

February 10, 2023

Lumio Solar  
12600 Challenger Parkway, Suite 200  
Orlando, FL 32826

Scott  
Wyssling,  
PE

Digitally signed by Scott Wyssling, PE  
DN: C=US, S=Utah, L=Alpine,  
O=Wyssling Consulting, OU=Engineering,  
CN=Scott Wyssling, PE,  
E=swyssling@wysslingconsulting.com  
Reason: I am the author of this document  
Location: your signing location here  
Date: 2023.02.10 12:56:56-0700  
Foxit PDF Editor Version: 11.1.0

Re: Engineering Services  
Baker Residence  
358 Southwest Whitetail Circle, Lake City FL  
8.800 kW System

To Whom It May Concern:

We have received information regarding solar panel installation on the roof of the above referenced structure. Our evaluation of the structure is to verify the existing capacity of the roof system and its ability to support the additional loads imposed by the proposed solar system.

**A. Site Assessment Information**

1. Site visit documentation identifying attic information including size and spacing of framing for the existing roof structure.
2. Design drawings of the proposed system including a site plan, roof plan and connection details for the solar panels. This information will be utilized for approval and construction of the proposed system.

**B. Description of Structure:**

**Roof Framing:** Prefabricated wood trusses at 24" on center. All truss members are constructed of 2 x 4 dimensional lumber.  
**Roof Material:** Metal Roofing  
**Roof Slopes:** 27 +/- degrees  
**Attic Access:** Accessible  
**Foundation:** Permanent

**C. Loading Criteria Used**

- **Dead Load**
  - Existing Roofing and framing = 7 psf
  - New Solar Panels and Racking = 3 psf
  - TOTAL = 10 PSF
- **Live Load** = 20 psf (reducible) – 0 psf at locations of solar panels
- **Ground Snow Load** = 0 psf
- **Wind Load** based on ASCE 7-16
  - Ultimate Wind Speed = 120 mph (based on Risk Category II)
  - Exposure Category B

*Analysis performed of the existing roof structure utilizing the above loading criteria is in accordance with the FBC 2020 7<sup>th</sup> Edition, including provisions allowing existing structures to not require strengthening if the new loads do not exceed existing design loads by 105% for gravity elements and 110% for seismic elements. This analysis indicates that the existing framing will support the additional panel loading without damage, if installed correctly.*

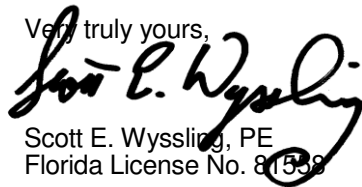
**D. Solar Panel Anchorage**

1. The solar panels shall be mounted in accordance with the most recent S-5! Installation manual. If during solar panel installation, the roof framing members appear unstable or deflect non-uniformly, our office should be notified before proceeding with the installation.
2. System will be attached to the metal roofing material utilizing the patented S-5! Connection. Installation of the connections shall be in accordance with the manufacturer's recommendations.
3. Considering the wind speed, roof slopes, size and spacing of framing members, and condition of the roof, the panel supports shall be placed no greater than 48" on center.

Based on the above evaluation, this office certifies that with the racking and mounting specified, the existing roof system will adequately support the additional loading imposed by the solar system. This evaluation is in conformance with the *FBC 2020 7<sup>th</sup> Edition*, current industry standards and practice, and is based on information supplied to us at the time of this report.

Should you have any questions regarding the above or if you require further information do not hesitate to contact me.

Very truly yours,

  
Scott E. Wyssling, PE  
Florida License No. 81558

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY SCOTT WYSSLING, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



Wyssling Consulting, PLLC  
76 N Meadowbrook Drive Alpine UT 84004  
Florida License # RY34912

Date Signed 2/10/2023



**SCOPE OF WORK:**  
TO INSTALL A ROOF MOUNTED SOLAR PHOTOVOLTAIC SYSTEM AT THE OWNER RESIDENCE LOCATED AT 358 SOUTHWEST WHITETAIL CIRCLE, LAKE CITY, FL 32024.

