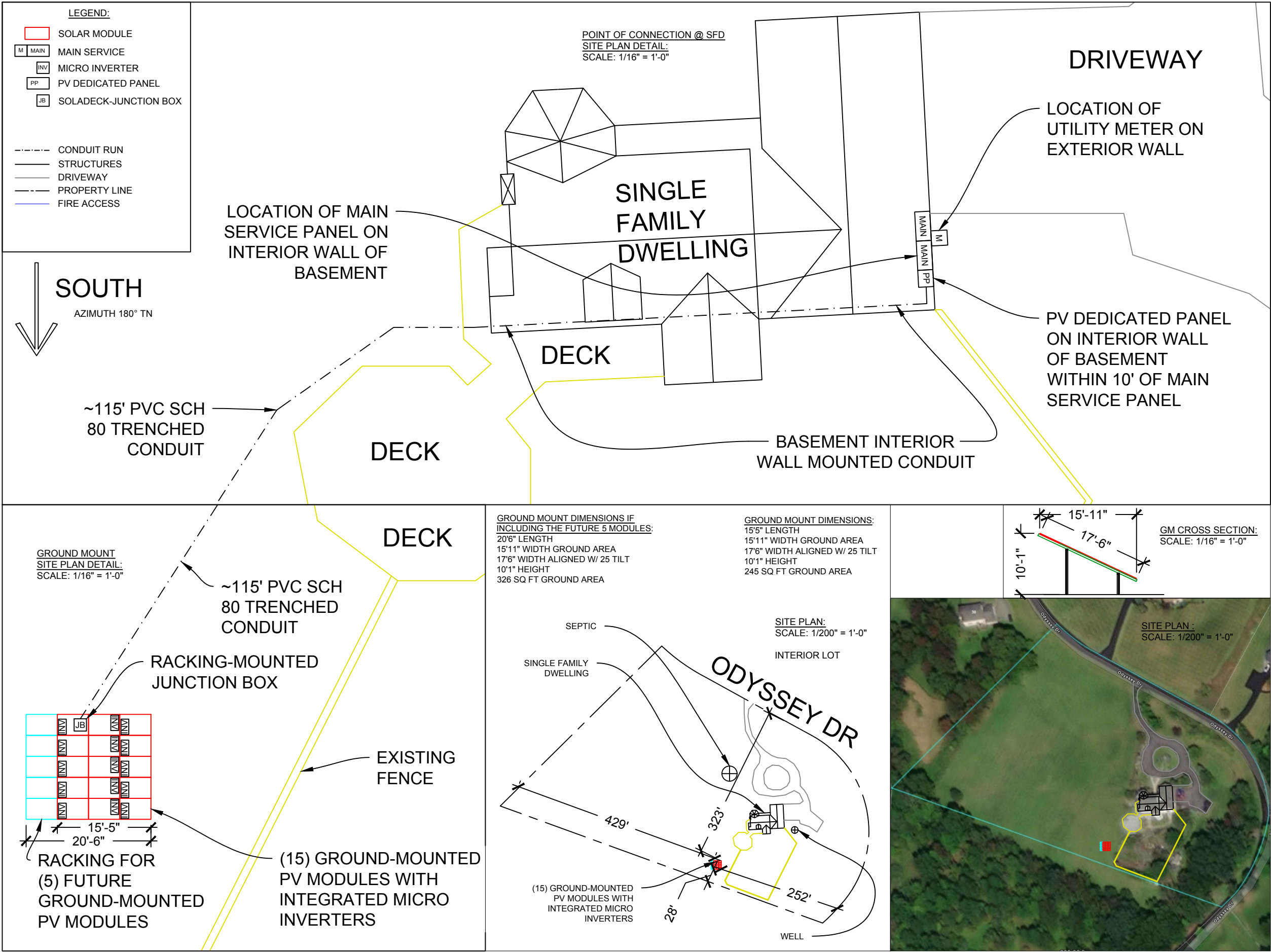


CONFORMING TO 2020 RESIDENTIAL CODE OF NEW YORK STATE & 2017 NEC



NEW YORK STATE SOLAR FARM INC.

