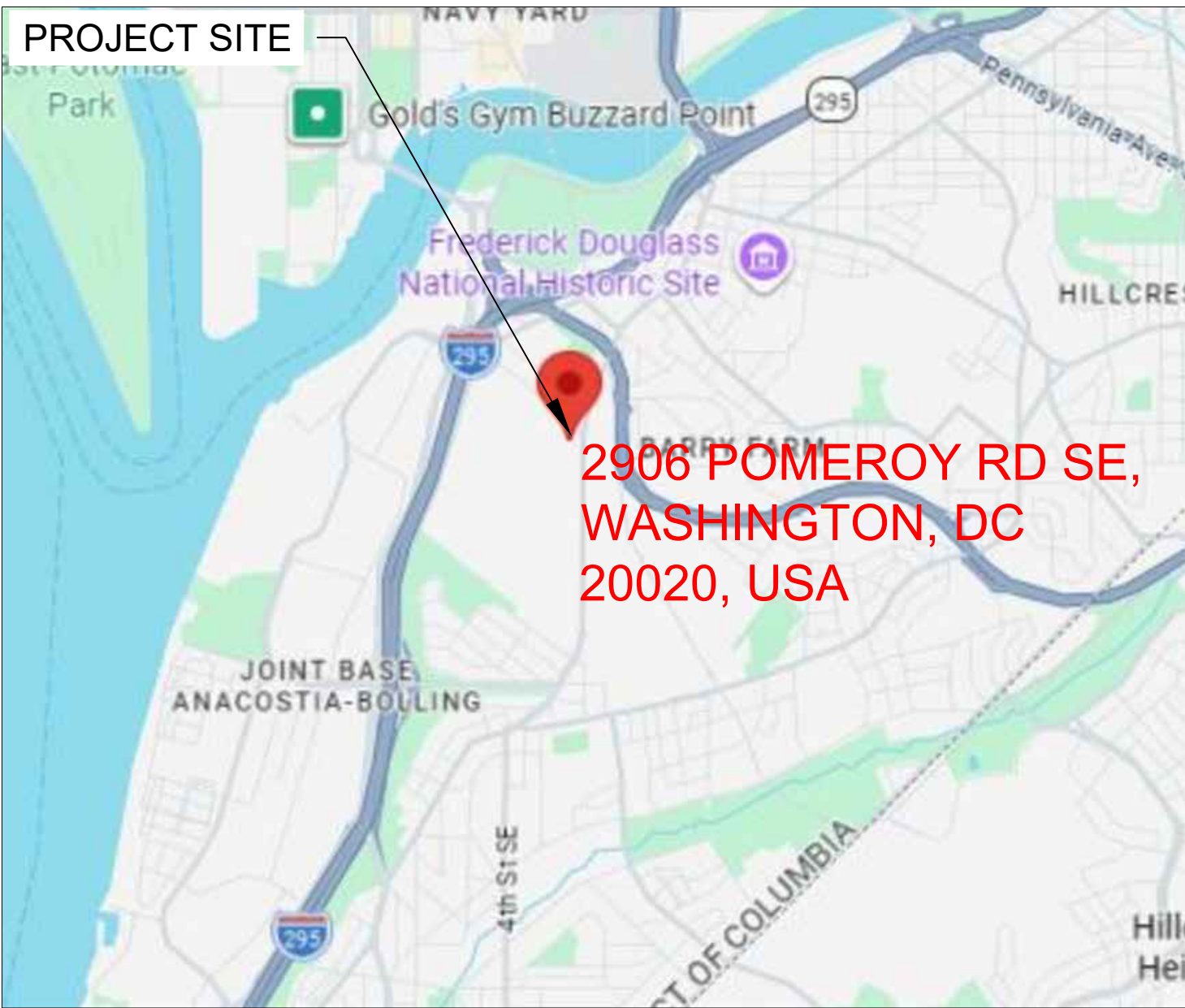
- THE EQUIPMENT AND ALL ASSOCIATED WIRING AND INTERCONNECTION SHALL BE INSTALLED ONLY BY QUALIFIED PEOPLE. A QUALIFIED PERSON IS ONE WHO HAS SKILLS AND KNOWLEDGE RELATED TO THE CONSTRUCTION AND OPERATION OF THE ELECTRICAL EQUIPMENT AND INSTALLATIONS AND HAS RECEIVED SAFETY TRAINING TO RECOGNIZE AND AVOID THE HAZARDS INVOLVED. (NEC 690.4(E) AND 705.6)
- LOCAL UTILITY PROVIDER SHALL BE NOTIFIED PRIOR TO USE AND ACTIVATION OF ANY SOLAR PHOTOVOLTAIC INSTALLATION. FOR A LINE SIDE TAP CONNECTION, UTILITY NEEDS TO BE NOTIFIED WELL IN ADVANCE TO COORDINATE BUILDING ELECTRICAL SHUT OFF.
- NEW CONDUIT ROUTING SHOWN IS ESSENTIALLY SCHEMATIC. SUBCONTRACTOR SHALL LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES.
- ARRAY WIRING SHOULD NOT BE READILY ACCESSIBLE EXCEPT TO QUALIFIED PERSONNEL.
- ALL EXTERIOR CONDUIT, FITTINGS, AND BOXES SHALL BE WATERTIGHT AND APPROVED FOR USE IN WET LOCATIONS. (NEC 314.15A).
- WIRING METHODS FOR PV SYSTEM CONDUCTORS AREN'T PERMITTED WITHIN 10 IN. OF THE ROOF DECKING OR SHEATHING EXCEPT WHERE LOCATED DIRECTLY BELOW THE ROOF SURFACE THAT'S COVERED BY PV MODULES AND ASSOCIATED EQUIPMENT WIRING
- BACK-FED BREAKER MUST BE AT THE OPPOSITE END OF BUS BAR FROM THE MAIN BREAKER OR MAIN LUG SUPPLYING CURRENT FROM THE UTILITIES.
- ALL CONDUCTORS AND WIRE TIES EXPOSED TO SUNLIGHT ARE LISTED AS UV RESISTANT.
- CONTRACTOR SHALL FOLLOW ALL ELECTRICAL EQUIPMENT LABELING REQUIREMENTS IN NEC 690 AND IFC 2021
- PV SOURCE, OUTPUT AND INVERTER CIRCUITS SHALL BE IDENTIFIED AT ALL POINTS OF TERMINATION, CONNECTION, AND SPLICES. THE MEANS OF ID CAN BE SEPARATE COLOR CODING, MARKING TAPE, TAGGING ETC. (NEC 690.4).
- MEASURE THE LINE-TO-LINE AND LINE-TO-NEUTRAL VOLTAGE OF ALL SERVICE ENTRANCE CONDUCTORS PROIR TO INSTALLING ANY SOLAR EQUIPMENT. THE VOLTAGES FOR THE 480VAC RATED.

WIRING AND CONDUIT NOTES:

- ALL CONDUIT SIZES AND TYPES, SHALL BE LISTED FOR ITS PURPOSE AND APPROVED FOR THE SITE APPLICATIONS
- ALL PV CABLES AND HOMERUN WIRES BE #10AWG *USE-2, PV WIRE, OR PROPRIETARY SOLAR CABLING SPECIFIED BY MFR, OR EQUIVALENT; ROUTED TO SOURCE CIRCUIT COMBINER BOXES AS REQUIRED
- ALL CONDUCTORS AND OCPD SIZES AND TYPES SPECIFIED ACCORDING TO [NEC 690.8 (A)(1) & (B)(1)], [NEC 240] [NEC 690.7] FOR MULTIPLE CONDUCTORS
- ALL PV DC CONDUCTORS IN CONDUIT EXPOSED TO SUNLIGHT SHALL BE DERATED ACCORDING TO [NEC TABLE 310.15 (B)(2)(C)] BLACK ONLY**
- EXPOSED ROOF PV DC CONDUCTORS SHALL BE USE-2, 90°C RATED, WET AND UV RESISTANT, AND UL LISTED RATED FOR 600V, UV RATED SPIRAL WRAP SHALL BE USED TO PROTECT WIRE FROM SHARP EDGES
- PHASE AND NEUTRAL CONDUCTORS SHALL BE DUAL RATED THHN/THWN-2 INSULATED, 90°C RATED, WET AND UV RESISTANT, RATED FOR 600V PER NEC 2008 OR 1000V PER NEC 2023
- 4-WIRE DELTA CONNECTED SYSTEMS HAVE THE PHASE WITH THE HIGHER VOLTAGE TO GROUND MARKED ORANGE OR IDENTIFIED BY OTHER EFFECTIVE MEANS
- ALL SOURCE CIRCUITS SHALL HAVE INDIVIDUAL SOURCE CIRCUIT PROTECTION
- VOLTAGE DROP LIMITED TO 2%
- AC CONDUCTORS >4AWG COLOR CODED OR MARKED: PHASE A OR L1- BLACK, PHASE B OR L2- RED, PHASE C OR L3- BLUE, NEUTRAL- WHITE/GRAY



1
PV-0 HOUSE PHOTO SCALE: NTS



2
PV-0 VICINITY MAP SCALE: NTS

SYSTEM INFO.		
(810)JA SOLAR JAM72D40-585/LB MODULES		
(10) SOLAREEDGE SE40KUS (480V) INVERTERS		
DC SYSTEM SIZE: 473.85 KWDC		
AC SYSTEM SIZE: 400.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026
SHEET NAME
COVER PAGE
SHEET SIZE
ANSI B 24" X 36"
SHEET NUMBER
PV-0