SYSTEM DC RATING: 8.80 KWDC  
SYSTEM AC RATING: 6.39 KWAC

- 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.
  - 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.
  - THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WITH APPROVED MATERIALS.
  - 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(C), NEC 2017).
  - NEW CONDUIT ROUTING SHOWN IS ESSENTIALLY SCHEMATIC. CONTRACTOR 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.
  - THE AC DISCONNECT MUST BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH.

| SHEET INDEX |                             |
|-------------|-----------------------------|
| CS-0        | COVER SHEET & BOM           |
| E-1         | STRING LAYOUT & SIGNAGE     |
| E-2         | ELECTRICAL DIAGRAM & CALCS. |
| E-3+        | EQUIPMENT SPECIFICATIONS    |

| GOVERNING CODES                                         |                         |
|---------------------------------------------------------|-------------------------|
| 2018 NFPA 1 (FIRE CODE)                                 | 2020 FFPC (7TH EDITION) |
| 2017 NATIONAL ELECTRICAL CODE                           |                         |
| 2020 FLORIDA BUILDING CODE (7TH EDITION)                |                         |
| AUTHORITY HAVING JURISDICTION (AHJ): COUNTY OF COLUMBIA |                         |

| BILL OF MATERIALS |     |                                                       |
|-------------------|-----|-------------------------------------------------------|
| EQUIPMENT         | QTY | DESCRIPTION                                           |
| SOLAR PV MODULE   | 22  | Q.PEAK DUO BLK ML-G10+ 400                            |
| MICROINVERTER     | 22  | ENPHASE IQ8PLUS-72-2-US                               |
| JUNCTION BOX      | 1   | JUNCTION BOX, NEMA 3R, UL LISTED                      |
| COMBINER BOX      | 1   | ENPHASE IQ COMBINER 4/4C W/ IQ ENVOY (X-IQ-AM1-240-4) |
| AC DISCONNECT     | 1   | 60A NON-FUSED AC DISCONNECT, 240V, NEMA 3R, UL LISTED |



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**ATLANTIC KEY ENERGY LLC**  
12600 CHALLENGER PARKWAY  
SUITE 200  
ORLANDO, FL 32826  
1 (407) 988-0273



PROJECT NAME & ADDRESS

TIMOTHY BAKER  
RESIDENCE  
PROJECT # P-0065772  
358 SOUTHWEST WHITETAIL CIRCLE  
LAKE CITY, FL 32024

SIGNATURE WITH SEAL

| REVISIONS   |         |     |
|-------------|---------|-----|
| DESCRIPTION | DATE    | REV |
| LAYOUT      | 2/10/23 | A   |
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Drawn by: X.X.  
Date: xx/xx/2023

| SHEET NAME        |
|-------------------|
| COVER SHEET & BOM |
| SHEET NUMBER      |
| CS-0              |

LEGEND

X

(E)

(N)

M

MSP

ACD

CB

- MODULE STRING ID

- EXISTING

- NEW

- UTILITY METER

- MAIN SERVICE PANEL

- AC DISCONNECT

- COMBINER BOX

LC

SP

JB

SCT

BAT

ICD

BUL

- LOAD CENTER

- SUBPANEL

- JUNCTION BOX

- STRING CENTER TAP

- CONDUIT

- ENERGY STORAGE

- INTERCONNECTION DEVICE

- BACK UP LOADS PANEL

**ADHESIVE FASTENED SIGNS:**

- ANSI Z535.4-2011 PRODUCT SAFETY SIGNS AND LABELS, PROVIDES GUIDELINES FOR SUITABLE FONT SIZES, WORDS, COLORS, SYMBOLS, AND LOCATION REQUIREMENTS FOR LABELS. NEC 110.21(B)(1).
- THE LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. NEC 110.21(B)(3).
- ADHESIVE FASTENED SIGNS MAY BE ACCEPTABLE IF PROPERLY ADHERED. VINYL SIGNS SHALL BE WEATHER RESISTANT.
- ALL LABELS AND MARKINGS FOR PHOTOVOLTAIC SYSTEMS WILL BE REFLECTIVE AND MEET ALL REQUIREMENTS.

⚠

WARNING

⚠

ELECTRIC SHOCK HAZARD

DO NOT TOUCH TERMINALS

TERMINALS ON BOTH THE LINE AND

LOAD SIDES MAY BE ENERGIZED

IN THE OPEN POSITION

LABEL LOCATION:  
COMBINER BOX/ EMT  
ENCLOSURES/ AC DISCONNECT/  
MAIN SERVICE PANEL  
PER CODE: NEC 2017, 690.13(B)

EMERGENCY RESPONDER

SOLAR PV SYSTEM EQUIPPED

WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN

SWITCH TO THE "OFF"

POSITION TO SHUT

DOWN THE ENTIRE PV

SYSTEM

LABEL LOCATION:  
RAPID SHUTDOWN (AC DISCONNECT)  
PER CODE: NEC 690.56 (C)(1) &  
NFPA11.12.2.1.1.1.1, 11.12.2.1.4  
SHALL BE REFLECTIVE, WITH ALL  
LETTERS CAPITALIZED AND HAVING A  
MINIMUM HEIGHT OF 3/8 IN. (9.5 MM), IN  
WHITE ON RED BACKGROUND.