871 STATE ROUTE 208

GARDINER, NY 12525 USA

PHONE: 1.877.SOLAR.95

BuySolarLocal.com

SUNPOWER®

by  
New York State Solar Farm

**CUSTOMER:**

LARRY DYSINGER

RESIDENCE

46 ODYSSEY DR

CHESTER, NY 10918

**CUSTOMER ID#:**

19549

**PV SYSTEM CONFIGURATION:**

SYSTEM SIZE: 5.4 kW DC

SYSTEM SIZE: 4.725 kW AC

PV MODULES: (15) SUNPOWER

X22-360-E-AC

MICRO INVERTER: (2 BRANCHES)

DRAWN BY: NYSOLAR-AS

DATE: 4-21-2021

REV: 0

INSTALLER CODE: 0

**SHEET #: PV1**

SHEET TITLE: SITE PLAN

1 OF 10 SHEETS

SCALE: LISTED

SOLAR ARRAYS AND THEIR SYSTEM COMPONENTS SHALL BE INSTALLED IN CONJUNCTION WITH LOCAL CODES, 2020 RESIDENTIAL CODE OF NEW YORK STATE & 2017 NEC

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See included documentation from the manufacturer indicating that there is no neutral conductor required between the micro inverters and the PV dedicated panel

<b>SUNPOWER 360 WATT AC MODULE SPECS:</b>	
<b>NOMINAL OPERATING AC VOLTAGE:</b>	240 V
<b>NOMINAL OPERATING AC FREQUENCY:</b>	60 HZ
<b>MAXIMUM AC POWER:</b>	320 WATT
<b>MAXIMUM AC CURRENT:</b>	1.31 A
<b>MAXIMUM OVERCURRENT DEVICE RATING:</b>	20A
<b>DC/AC CONVERSION EFFICIENCY:</b>	97.5 %

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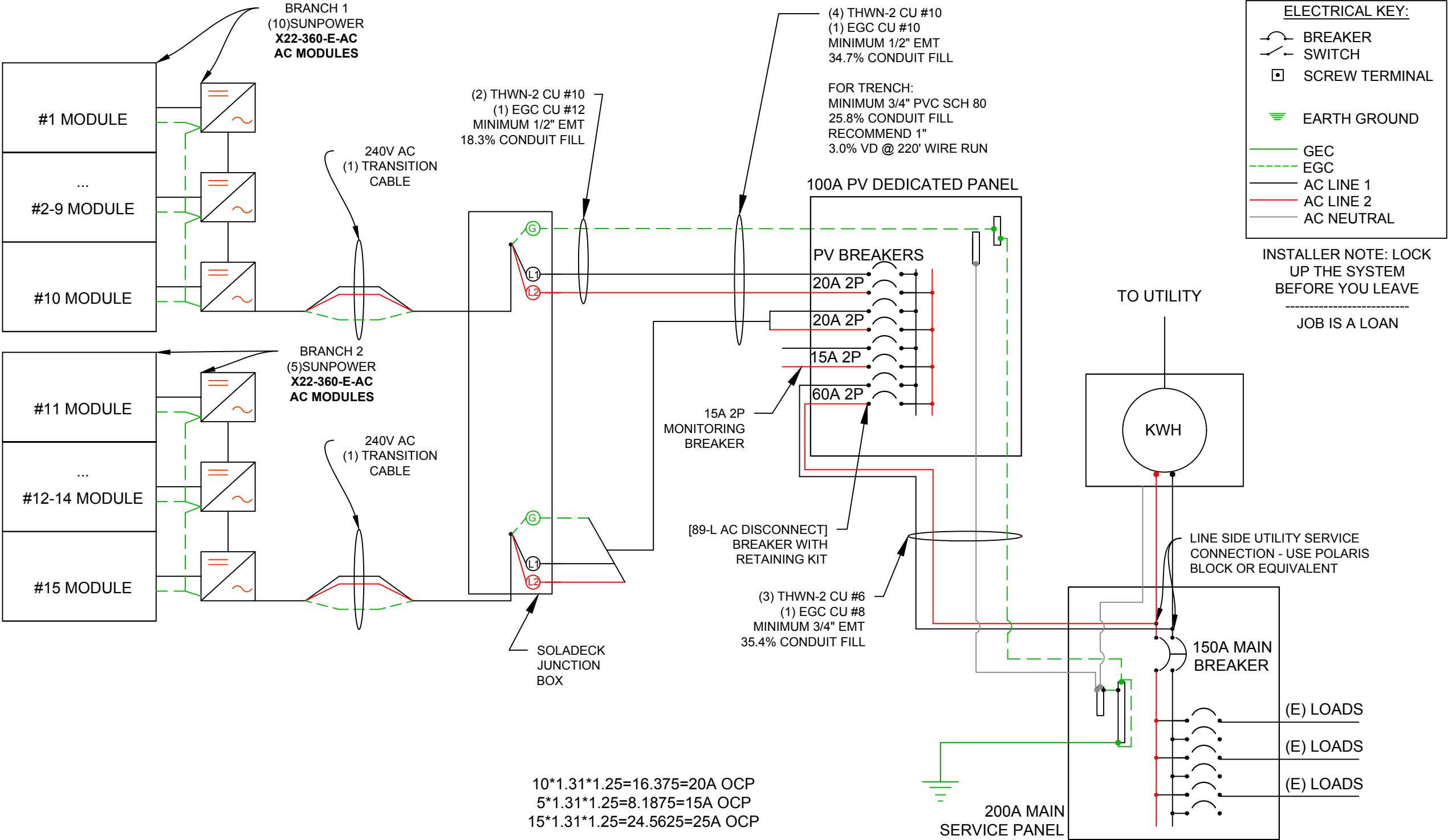
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PV MODULES: (15) SUNPOWER  
X22-360-E-AC  
MICRO INVERTER: (2 BRANCHES)