SITE NOTES

- A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
- THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS AN UTILITY INTERACTIVE SYSTEM WITH NO STORAGE BATTERIES.
- THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
- PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION [NEC 110.26]

PV CANOPY #1
(72) JA SOLAR JAM72D40-585/LB MODULES

PV CANOPY #2
(72) JA SOLAR JAM72D40-585/LB MODULES

PV CANOPY #3
(162) JA SOLAR JAM72D40-585/LB MODULES

PV CANOPY #4
(162) JA SOLAR JAM72D40-585/LB MODULES

PROPERTY LINE

ROOF #1
(40) JA SOLAR JAM72D40-585/LB MODULES

ROOF #2
(36) JA SOLAR JAM72D40-585/LB MODULES

ROOF #3
(29) JA SOLAR JAM72D40-585/LB MODULES

ROOF #4
(45) JA SOLAR JAM72D40-585/LB MODULES

ROOF #5
(34) JA SOLAR JAM72D40-585/LB MODULES

ROOF #6
(36) JA SOLAR JAM72D40-585/LB MODULES

ROOF #7
(54) JA SOLAR JAM72D40-585/LB MODULES

ROOF #8
(37) JA SOLAR JAM72D40-585/LB MODULES

ROOF #9
(31) JA SOLAR JAM72D40-585/LB MODULES

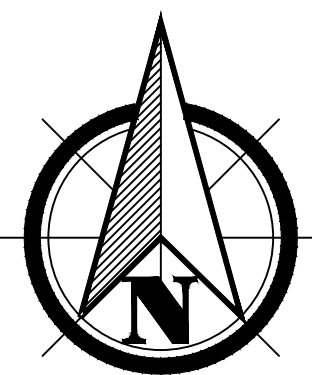
LEGEND

- CT - CT CABINET
- ACD - AC DISCONNECT
- INV - INVERTER
- SLC - SOLAR LOAD CENTER
- CONDUIT
- (810) SOLAREEDGE C651U OPTIMIZER
- (810)JA SOLAR JAM72D40-585/LB MODULES
- VENTILATION, ATTIC FAN (ROOF OBSTRUCTION)

SYSTEM RATING

473.85 KWDC

400.00 KWAC



1

SITE PLAN

PV-1

SCALE: 1/32" = 1'-0"

SYSTEM INFO.		
(810)JA SOLAR JAM72D40-585/LB MODULES		
(10) SOLAREEDGE SE40KUS (480V) INVERTERS		
DC SYSTEM SIZE: 473.85 KWDC		
AC SYSTEM SIZE: 400.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026

SHEET NAME
SITE PLAN

SHEET SIZE
ANSI B
24" X 36"

SHEET NUMBER
PV-1

MODULE TYPE, DIMENSIONS & WEIGHT		SYSTEM RATING
NUMBER OF MODULES:	810 MODULES	473.85 KWDC
		400.00 KWAC
MODULE TYPE:	JA SOLAR JAM72D40-585/LB	
MODULE WEIGHT:	71.65 LBS	
MODULE DIMENSIONS:	91.85" X 44.65" = 28.48 SF	
UNIT WEIGHT OF AREA:	2.52 PSF	

LEGEND

- CT - CT CABINET
- ACD - AC DISCONNECT
- INV - INVERTER
- SLC - SOLAR LOAD CENTER
- CONDUIT
- (810) SOLAREEDGE C651U OPTIMIZER
- (810)JA SOLAR JAM72D40-585/LB MODULES
- VENTILATION, ATTIC FAN (ROOF OBSTRUCTION)

ROOF DESCRIPTION						
ROOF	ROOF TILT	ARRAY TILT	AZIMUTH	TRUSS SIZE	TRUSS SPACING	ROOF MATERIAL
#1	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#2	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#3	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#4	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#5	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#6	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#7	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#8	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE
#9	1°	5°	190°	2"X10"	24" O.C.	TPO MEMBRANE

DESIGN SPECIFICATION

RISK CATEGORY:	II
CONSTRUCTION:	COMMERCIAL
ZONING:	COMMERCIAL
SNOW LOAD (ASCE 7-16):	25 PSF
EXPOSURE CATEGORY:	B
WIND SPEED (ASCE 7-16):	113 MPH

CARPORT DESCRIPTION

PV CANOPY	TILT	AZIMUTH
#1	10°	128°
#2	10°	128°
#3	10°	128°
#4	10°	128°

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AC SYSTEM SIZE: 400.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

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2906 POMEROY RD SE,
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DATE: 03/10/2026

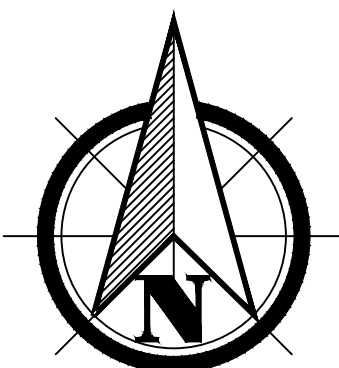
SHEET NAME
ROOF PLAN & MODULES

SHEET SIZE

ANSI B
24" X 36"

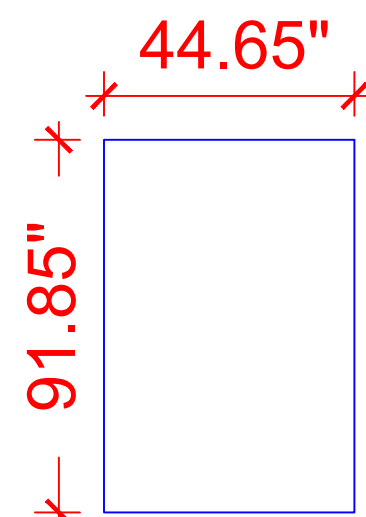
SHEET NUMBER

PV-2



(E) BACK OF RESIDENCE

POMEROY RD SE
(E) FRONT OF RESIDENCE



JA SOLAR JAM72D40-585/LB

INVERTER STRING SCHEDULE (ROOFTOP)			
INVERTER	STRING ID	# MLPE	# MODULES
1	1-1	23	23
	1-2	23	23
	1-3	23	23
	1-4	23	23
TOTAL		92	92
2	2-1	23	23
	2-2	23	23
	2-3	23	23
	2-4	23	23
TOTAL		92	92
3	3-1	19	19
	3-2	20	20
	3-3	20	20
	3-4	20	20
TOTAL		79	79
4	4-1	19	19
	4-2	20	20
	4-3	20	20
	4-4	20	20
TOTAL		79	79

INVERTER STRING SCHEDULE (PV CANOPY)			
INVERTER	STRING ID	# MLPE	# MODULES
5	5-1	18	18
	5-2	18	18
	5-3	18	18
	5-4	18	18
TOTAL		72	72
6	6-1	18	18
	6-2	18	18
	6-3	18	18
	6-4	18	18
TOTAL		72	72
7	7-1	20	20
	7-2	20	20
	7-3	20	20
	7-4	21	21
TOTAL		81	81
8	8-1	20	20
	8-2	20	20
	8-3	20	20
	8-4	21	21
TOTAL		81	81
9	9-1	20	20
	9-2	20	20
	9-3	20	20
	9-4	21	21
TOTAL		81	81
10	10-1	20	20
	10-2	20	20
	10-3	20	20
	10-4	21	21
TOTAL		81	81

BILL OF MATERIALS		
EQUIPMENT	QTY	DESCRIPTION
SOLAR PV MODULE	810	JA SOLAR JAM72D40-585/LB
INVERTER	10	SOLAREEDGE SE40KUS (480V)
OPTIMIZER	810	SOLAREEDGE C651U OPTIMIZER
LOAD CENTER	1	LOAD CENTER, 800A RATED, 4-W, 480V
AC DISCONNECT	1	700A NON FUSED AC DISCONNECT, 480V, NEMA 3R, UL LISTED

SYSTEM INFO.

(810)JA SOLAR JAM72D40-585/LB MODULES

(10) SOLAREEDGE SE40KUS (480V) INVERTERS

DC SYSTEM SIZE: 473.85 KWDC

AC SYSTEM SIZE: 400.00 KWAC

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

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2906 POMEROY RD SE,
WASHINGTON, DC 20020,
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DATE: 03/10/2026