⚠

WARNING: PHOTOVOLTAIC

POWER SOURCE

⚠

LABEL LOCATION:  
CONDUIT/ RACEWAY/ ENCLOSURES/  
COMBINER BOX/ AC DISCONNECT  
PER CODE: NEC2017, 690.31(G)(3)(4)

PHOTOVOLTAIC

AC DISCONNECT

LABEL LOCATION:  
AC DISCONNECT/ BREAKER/  
POINTS OF CONNECTION  
PER CODE: NEC2017, 690.13(B)

PHOTOVOLTAIC AC DISCONNECT

RATED AC OUTPUT CURRENT

60.8 A

NOMINAL OPERATING AC VOLTAGE

240 V

LABEL LOCATION:  
AC DISCONNECT  
PER CODE: NEC2017, 690.54

RAPID SHUTDOWN

SWITCH FOR

SOLAR PV SYSTEM

LABEL LOCATION:  
RAPID SHUTDOWN  
(AC DISCONNECT)  
PER CODE: NEC 690.58 (C)(3)

⚠

WARNING

⚠

DUAL POWER SOURCE

SOURCES: UTILITY GRID AND

PV SOLAR ELECTRIC SYSTEM

LABEL LOCATION:  
POINT OF INTERCONNECTION  
PER CODE: NEC 2017, 705.12(B)

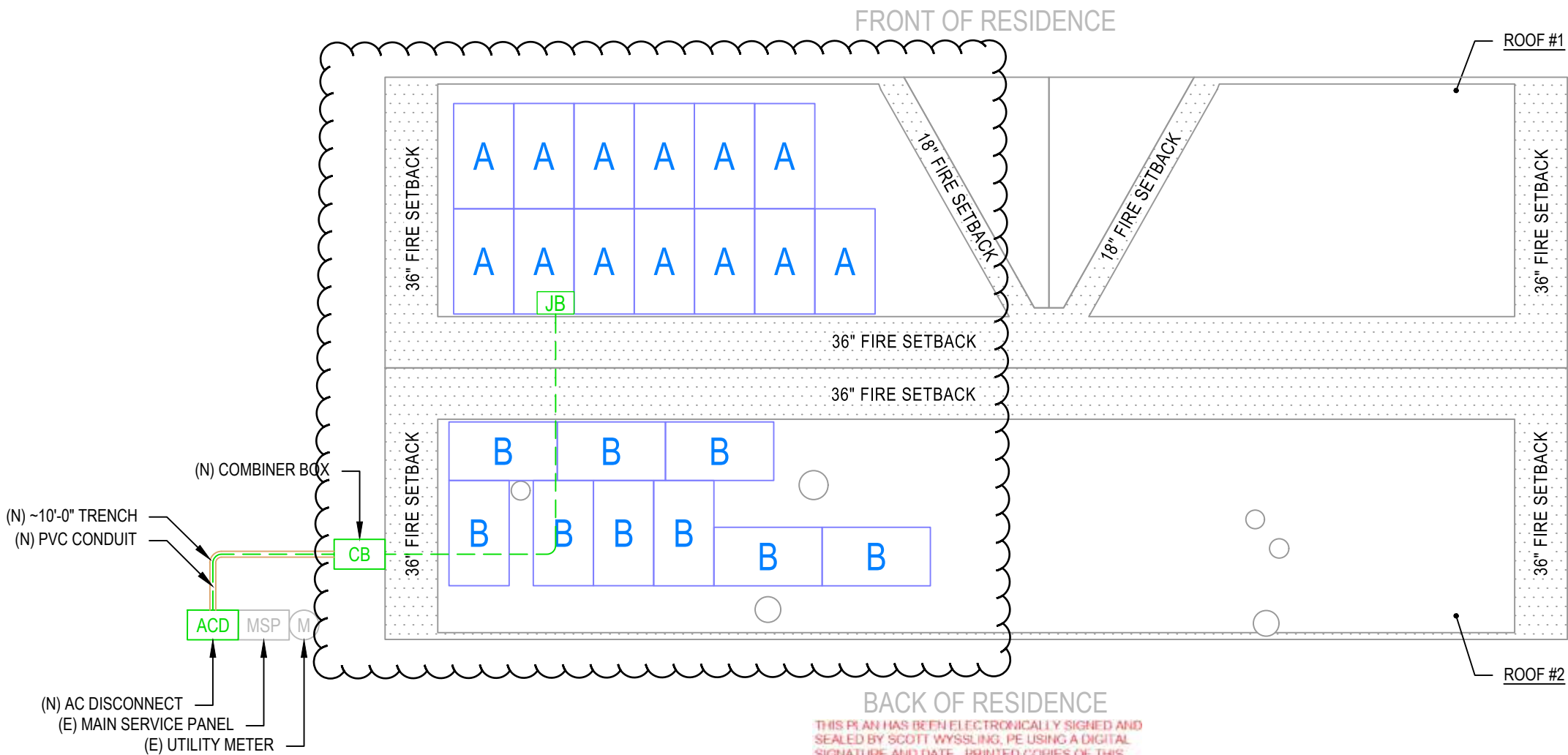
! WARNING !