DRAWN BY: NYSOLAR-AS  
DATE: 4-21-2021  
REV: 0  
INSTALLER CODE: 0b

**SHEET #: PV2**

**SHEET TITLE: ELECTRICAL**  
2 OF 10 SHEETS  
SCALE: N/A

SOLAR ARRAYS AND THEIR SYSTEM COMPONENTS SHALL BE INSTALLED IN CONJUNCTION WITH LOCAL CODES, 2020 RESIDENTIAL CODE OF NEW YORK STATE & 2017 NEC



NEC 690.5(c)  
PLACE THIS LABEL ON INVERTER(S) OR NEAR  
GROUND-FAULT INDICATOR (ON INVERTER(S) U.O.N.)

**WARNING**  
ELECTRIC SHOCK HAZARD  
IF A GROUND FAULT IS INDICATED,  
NORMALLY GROUNDED CONDUCTORS  
MAY BE UNGROUNDED AND  
ENERGIZED

NEC 690.17  
PLACE THIS LABEL ON ALL DISCONNECTING  
MEANS WHERE ENERGIZED IN AN OPEN POSITION

**WARNING**  
ELECTRIC SHOCK HAZARD  
DO NOT TOUCH TERMINALS  
TERMINALS ON BOTH THE  
LINE AND LOAD SIDE MAY  
BE ENERGIZED IN THE  
OPEN POSITION

NEC 705.12(D)(7)  
PLACE THIS LABEL AT P.O.C. TO SERVICE  
DISTRIBUTION EQUIPMENT (I.E. MAIN PANEL (AND  
SUBPANEL IF APPLICABLE))

**WARNING**  
INVERTER OUTPUT CONNECTION  
DO NOT RELOCATE THIS  
OVERCURRENT DEVICE

NEC 690.31 (E) 3 & 4  
PLACE ON ALL JUNCTION BOXES EXPOSED  
RACEWAYS EVERY 10'

**PHOTOVOLTAIC  
POWER SOURCE**

NEC 690.54  
PLACE THIS LABEL AT "INTERACTIVE POINT OF  
INTERCONNECTION" (AT MAIN SERVICE PANEL AND  
SUBPANEL IF APPLICABLE)

INTERACTIVE PHOTOVOLTAIC POWER SOURCE  
RATED AC OUTPUT CURRENT (A): 19.65 A  
NOMINAL OPERATING AC VOLTAGE (V): 240 V

NEC 690.52  
PLACE THIS LABEL ON SERVICE  
DISTRIBUTION EQUIPMENT

SUNPOWER 360 WATT AC MODULE SPECS:  
NOMINAL OPERATING AC VOLTAGE: 240 V  
NOMINAL OPERATING AC FREQUENCY: 60 HZ  
MAXIMUM AC POWER: 320 WATT  
MAXIMUM AC CURRENT: 1.31 A  
MAXIMUM OVERCURRENT DEVICE RATING: 20A  
DC/AC CONVERSION EFFICIENCY: 97.5 %

NEC 705.12(D)(4)  
PLACE THIS LABEL ON ALL EQUIPMENT CONTAINING  
OVERCURRENT DEVICES IN CIRCUITS SUPPLYING  
POWER TO A BUSBAR OR CONDUCTORS SUPPLIED  
FROM MULTIPLE SOURCES.