SHEET NAME

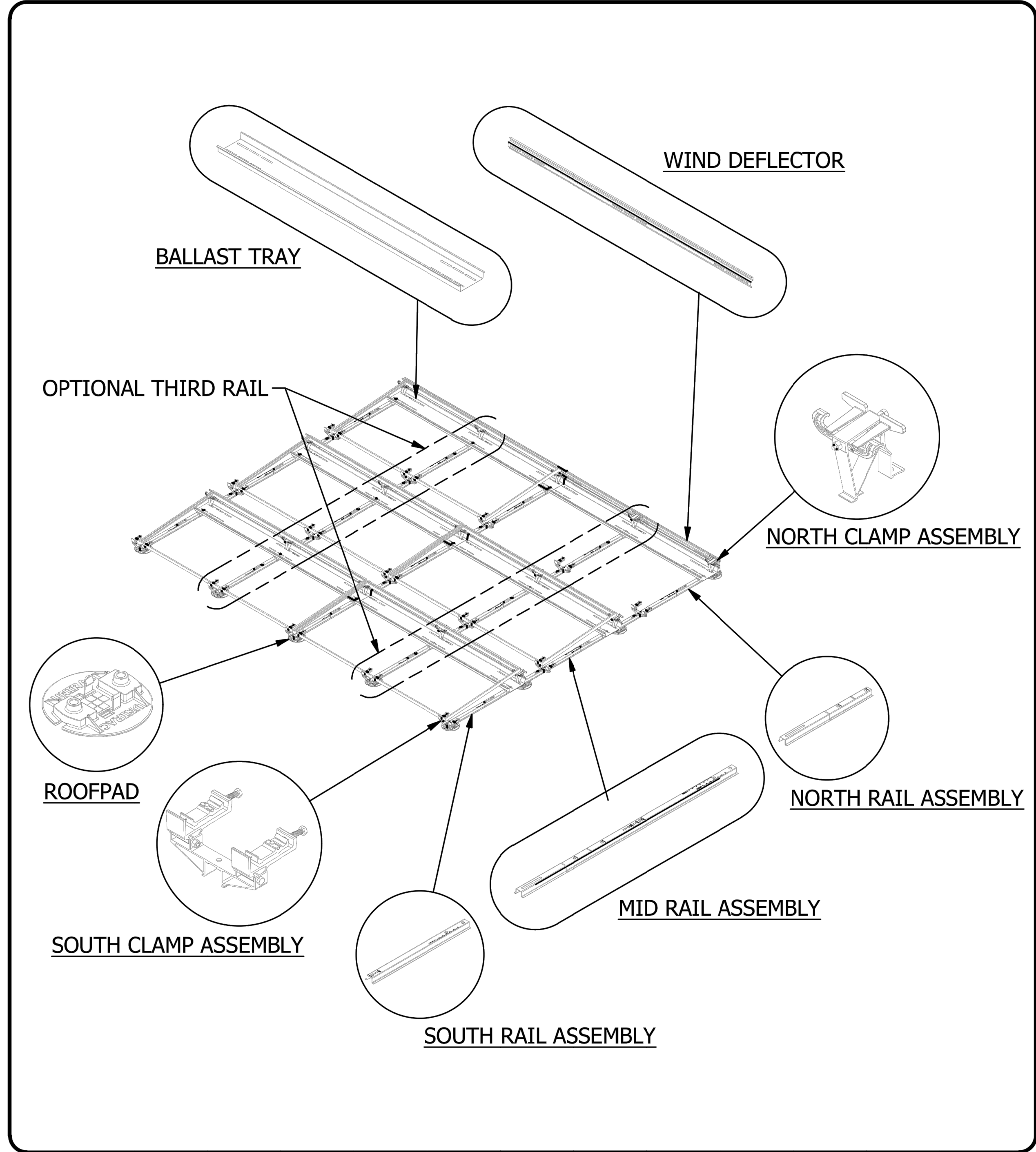
STRING CHART & BOM

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-2A



1411 BROADWAY BLVD. NE
ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

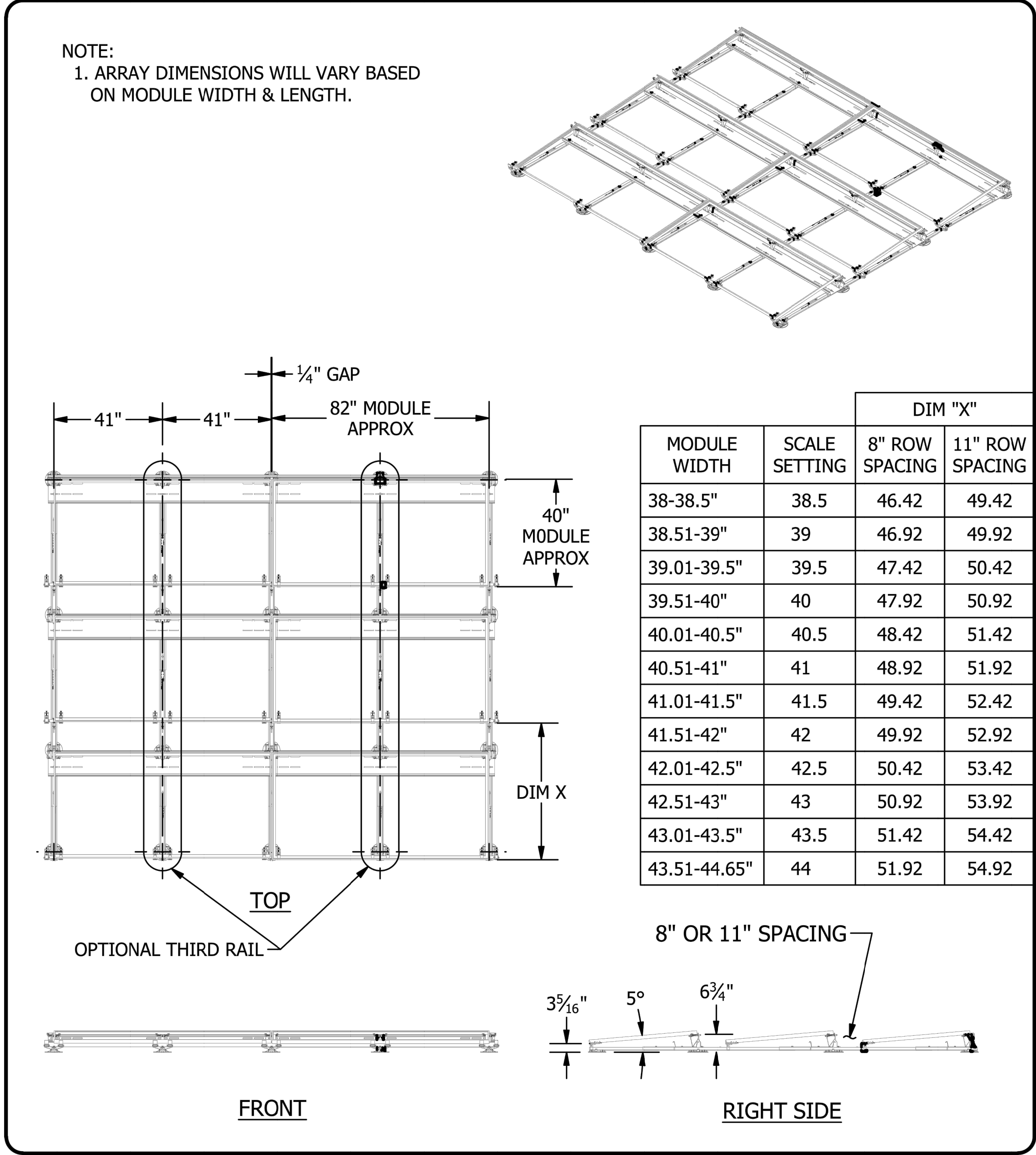
PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	MODULE ASSEMBLY
REVISION DATE:	10/15/2025

DRAWING NOT TO SCALE
ALL DIMENSIONS ARE
NOMINAL

PRODUCT PROTECTED BY
ONE OR MORE US PATENTS

LEGAL NOTICE

GF-A01
SHEET



1411 BROADWAY BLVD. NE
ALBUQUERQUE, NM 87102 USA
PHONE: 505.242.6411
WWW.UNIRAC.COM

PRODUCT LINE:	GRIDFLEX
DRAWING TYPE:	ASSEMBLY
DESCRIPTION:	MODULE ASSEMBLY
REVISION DATE:	10/15/2025

DRAWING NOT TO SCALE
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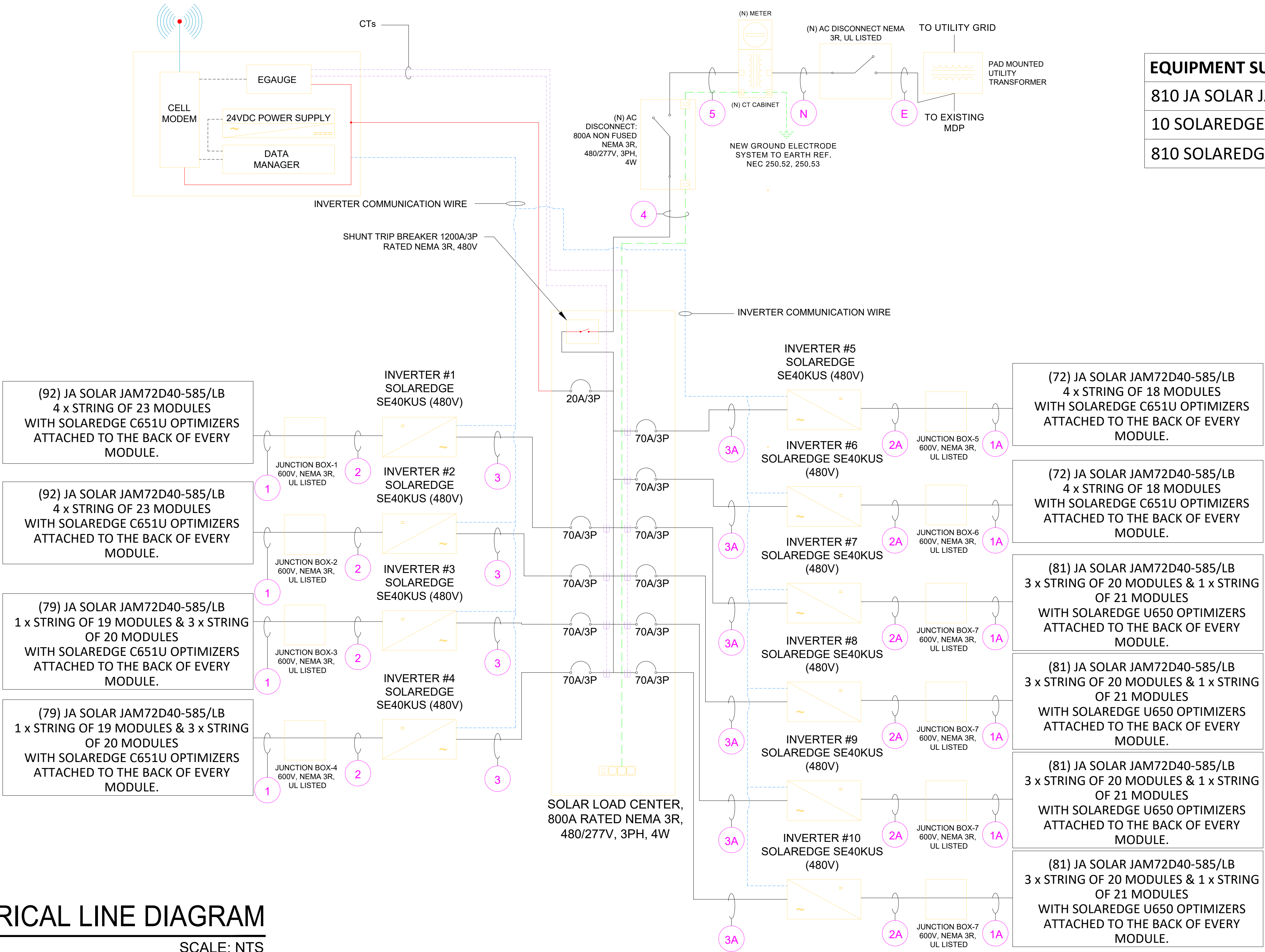
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LEGAL NOTICE