INVERTER OUTPUT CONNECTION. DO NOT

RELOCATE THIS OVERCURRENT DEVICE.

LABEL LOCATION:  
POINT-OF-INTERCONNECTION OR AT  
MAIN SERVICE DISCONNECT (MSP)  
PER CODE: NEC 705.12(B)(2)(3)(b)

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Date Signed 2/10/2023

1 | ROOF PLAN WITH STRING LAYOUT  
E-1 | SCALE: NTS

ATLANTIC KEY ENERGY LLC

12600 CHALLENGER PARKWAY

SUITE 200

ORLANDO, FL 32826

1 (407) 988-0273

**Lumio**

PROJECT NAME & ADDRESS

TIMOTHY BAKER  
RESIDENCE  
PROJECT # P-0065772  
358 SOUTHWEST WHITETAIL CIRCLE  
LAKE CITY, FL 32024

SIGNATURE WITH SEAL

| REVISIONS   |         |     |
|-------------|---------|-----|
| DESCRIPTION | DATE    | REV |
| LAYOUT      | 2/10/23 | A   |
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Date: xx/xx/2023

SHEET NAME  
STRING LAYOUT &  
SIGNAGE  
SHEET NUMBER

E-1

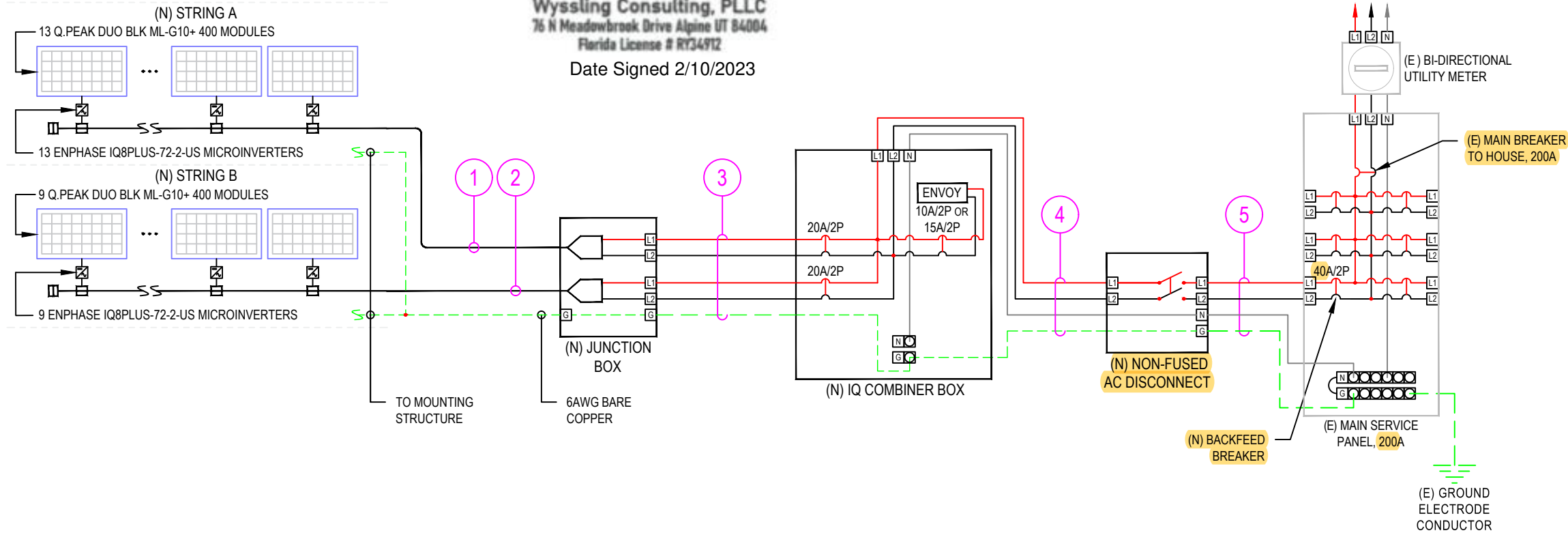
| ID | INITIAL CONDUCTOR LOCATION | FINAL CONDUCTOR LOCATION | MIN. CONDUCTOR SIZE (AWG) |               | MIN. DIA CONDUIT SIZE (IN.) | # OF PARALLEL CIRCUITS | CURRENT-CARRYING CONDUCTORS IN CONDUIT | OCPD (A) | MIN. EGC SIZE (AWG) |               | TEMP. CORR. FACTOR |      | CONDUIT FILL FACTOR | CONT. CURRENT (A) | MAX. CURRENT (A) | BASE AMP. (A) | DERATED AMP. (A) | TERM. AMP. RATING (A) | LENGTH (FT) | VOLTAGE DROP (%) |
|----|----------------------------|--------------------------|---------------------------|---------------|-----------------------------|------------------------|----------------------------------------|----------|---------------------|---------------|--------------------|------|---------------------|-------------------|------------------|---------------|------------------|-----------------------|-------------|------------------|
| 1  | STRING A                   | JUNCTION BOX             | 12                        | Q CABLE       | N/A                         | 1                      | 2                                      | N/A      | 6                   | BARE COPPER   | 0.76               | 55°C | N/A                 | 15.73             | 19.66            | 30            | N/A              | N/A                   | 48.00       | 0.51             |
| 2  | STRING B                   | JUNCTION BOX             | 12                        | Q CABLE       | N/A                         | 1                      | 2                                      | N/A      | 6                   | BARE COPPER   | 0.76               | 55°C | N/A                 | 10.89             | 13.61            | 30            | N/A              | N/A                   | 48.00       | 0.86             |
| 3  | JUNCTION BOX               | COMBINER BOX             | 10                        | THWN-2 COPPER | 0.75 LTNM                   | 2                      | 4                                      | 20       | 10                  | THWN-2 COPPER | 0.76               | 55°C | 0.8                 | 15.73             | 19.66            | 40            | 24.3             | 35                    | 34.00       | 0.55             |
| 4  | COMBINER BOX               | AC DISCONNECT            | 8                         | THWN-2 COPPER | 0.75 LTNM                   | 1                      | 3                                      | N/A      | 10                  | THWN-2 COPPER | 0.96               | 34°C | 1                   | 26.62             | 33.28            | 55            | 52.8             | 35                    | 25.00       | 0.43             |
| 5  | AC DISCONNECT              | MSP                      | 8                         | THWN-2 COPPER | 0.75 LTNM                   | 1                      | 3                                      | 40       | 10                  | THWN-2 COPPER | 0.96               | 34°C | 1                   | 26.62             | 33.28            | 55            | 52.8             | 35                    | 5.00        | 0.09             |