**CAUTION**  
CONTAINS MULTIPLE POWER  
SOURCES

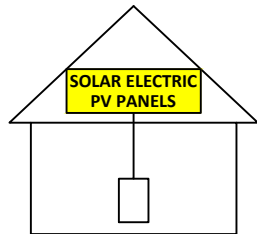
NEC 690.35(F)  
PLACE THIS LABEL AT EACH JUNCTION BOX, COMBINER  
BOX, INVERTER AND DEVICE WHERE ENERGIZED,  
UNGROUNDING CIRCUITS MAY BE EXPOSED DURING  
SERVICE.

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

**RAPID SHUTDOWN SWITCH  
FOR SOLAR PV SYSTEM**

**SOLAR PV SYSTEM EQUIPPED  
WITH RAPID SHUTDOWN**

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



RAPID SHUTDOWN:

**PHOTOVOLTAIC SYSTEM  
EQUIPPED WITH  
RAPID SHUTDOWN**

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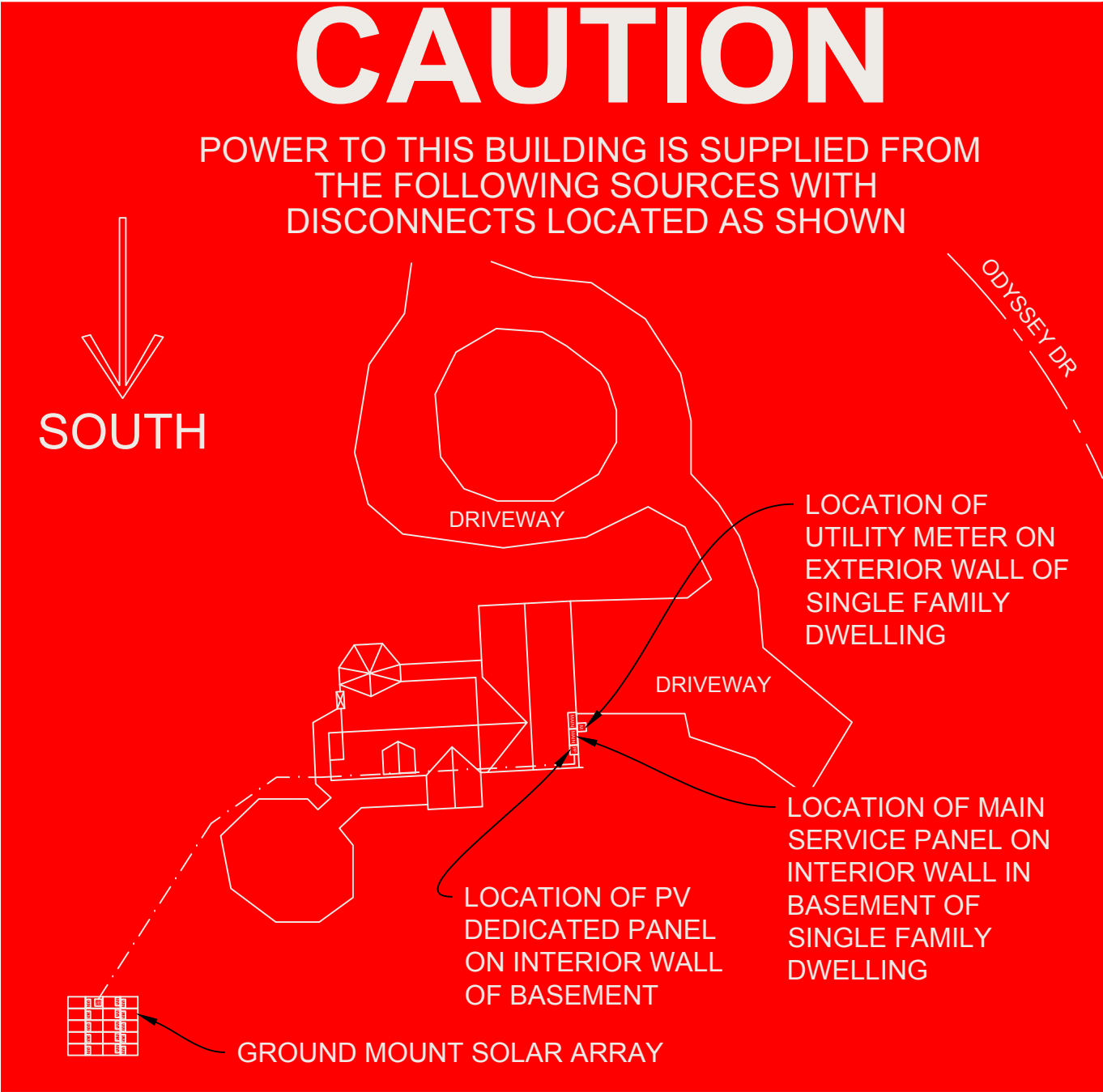
DRAWN BY: NYSOLAR-AS  
DATE: 4-21-2021  
REV: 0  
INSTALLER CODE: 0