GF-A02
SHEET

SYSTEM INFO.		
(810)JA SOLAR JAM72D40-585/LB MODULES		
(10) SOLAREEDGE SE40KUS (480V) INVERTERS		
DC SYSTEM SIZE: 473.85 KWDC		
AC SYSTEM SIZE: 400.00 KWAC		
REVISIONS		
DESCRIPTION	DATE	REV
Signature with Seal		
PROJECT NAME & ADDRESS		
2906 POMEROY RD SE COMMERCIAL 2906 POMEROY RD SE, WASHINGTON, DC 20020, USA		
DATE: 03/10/2026		
SHEET NAME ATTACHMENT DETAILS		
SHEET SIZE ANSI B 24" X 36"		
SHEET NUMBER PV-3		

ID	TYP.	INITIAL CONDUCTOR LOCATION	FINAL CONDUCTOR LOCATION	CONDUCTOR		CONDUIT	# OF PARALLEL CIRCUITS	CURRENT-CARRYING CONDUCTORS IN CONDUIT	CONDUIT FILL PERCENT	OCPD	EGC		TEMP. CORR. FACTOR		CONDUIT FILL FACTOR	CONT. CURRENT	MAX. CURRENT	BASE AMP.	DERATED AMP.	TERM. TEMP. RATING
1	4	STRING	JUNCTION BOX	10 AWG	PV WIRE	Open Air	1	2	N/A	N/A	6 AWG	BARE COPPER	0.71	(56°C)	N/A	20.00A	25.0A	40A	28.4A	75°C
1A	4	STRING	JUNCTION BOX	10 AWG	PV WIRE	Open Air	1	2	N/A	N/A	6 AWG	BARE COPPER	0.71	(56°C)	N/A	20.00A	25.0A	40A	28.4A	75°C
2	1	JUNCTION BOX	INVERTER #1, #2, #3 & #4	8 AWG	THWN-2	COPPER	MIN 1.00" Dia EMT	8	37.11%	N/A	8 AWG	THWN-2, COPPER	0.96	(34°C)	0.7	20.00A	25.0A	55A	26.40A	75°C
2A	1	JUNCTION BOX	INVERTER #5, #6, #7, #8, #9 & #10	8 AWG	THWN-2	COPPER	MIN 1.00" Dia EMT	8	37.11%	N/A	8 AWG	THWN-2, COPPER	0.96	(34°C)	0.7	20.00A	25.0A	55A	36.96A	75°C
3	1	INVERTER #1, #2, #3 & #4	SOLAR LOAD CENTER	4 AWG	THWN-2	COPPER	MIN 1.25" Dia EMT	4	26.55%	70A	8 AWG	THWN-2, COPPER	0.96	(34°C)	0.8	48.25A	60.31A	95A	72.96A	75°C
3A	1	INVERTER #5, #6, #7, #8, #9 & #10	SOLAR LOAD CENTER	4 AWG	THWN-2	COPPER	MIN 1.25" Dia EMT	4	26.55%	70A	8 AWG	THWN-2, COPPER	0.96	(34°C)	0.8	48.25A	60.31A	95A	72.96A	75°C
4	1	SOLAR LOAD CENTER	AC DISCONNECT	250 KCML	THWN-2	COPPER	MIN 2.50" Dia EMT	4	32.29%	N/A	1/0 AWG	THWN-2, COPPER	0.96	(34°C)	0.8	482.50A	603.125A	3 X 290A	3 X 222.72A	75°C
5	1	AC DISCONNECT	CT CABINET	250 KCML	THWN-2	COPPER	MIN 2.50" Dia EMT	4	32.29%	N/A	1/0 AWG	THWN-2, COPPER	0.96	(34°C)	0.8	482.50A	603.125A	3 X 290A	3 X 222.72A	75°C



EQUIPMENT SUMMARY

810 JA SOLAR JAM72D40-585/LB MODULES

10 SOLAREEDGE SE40KUS (480V) INVERTERS

810 SOLAREEDGE C651U OPTIMIZER

ALL NEW CIRCUIT BREAKERS INSTALLED IN PANEL SHALL MATCH THE HIGHEST EXISTING AIC RATED CIRCUIT BREAKER WITHIN THAT BOARD. INSPECTOR TO VERIFY HIGHEST AIC RATING AT THE SITE.

SYSTEM RATING

473.85 KWDC

400.00 KWAC

SERVICE INFO.

UTILITY PROVIDER: PEP
MAIN SERVICE VOLTAGE: 480V

AHJ NAME: DISTRICT OF COLUMBIA

MAIN SERVICE LOCATION: SOUTH-EAST
SERVICE FEED SOURCE: OVERHEAD

SYSTEM INFO.		
(810)JA SOLAR JAM72D40-585/LB MODULES		
(10) SOLAREEDGE SE40KUS (480V) INVERTERS		
DC SYSTEM SIZE: 473.85 KWDC		
AC SYSTEM SIZE: 400.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

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COMMERCIAL
2906 POMEROY RD SE,
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USA

DATE: 03/10/2026

SHEET NAME
ELECTRICAL LINE

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-4

1 ELECTRICAL LINE DIAGRAM

SCALE: NTS

PV-4

SOLAR MODULE SPECIFICATIONS	
MANUFACTURER / MODEL	JA SOLAR JAM72D40-585/LB
VMP	43.24 V
IMP	13.53 A
VOC	51.80 V
ISC	14.29 A
TEMP. COEFF. VOC	-0.25%/°C
MODULE DIMENSION	91.85" (L) x 44.64" (W)
PANEL STC RATING	585.00W

INVERTER SPECIFICATIONS #1,#2,#3,#4,#5,#6,#7,#8,#9 & #10	
MANUFACTURER / MODEL	SOLAREEDGE SE40KUS (480V)
NOMINAL AC POWER	40000W
NOMINAL OUTPUT VOLTAGE	480 VAC
NOMINAL OUTPUT CURRENT	48.25 A

AMBIENT TEMPERATURE SPECS	
RECORD LOW TEMP	-15°C
AMBIENT TEMP (HIGH TEMP 2%)	34°C
CONDUIT HEIGHT	0.5"
ROOF TOP TEMP	75°C
CONDUCTOR TEMPERATURE RATE	56°C
MODULE TEMPERATURE COEFFICIENT OF VOC	-0.25%/°C

PERCENT OF VALUES	NUMBER OF CURRENT CARRYING CONDUCTORS IN EMT
0.80	4-6
0.70	7-9
0.50	10-20

POWER OPTIMIZER (SOLAREEDGE C651U)	
RATED INPUT DC POWER	650 W
MAXIMUM INPUT VOLTAGE	80 VDC
MAX INPUT CURRENT	20.0 ADC
MAXIMUM OUTPUT CURRENT	24.0 ADC
WEIGHTED EFFICIENCY	98.80%

SYSTEM INFO.
(810)JA SOLAR JAM72D40-585/LB
MODULES
(10) SOLAREEDGE SE40KUS (480V)
INVERTERS
DC SYSTEM SIZE: 473.85 KWDC
AC SYSTEM SIZE: 400.00 KWAC

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026

SHEET NAME
SPECIFICATIONS
NOTES

SHEET SIZE
ANSI B
24" X 36"

SHEET NUMBER
PV-4A

PHOTOVOLTAIC POWER SOURCE

CODE : PER NEC 690.31(D)(2)

SOLAR PV DC CIRCUIT

CODE : PER NEC 690.31(O)(2)