**SHEET #: PV3**

**SHEET TITLE: LABELS**  
3 OF 10 SHEETS  
SCALE: N/A

SOLAR ARRAYS AND THEIR SYSTEM  
COMPONENTS SHALL BE INSTALLED  
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NEC 690.14(D)(4) LINKS TO 705.10 DIRECTORY  
A permanent plaque or directory denoting all electric power sources on or in the premises must be installed at each service equipment location and all interconnected electric power production sources.



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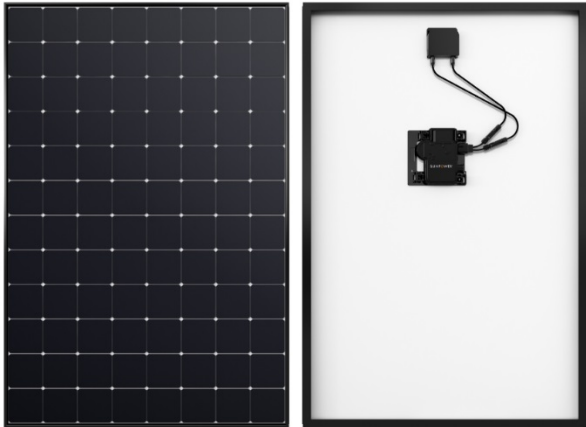
DRAWN BY: NYSOLAR-AS  
DATE: 4-21-2021  
REV: 0  
INSTALLER CODE: 0

**SHEET #: PV4**

**SHEET TITLE: LABELS**  
4 OF 10 SHEETS  
SCALE: N/A

SOLAR ARRAYS AND THEIR SYSTEM COMPONENTS SHALL BE INSTALLED IN CONJUNCTION WITH LOCAL CODES, 2020 RESIDENTIAL CODE OF NEW YORK STATE & 2017 NEC





## SunPower® X-Series: X22-370 | X22-360

# SunPower® Residential AC Module

Built specifically for use with the SunPower Equinox™ system, the only fully integrated solution designed, engineered, and warranted by one manufacturer.



### Maximum Power. Minimalist Design.

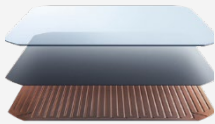
Industry-leading efficiency means more power and savings per available space. With fewer modules required and hidden microinverters, less is truly more.



### Highest Lifetime Energy and Savings.

Designed to deliver 60% more energy over 25 years in real-world conditions like partial shade and high temperatures.<sup>1</sup>

### Fundamentally Different. And Better.



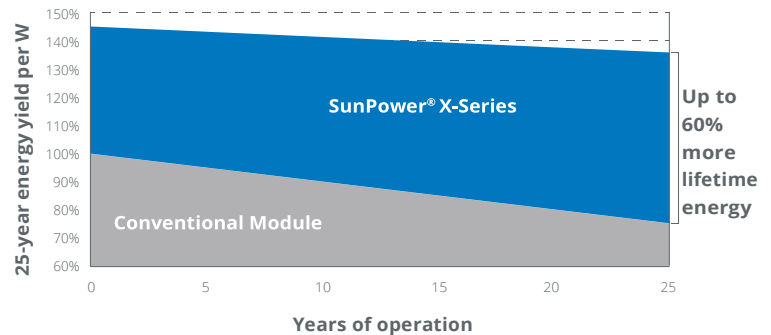
#### The SunPower® Maxeon® Solar Cell

- Enables highest-efficiency modules available<sup>2</sup>
- Unmatched reliability<sup>3</sup>
- Patented solid metal foundation prevents breakage and corrosion



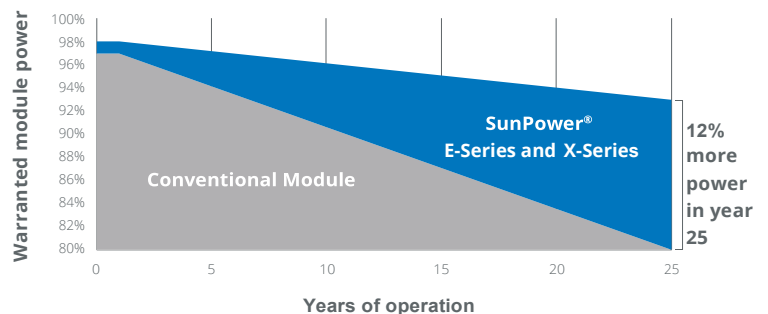
#### Factory-integrated Microinverter

- Simpler, faster installation
- Integrated wire management, rapid shutdown
- Engineered and calibrated by SunPower for SunPower modules



### Best Reliability. Best Warranty.

With more than 25 million modules deployed around the world, SunPower technology is proven to last. That's why we stand behind our module and microinverter with the industry's best 25-year Combined Power and Product Warranty, including the highest Power Warranty in solar.



AC Electrical Data		
Inverter Model: Enphase IQ 7XS (IQ7XS-96-ACM-US)	@240 VAC	@208 VAC
Peak Output Power	320 VA	320 VA
Max. Continuous Output Power	315 VA	315 VA
Nom. (L-L) Voltage/Range² (V)	240 / 211–264	208 / 183–229
Max. Continuous Output Current (A)	1.31	1.51
Max. Units per 20 A (LL) Branch Circuit³	12 (single phase)	10 (two pole) wye
CEC Weighted Efficiency	97.5%	97.0%
Nom. Frequency	60 Hz	
Extended Frequency Range	47–68 Hz	
AC Short Circuit Fault Current Over 3 Cycles	5.8 A rms	
Overvoltage Class AC Port	III	
AC Port Backfeed Current	18 mA	
Power Factor Setting	1.0	
Power Factor (adjustable)	0.7 lead. / 0.7 lag.	
No active phase balancing for three-phase installations		

DC Power Data		
	SPR-X22-370-E-AC	SPR-X22-360-E-AC
Nominal Power <sup>5</sup> (Phom)	370 W	360 W
Power Tolerance	+5/-0%	+5/-0%
Module Efficiency <sup>5</sup>	22.7%	22.1%
Temp. Coef. (Power)	-0.29%/°C	-0.29%/°C
Shade Tolerance	<ul style="list-style-type: none"> <li>• Three bypass diodes</li> <li>• Integrated module-level maximum power point tracking</li> </ul>	

Tested Operating Conditions	
Operating Temp.	-40°F to +140°F (-40°C to +60°C)
Max. Ambient Temp.	122°F (50°C)
Max. Load	Wind: 62 psf, 3000 Pa, 305 kg/m <sup>2</sup> front & back Snow: 125 psf, 6000 Pa, 611 kg/m <sup>2</sup> front
Impact Resistance	1 inch (25 mm) diameter hail at 52 mph (23 m/s)

Mechanical Data	
Solar Cells	96 Monocrystalline Maxeon Gen III
Front Glass	High-transmission tempered glass with anti-reflective coating
Environmental Rating	Module: Outdoor rated Inverter: NEMA Type 6 Class II
Frame	Class 1 black anodized (highest AAMA rating)
Weight	42.9 lb (19.5 kg)
Recommended Max. Module Spacing	1.3 in. (33 mm)

1 SunPower 360 W compared to a conventional module on same-sized arrays (260 W, 16% efficient, approx. 1.6 m<sup>2</sup>), 4% more energy per watt (based on third-party module characterization and PVSim), 0.75%/yr slower degradation (Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013).