1 DC Conduit

Scale: NTS

! WARNING

TURN OFF PHOTOVOLTAIC AC
DISCONNECT PRIOR TO
WORKING INSIDE PANEL

CODE : PER NEC 110.27(C) & OSHA 1910.145(f)(7)

! WARNING

ELECTRICAL SHOCK HAZARD
TERMINALS ON THE LINE AND LOAD
SIDES MAY BE ENERGIZED
IN THE OPEN POSITION

CODE : PER NEC 110.27(C) & OSHA 1910.145(i)(7)

2 Junction Box

Scale: NTS

! WARNING

THE DISCONNECTION OF THE
GROUNDED CONDUCTORS(S)
MAY RESULT IN OVERVOLTAGE
OF THE EQUIPMENT

CODE : PER NEC 690.13(B)

3 Inverter

Scale: NTS

! WARNING

RACEWAY IS ENERGIZED WHENIN
THE OPEN POSITION. DO NOT
RELOCATE OR CUT

4 Conduit

Scale: NTS

! WARNING

THIS EQUIPMENT FED BY MULTIPLE
SOURCES: TOTAL RATING OF ALL OVER
CURRENT DEVICES EXCLUDING MAIN
POWER SUPPLY SHALL NOT EXCEED
AMPACITY OF BUSBAR

CODE : PER NEC 690.13(B)

! WARNING

ELECTRIC SHOCK HAZARD
TERMINALS ON BOTH LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION

CODE : PER NEC 706.15(C)(4) and NEC 690.13(B)

PHOTOVOLTAIC SYSTEM AC DISCONNECT

RATED AC OPERATING CURRENT 603.125 AMPS

AC NOMINAL OPERATING VOLTAGE 480 VOLTS

CODE : PER NEC 690.54

5 AC Disconnects

Scale: NTS

MAIN PHOTOVOLTAIC

SYSTEM DISCONNECT

CODE : PER NEC 690.13(B)

RAPID SHUTDOWN FOR
SOLAR PV SYSTEM

CODE : PER NEC 690.56(C)(2)

DO NOT DISCONNECT
UNDER LOAD

CODE : PER NEC 690.15(B) and NEC 690.33(D)(2)

WARNING DUAL POWER SOURCE SECOND
SOURCE IS PHOTOVOLTAIC SYSTEM

CODE : PER NEC 690.59 and NEC 705.12(D)(3)

! WARNING

POWER SOURCE OUTPUT
CONNECTION. DO NOT RELOCATE
THIS OVERCURRENT DEVICE.

CODE : PER NEC 705.12(B)(3)(2)

! CAUTION

PHOTOVOLTAIC SYSTEM CIRCUIT IS TAPPING

CODE : PER NEC 705.12(B)(3)(2)

PANEL BOARD ENERGIES FROM
TWO SOURCES OF AC POWER
SOLAR 603.125A AT 480V
UTILITY GRID 2000A AT 480V

CODE : PER NEC 690.54

! WARNING

TURN OFF PHOTOVOLTAIC
AC DISCONNECT PRIOR TO
WORKING INSIDE PANEL

CODE : PER NEC 110.27(C) and OSHA 1910.145(f)(7)

! WARNING

ELECTRIC SHOCK HAZARD
TERMINALS ON BOTH LINE AND
LOAD SIDES MAY BE ENERGIZED
IN THE OPEN POSITION

CODE : PER NEC 706.15(C)(4) and NEC 690.13(B)

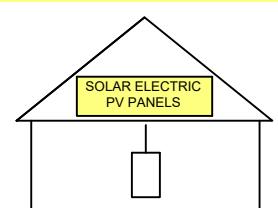
! WARNING

SINGLE 120-VOLT SUPPLY
DO NOT CONNECT
MULTI WIRE BRANCH CIRCUITS

CODE : PER NEC 706.15(C)(4) and NEC 690.13(B)

SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN
SWITCH TO THE
"OFF" POSITION TO
SHUT DOWN PV SYSTEM
AND REDUCE
SHOCK HAZARD
IN THE ARRAY



CODE : PER NEC 605.11.3.1(1) and NEC 690.56(C)

! WARNING: DUAL POWER SOURCE
SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

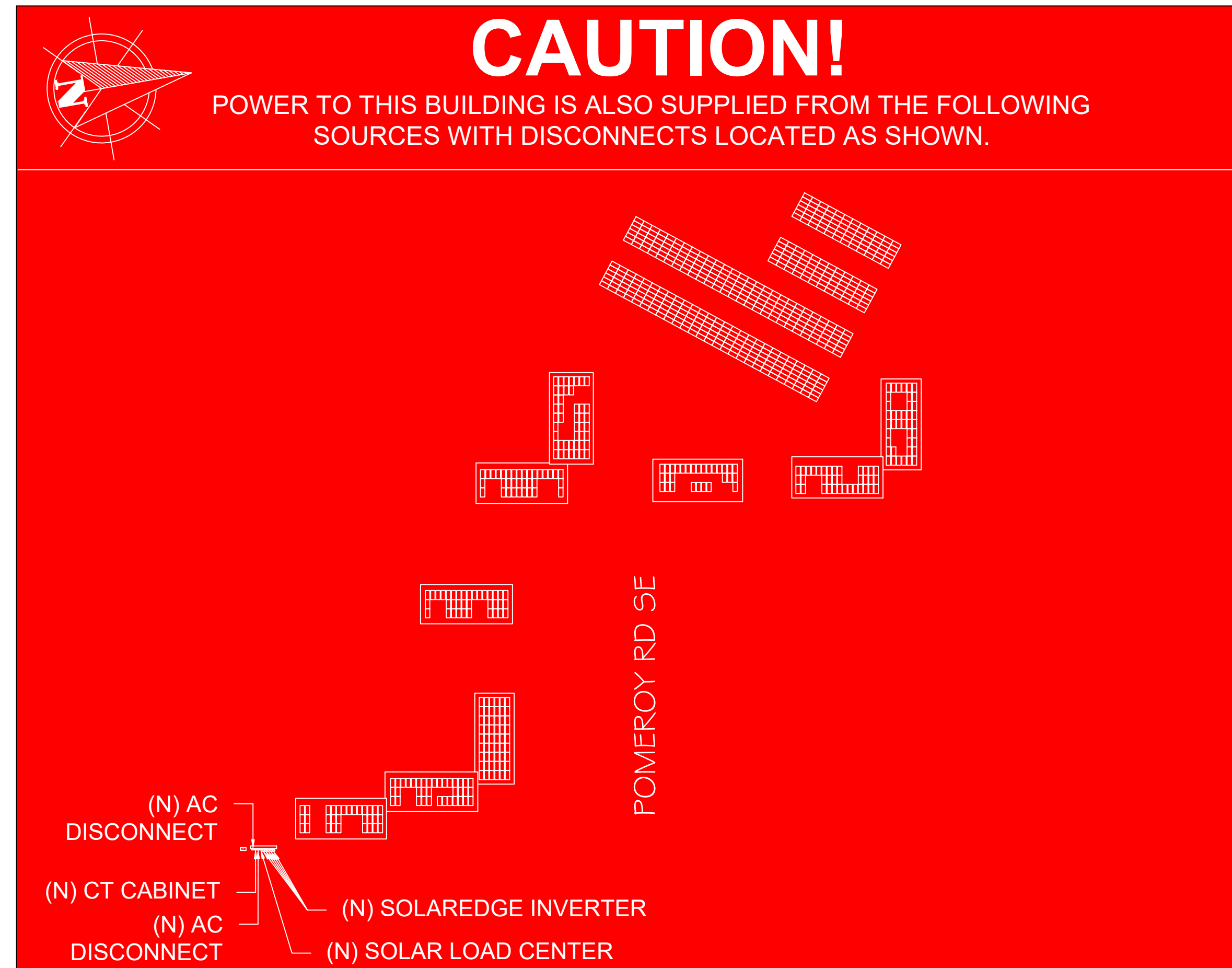
(PER CODE: NEC 705.12(B)(3-4) & and 690.59)

7 Point of Interconnection

Scale: NTS

PLACARDS NOTES

1. NEC ARTICLES 690 AND 705 AND IRC SECTION R331 MARKINGS SHOW HEREON
2. ALL MARKINGS SHALL CONSIST OF THE FOLLOWING:
 - A. UV RESISTANT SIGN MATERIAL WITH ENGRAVED OR MACHINE PRINTED LETTERS OR ELECTRO-PLATING
 - B. RED BACKGROUND COLOR WITH WHITE TEXT AND LINE WORK
 - C. ARIAL FONT.
3. ALL SIGNS SHALL BE SIZED APPROPRIATELY AND PLACED IN THE LOCATIONS SPECIFIED.
4. SIGNS SHALL BE ATTACHED TO THE SERVICE EQUIPMENT USING POP-RIVETS OR SCREWS.
5. THE LABEL SHALL BE SUITABLE FOR THE ENVIRONMENT WHERE IT IS INSTALLED.
6. WHERE REQUIRED ELSEWHERE IN THIS CODE, ALL FIELD APPLIED LABELS, WARNINGS AND MARKINGS SHOULD COMPLY WITH ANSI Z535.4 [NEC 110.21(8) FIELD MARKING].
7. ADHESIVE FASTENED SIGNS MAY BE ACCEPTABLE IF PROPERLY ADHERED. VINYL SIGNS SHALL BE WEATHER RESISTANT [IFC 605.11.1.3]



LABEL LOCATION:
MAIN SERVICE PANEL & UTILITY METER &
SUB PANEL, AC PANEL, AC DISCONNECT

SYSTEM INFO.

(810)JA SOLAR JAM72D40-585/LB
MODULES

(10) SOLAREEDGE SE40KUS (480V)
INVERTERS

DC SYSTEM SIZE: 473.85 KWDC

AC SYSTEM SIZE: 400.00 KWAC

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026

SHEET NAME

SIGNAGE

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-5

Harvest the Sunshine

605W

JA SOLAR

JAM72D40 LB

n-type Double Glass Bifacial Modules

Premium Cells

n-Bycium+
16BB

MBB Half-Cell
Technology

26%

Up To

Cell Conversion
Efficiency

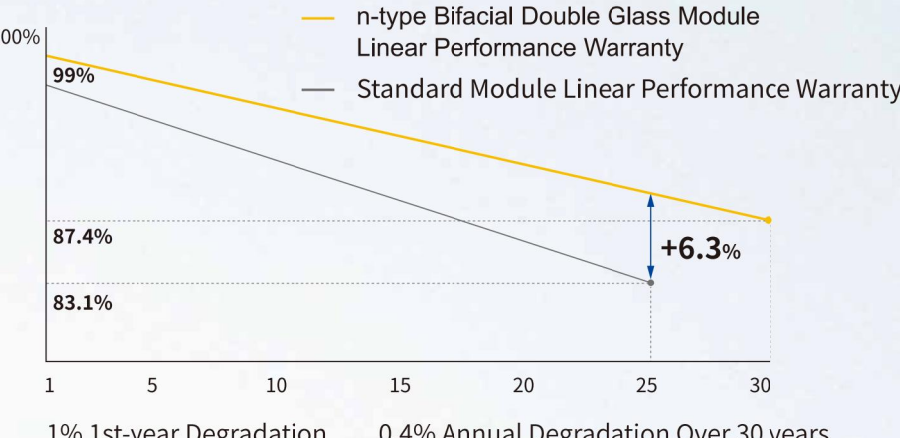
Premium Modules

 Higher power generation better LCOE

 n-type with very Lower LID

 Better Temperature Coefficient

 Better low irradiance response



1% 1st-year Degradation 0.4% Annual Degradation Over 30 years

12-year product warranty

30-year linear power output warranty

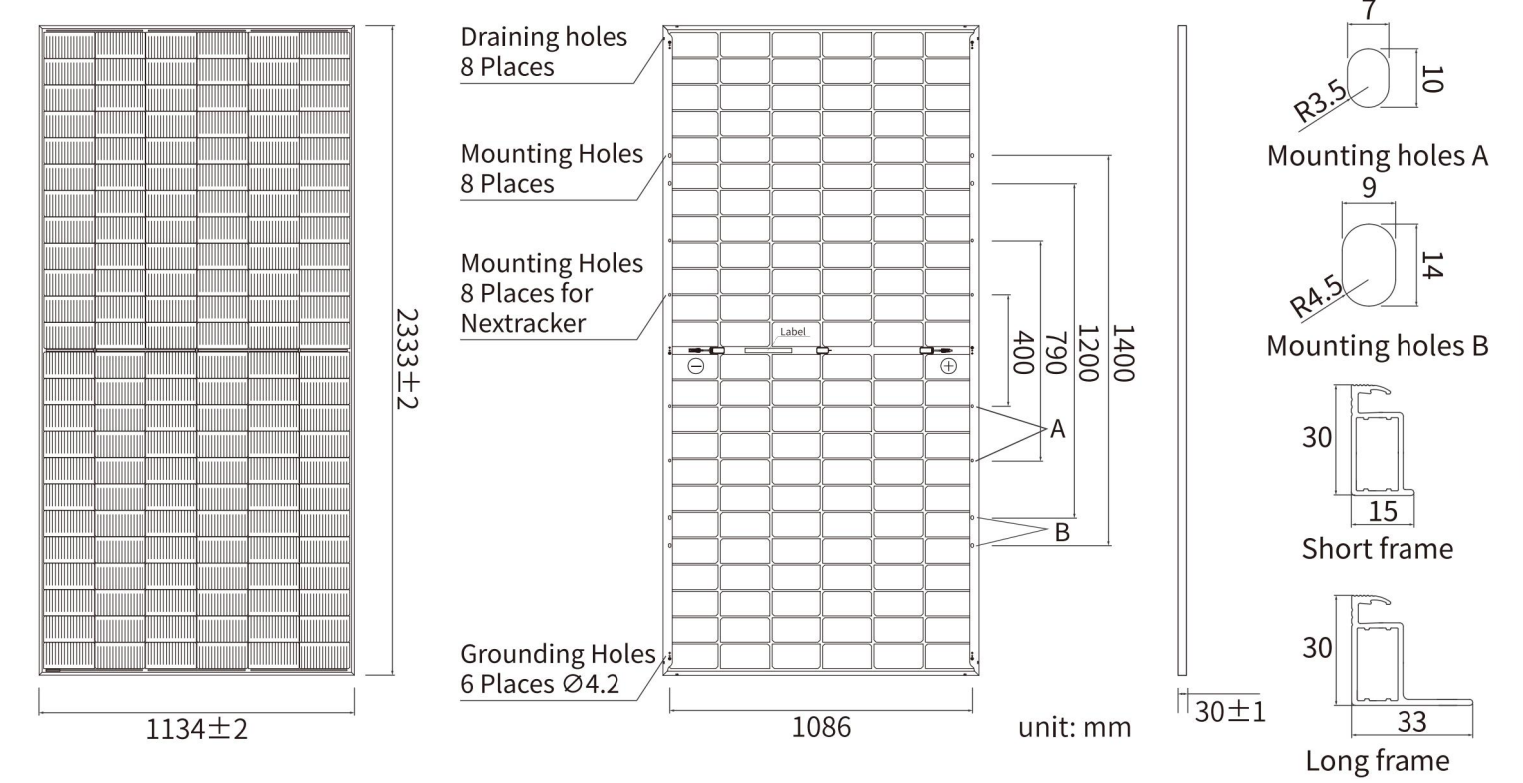
- Comprehensive Certificates
- IEC 61215, IEC 61730, UL 61215, UL 61730
 - ISO 9001: 2015 Quality management systems
 - ISO 14001: 2015 Environmental management systems
 - ISO 45001: 2018 Occupational health and safety management systems
 - IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



JAM72D40 LB

n-type Double Glass Bifacial Modules

DEEP BLUE 4.0 Pro



MECHANICAL PARAMETERS

Cell	Mono
Weight	32.5kg
Dimensions	2333±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm²(IEC), 12 AWG(UL)
No. of cells	144(6×24)
Junction Box	IP68, 3diodes
Connector	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300mm(+)/400mm(-) Landscape: 1400mm(+)/1400mm(-)
Front Glass/Back Glass	2.0mm/2.0mm
Packaging Configuration	36pcs/Pallet, 720pcs/40HQ Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC

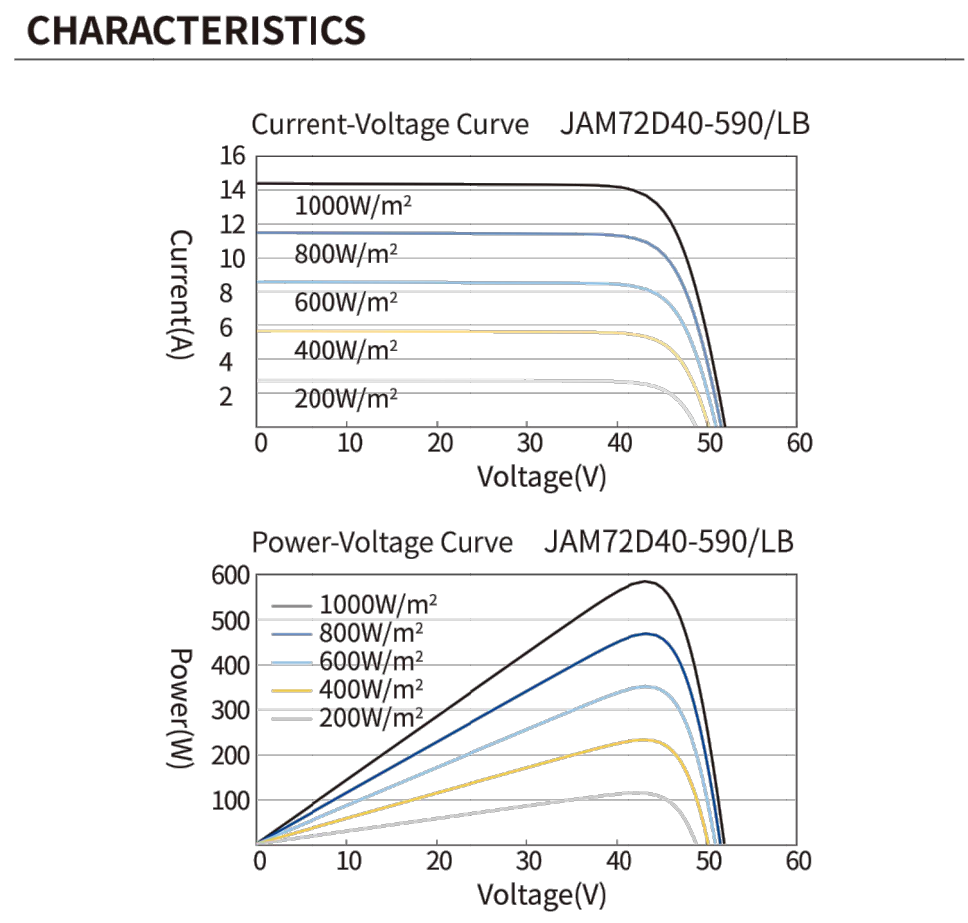
TYPE	JAM72D40 580/LB	JAM72D40 585/LB	JAM72D40 590/LB	JAM72D40 595/LB	JAM72D40 600/LB	JAM72D40 605/LB
Rated Maximum Power(Pmax) [W]	580	585	590	595	600	605
Open Circuit Voltage (Voc) [V]	51.60	51.80	52.00	52.20	52.40	52.60
Maximum Power Voltage(Vmp) [V]	43.06	43.24	43.41	43.59	43.76	43.94
Short Circuit Current(Isc) [A]	14.23	14.29	14.35	14.42	14.48	14.53
Maximum Power Current(Imp) [A]	13.47	13.53	13.59	13.65	13.71	13.77
Module Efficiency [%]	21.9	22.1	22.3	22.5	22.7	22.9
Power Tolerance	0~+3%					
Temperature Coefficient of Isc(α_Isc)	+0.045%/°C					
Temperature Coefficient of Voc (β_Voc)	-0.250%/°C					
Temperature Coefficient of Pmax(γ_Pmp)	-0.290%/°C					
STC	Irradiance 1000W/m², cell temperature 25°C, AM1.5G					