2 Based on search of datasheet values from websites of top 10 manufacturers per IHS, as of January 2017.

3 #1 rank in "Fraunhofer PV Durability Initiative for Solar Modules: Part 3." PVTech Power Magazine, 2015. Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013.

4 Factory set to 1547a-2014 default settings. CA Rule 21 default settings profile set during commissioning. See the Equinox Installation Guide #518101 for more information.

5 Standard Test Conditions (1000 W/m<sup>2</sup> irradiance, AM 1.5, 25°C). NREL calibration standard: SOMS current, LACCS FF and voltage. All DC voltage is fully contained within the module.

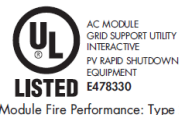
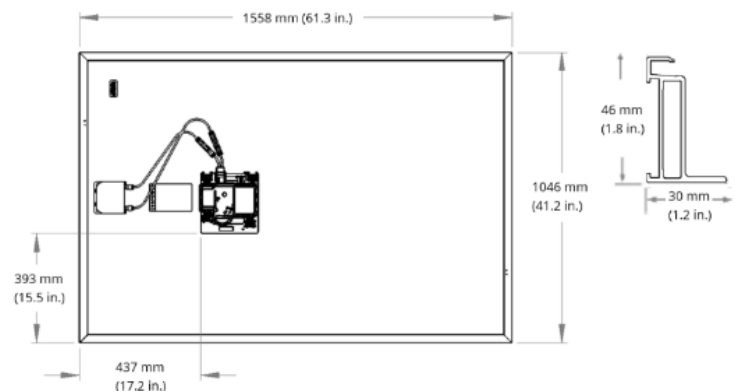
6 This product is UL Listed as PVRSE and conforms with NEC 2014 and NEC 2017 690.12; and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors; when installed according to manufacturer's instructions.

See [www.sunpower.com/facts](http://www.sunpower.com/facts) for more reference information.

For more details, see extended datasheet [www.sunpower.com/datasheets](http://www.sunpower.com/datasheets). Specifications included in this datasheet are subject to change without notice.

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Warranties, Certifications, and Compliance	
Warranties	<ul style="list-style-type: none"> <li>• 25-year limited power warranty</li> <li>• 25-year limited product warranty</li> </ul>
Certifications and Compliance	<ul style="list-style-type: none"> <li>• UL 1703</li> <li>• UL 1741 / IEEE-1547</li> <li>• UL 1741 AC Module (Type 2 fire rated)</li> <li>• UL 62109-1 / IEC 62109-2</li> <li>• FCC Part 15 Class B</li> <li>• ICES-0003 Class B</li> <li>• CAN/CSA-C22.2 NO. 107.1-01</li> <li>• CA Rule 21 (UL 1741 SA)<sup>4</sup></li> <li>(includes Volt/Var and Reactive Power Priority)</li> <li>• UL Listed PV Rapid Shutdown Equipment<sup>6</sup></li> </ul> <p>Enables installation in accordance with:</p> <ul style="list-style-type: none"> <li>• NEC 690.6 (AC module)</li> <li>• NEC 690.12 Rapid Shutdown (inside and outside the array)</li> <li>• NEC 690.15 AC Connectors, 690.33(A)-(E)(1)</li> </ul> <p>When used with InvisiMount racking and InvisiMount accessories (UL 2703):</p> <ul style="list-style-type: none"> <li>• Module grounding and bonding through InvisiMount</li> <li>• Class A fire rated</li> </ul> <p>When used with AC module Q Cables and accessories (UL 6703 and UL 2238)<sup>6</sup>:</p> <ul style="list-style-type: none"> <li>• Rated for load break disconnect</li> </ul>
PID Test	Potential-induced degradation free



**SUNPOWER®**

Please read the Safety and Installation Instructions for details.

531945 RevA