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM72D40 580/LB	JAM72D40 585/LB	JAM72D40 590/LB	JAM72D40 595/LB	JAM72D40 600/LB	JAM72D40 605/LB
Rated Max Power(Pmax) [W]	626	632	637	643	648	653
Open Circuit Voltage(Voc) [V]	51.60	51.80	52.00	52.20	52.40	52.60
Max Power Voltage(Vmp) [V]	43.06	43.24	43.41	43.59	43.76	43.94
Short Circuit Current(Isc) [A]	15.36	15.43	15.50	15.57	15.64	15.69
Max Power Current(Imp) [A]	14.55	14.61	14.68	14.74	14.81	14.87
Irradiation Ratio (rear/front)	10%					

* For Nexttracker installations, maximum static load please take compatibility approve letter between JA Solar and Nexttracker for reference.
** Bifaciality=Pmax, rear/Rated Pmax, front



OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	30A
Maximum Static Load, Front*	5400Pa(112 lb/ft²)
Maximum Static Load, Back*	2400Pa(50 lb/ft²)
NOCT	45±2°C
Bifaciality**	80%±10%
Safety Class	Class II
Fire Performance	UL Type 29/Class C

JA SOLAR

Headquarters

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Specifications subject to technical changes and tests.
JA Solar reserves the right of final interpretation.
Version No.: Global-EN-20240423A

SYSTEM INFO.

(810)JA SOLAR JAM72D40-585/LB MODULES
(10) SOLAREEDGE SE40KUS (480V) INVERTERS
DC SYSTEM SIZE: 473.85 KWDC
AC SYSTEM SIZE: 400.00 KWAC

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026

SHEET NAME

EQUIPMENT SPECIFICATION

SHEET SIZE

ANSI B
24" X 36"

SHEET NUMBER

PV-6

Three Phase
Commercial Inverter
USA Domestic Content Eligible*
For North America
SE10KUS / SE17.3KUS / SE30KUS / SE40KUS

INVERTER



SolarEdge's USA-manufactured offering for C&I rooftops and carports

- Eligible for domestic content*: SolarEdge’s USA-manufactured inverters, when paired with certain SolarEdge USA-manufactured power optimizers, are intended to be eligible for the enhanced federal income tax credit for domestic content

Specifically designed to work with power optimizers

Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp

Fixed DC voltage inverter for superior efficiency and longer strings

Small, lightest in its class, and easy to install outdoors or indoors on provided bracket
- Built-in type 2 DC and AC Surge Protection, to better withstand lightning events

Integrated arc fault protection and rapid shutdown for NEC 2014 – 2023, per articles 690.11 and 690.12

Built-in module level monitoring with ethernet, wireless, or cellular communication for full system visibility

Integrated safety switch

UL 1741 SA and SB certified, for CPUC Rule 21 grid compliance

* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the “Rooftop (MLPE)” category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

solaredge.com



Three Phase Commercial Inverter
USA Domestic Content Eligible for North America
SE10KUS / SE17.3KUS / SE30KUS / SE40KUS

Applicable to inverters with part number Model Number	USE-SIN-USxxLxxxx				UNITS
	SE10KUS	SE17.3KUS	SE30KUS	SE40KUS	
OUTPUT					
Maximum AC Output Capacity	40,000				W
Rated AC Power Output	10,000	17,300	30,000	40,000	W
Maximum Apparent AC Output Power	10,000	17,300	30,000	40,000	VA
AC Output Line Connections	3W + PE, 4W + PE				
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-N)	105 – 120 – 132.5		244 – 277 – 305		Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-L)	183 – 208 – 229		422.5 – 480 – 529		Vac
AC Frequency Min-Nom-Max ⁽¹⁾	59.3 – 60 – 60.5		59.3 – 60 – 60.5		Hz
Maximum Continuous Output Current (per Phase)	27.8	48.25	36.25	48.25	Aac
GFDI Threshold	1				A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes				
Total Harmonic Distortion	≤ 3				%
Power Factor Range	+/- 0.85 to 1				
INPUT ⁽²⁾					
Maximum DC Power (Module STC)	17,500	30,275	52,500	70,000	W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC+ to DC-	600		1000		Vdc
Operating Voltage Range	370 – 600		840 – 1000		Vdc
Maximum Input Current	27.8	48.25	36.25	48.25	Adc
Maximum Input Short Circuit Current	55				Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	167kΩ Sensitivity ⁽³⁾				
CEC Weighted Efficiency	97	97.5	98.5		%
Night-time Power Consumption	<4				W
ADDITIONAL FEATURES					
Supported Communication Interfaces	2 x RS485, Ethernet, Cellular (optional)				
Inverter Commissioning	With the SetApp mobile application using built-in access point for local connection				
Arc Fault Protection	Integrated, User Configurable (According to UL 1699B)				
Photovoltaic Rapid Shutdown System	NEC 2014 – 2023, built-in, if paired with C651U				
RS485 Surge Protection Plug-in	Supplied with the inverter, built-in				
DC Surge Protection	Type II, field replaceable, built-in				
AC Surge Protection	Type II, field replaceable, built-in				
Smart Energy Management	Export Limitation				
DC SAFETY SWITCH					
DC Disconnect	Integrated				
STANDARD COMPLIANCE					
Safety	UL 1741; UL 1741 SA; UL 1741 SB; UL 1699B; CSA C22.2#107.1; Canadian AFCI according to T.I.L. M-07				
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (HI)				
Emissions	FCC Part 15 Class A				
INSTALLATION SPECIFICATIONS					
AC Output Conduit Size / AWG Range	¾" or 1" / 6 – 10 AWG				
DC Input Conduit Size / AWG Range	¾" or 1" / 6 – 12 AWG				
Number of DC Input Pairs (Fuseless)	3				
Dimensions with Safety Switch (H x W x D)	31.8 x 12.5 x 11.8 / 808 x 317 x 300				in / mm
Weight with Safety Switch	78.2 / 35.5				lb / kg
Cooling	Fans (user replaceable)				
Noise	< 62				dBA
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁴⁾				°F / °C
Protection Rating	NEMA 3R				
Mounting	Bracket provided				

(1) For other regional settings please contact SolarEdge support.
(2) For compatibility of inverters and power optimizers, see this [technical note](#).
(3) Where permitted by local regulations.
(4) For power derating information, see the [Temperature Derating](#) technical note.



SYSTEM INFO.

(810)JA SOLAR JAM72D40-585/LB MODULES

(10) SOLAREEDGE SE40KUS (480V) INVERTERS

DC SYSTEM SIZE: 473.85 KWDC

AC SYSTEM SIZE: 400.00 KWAC

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026

SHEET NAME
EQUIPMENT
SPECIFICATION

SHEET SIZE
ANSI B
24" X 36"

SHEET NUMBER
PV-7

Commercial Power Optimizer
USA Domestic Content Eligible
C651U



SolarEdge's USA-manufactured offering for C&I projects, for power optimization at the module level

- **Eligible for Domestic Content***

- SolarEdge USA-manufactured power optimizers, when paired with certain SolarEdge USA-manufactured inverters, are intended to be eligible for the enhanced federal income tax credit for domestic content
- **Enhanced Monitoring and Visibility**

- Maximum system visibility up to the individual module level
 - Pinpointed fault detection and remote troubleshooting
- **Higher Energy Yields**

- Generates maximum power from each PV module
 - High efficiency (99.5%)
 - Supports high power and bifacial PV modules, including G12 modules
- **Maximum Protection with Built-in Safety**

- Designed to automatically reduce high DC voltage to touch-safe levels, upon grid/inverter shutdown, with SafeDC™
 - Includes SolarEdge Sense Connect, designed to prevent arcs by monitoring Power Optimizer connectors for overheating
 - Certified to Photovoltaic Rapid Shutdown, according to NEC 2014 – 2023

* For more information, refer to the last page of this document

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Power Optimizer
USA Domestic Content Eligible for North America
C651U

Power Optimizer Model	C651U	
INPUT		
Rated Input DC Power ⁽¹⁾	650	W
Absolute Maximum Input Voltage (Voc)	80	Vdc
MPPT Operating Range	12.5 – 80	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module ⁽²⁾	20	Adc
Maximum Adjusted Short Circuit Current (with Safety Factor) ⁽³⁾	25	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overtoltage Category	II	
OUTPUT DURING OPERATION		
Maximum Output Power	650	Wdc
Maximum Output Current	24	Adc
Maximum Output Voltage	60	Vdc
SAFETY FEATURES		
SafeDC™	Yes	
Safety Output Voltage per Power Optimizer	0.5 ± 0.075	Vdc
Sense Connect	Yes	
Photovoltaic Rapid Shutdown System	Yes, NEC 2014 – 2023	
STANDARD COMPLIANCE		
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3	
Safety	IEC62109-1 (class II safety); UL 1741; UL 3741; CSA C22.2#107.1	
Material	UL94 V-0, UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters ⁽⁴⁾	Commercial Three Phase Inverters with one of the following part number structures: xSE-SIN-USxx0xxx SE-DBL-USxx0xxx SE-TRI-USxx0xxx	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 155 x 52 / 5.03 x 6.10 x 2.05	mm / in
Weight	1080 / 2.38	gr / lb
Input Connector	MC4 ⁽⁵⁾	
Input Wire Length	(+) 1.4, (-) 1.4 / (+) 4.59, (-) 4.59 ⁽⁶⁾	m / ft
Output Connector	MC4	
Output Wire Length	(+) 3.0 (-) 0.10 / (+) 9.84, (-) 0.32	m / ft
Operating Temperature Range ⁽⁷⁾	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 – 100	%

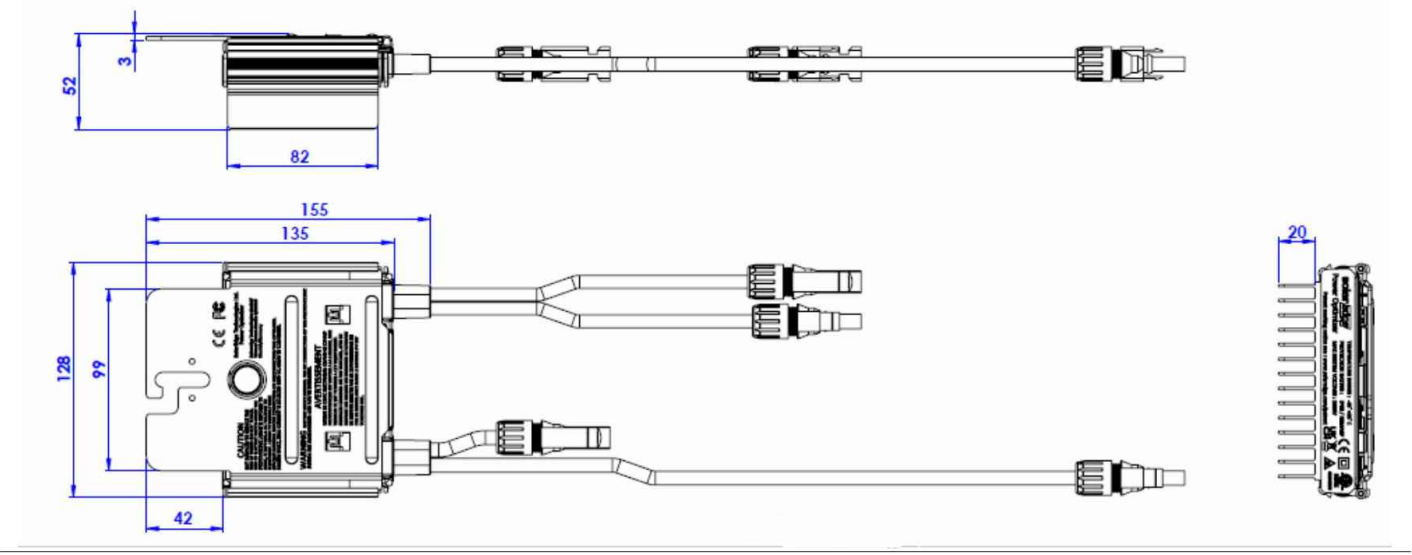
(1) Modules with a front side maximum power of up to 715W at STC are allowed. Up to +5% power tolerance is allowed.
(2) When using bifacial modules, consider only the front side Isc at STC (0% back side gain). For details, see [page](#).
(3) Adjusted for ambient temperature, irradiance, bifacial gain, safety factor, and so on, in accordance with NEC and CSA.
(4) For detailed inverter compatibility information, see [page](#).
(5) For other connector types please contact SolarEdge.
(6) The Sense Connect feature is only enabled on the output wire connectors. For details, see [page](#).
(7) For ambient temperatures above +65°C / +149°F, power derating is applied. For details, see [page](#).

Power Optimizer
USA Domestic Content Eligible for North America
C651U

PV System Design Using a SolarEdge Inverter ⁽⁸⁾		208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE30K, SE33.3K*	277/480V Grid SE40K*	
Compatible Power Optimizers		C651U				
Minimum String Length	Power Optimizers	13	13	18	18	
	PV Modules	13	13	18	18	
Maximum String Length	Power Optimizers	57	57	57	57	
	PV Modules	57	57	57	57	
Maximum Continuous Power per String		10,000	9600	20,400	20,400	W
Maximum Allowed Connected Power per String ⁽⁹⁾		1 string or more – 15,000	1 string – 11,400	1 string – 22,650	1 string – 22,650	W
			2 strings or more – 15,600	2 strings or more – 30,400	2 strings or more – 30,400	
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimizers				

*The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy Technology inverter.
(8) C651U cannot be mixed with any other Power Optimizer models in the same string.
(9) To connect more STC power per string, design your project using [SolarEdge Designer](#).

C651U Mechanical Drawing



Eligibility for Domestic Content
As it relates to the domestic content rules, the U.S. Department of Treasury and the IRS have not yet issued proposed or final regulations. Rather, the IRS has issued three notices - Notice 2023-38, Notice 2024-41 and Notice 2025-08. These notices provide guidance regarding the domestic content rules. SolarEdge products referenced herein are manufactured with the intent to be eligible for inclusion under the elective safe harbor table in calculating the Domestic Cost Percentage under the **"Rooftop (MLPE)"** category (under IRS **Notices 2024-41 and 2025-08, depending on the PN used – see chart below**). Eligibility is subject to the installation of qualified USA-Manufactured inverters and Power Optimizers (C651U) in the same project. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% Domestic Content bonus, to determine how the applicable rules apply to your project. The forward-looking statements in this document are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USE-SIN-USR0BNS6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR0NNN6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USE-SIN-USR0BNS8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR0NNN8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)

SYSTEM INFO.		
(810)JA SOLAR JAM72D40-585/LB MODULES		
(10) SOLAREEDGE SE40KUS (480V) INVERTERS		
DC SYSTEM SIZE: 473.85 KWDC		
AC SYSTEM SIZE: 400.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

Signature with Seal

PROJECT NAME & ADDRESS

2906 POMEROY RD SE
COMMERCIAL
2906 POMEROY RD SE,
WASHINGTON, DC 20020,
USA

DATE: 03/10/2026
SHEET NAME EQUIPMENT SPECIFICATION
SHEET SIZE ANSI B 24" X 36"
SHEET NUMBER PV-8

GRIDFLEX[®] 5



LIGHTER

- Grid structure increases load sharing benefits
- Low profile for aerodynamic advantage
- Wind deflectors only required at north array edge

FASTER

- Modular, universal components for easy design and install
- Preassembled components are fast and easy to use
- Hinged module clamp for install and O&M access
- Shared rail, fewer parts, single tool install

MORE SECURE

- Torqueable, checkable module clamping
- Robust, reliable clamps with multiple frame connection points
- Ballast fully contained under modules in structural tray
- Wind tunnel tested and validated
- Clamp fasteners provide more security than friction-only connections

WHY GRIDFLEX[®] 5?

GRIDFLEX[®] combines strength and flexibility for the best in flat roof solar. Low ballast counts and ultimate array design flexibility. Rail sections connect to create a rigid structure that greatly reduces ballast weight. Modular, preassembled components offer ultimate array design flexibility and installer preferred construction process. Additionally, preassembled stanchion clamps secure the inside and outside of the module frame for robust reliable connections that can be trusted beyond the 25-year warranty.



FOR QUESTIONS OR CUSTOMER SERVICE CONTACT:
505-242-6411 | SALES@UNIRAC.COM | WWW.UNIRAC.COM
PUB2025NOV20-V1

CONFORMS TO
UL3741

CONFORMS TO
UL2703

ISO 9001:2015
14001:2015
CERTIFIED

SYSTEM INFO.		
(810)JA SOLAR JAM72D40-585/LB MODULES		
(10) SOLAREEDGE SE40KUS (480V) INVERTERS		
DC SYSTEM SIZE: 473.85 KWDC		
AC SYSTEM SIZE: 400.00 KWAC		

REVISIONS		
DESCRIPTION	DATE	REV

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USA

DATE: 03/10/2026

SHEET NAME
**EQUIPMENT
SPECIFICATION**

SHEET SIZE
**ANSI B
24" X 36"**

SHEET NUMBER
PV-9