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**NOTE:**  
1. LTNM OR EQUIVALENT TYPE CONDUIT

**LEGEND**  
(E) - EXISTING  
(N) - NEW

DESIGN TEMPERATURE SPECIFICATIONS

|                               |      |
|-------------------------------|------|
| RECORD LOW TEMP               | -5°C |
| AMBIENT TEMP. (HIGH TEMP. 2%) | 34°C |
| CONDUIT HEIGHT                | 1.0" |
| CONDUCTOR TEMP. RATE (ROOF)   | 55°C |

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1 | ELECTRICAL LINE DIAGRAM  
E-2 | SCALE: NTS



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SUITE 200  
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1 (407) 988-0273



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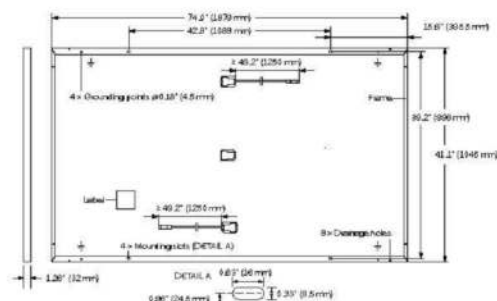
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Date: xx/xx/2023

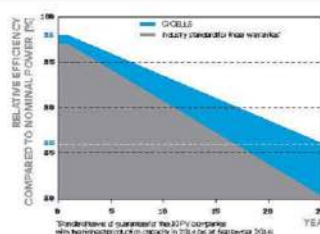
SHEET NAME  
**ELECTRICAL LINE  
DIAGRAM & CALCS.**

SHEET NUMBER  
**E-2**

|              |                                                                                                        |
|--------------|--------------------------------------------------------------------------------------------------------|
| Format       | 74.0 in x 41.1 in x 1.26 in (including frame)<br>(1879mm x 1045mm x 32mm)                              |
| Weight       | 48.5lbs (22.0kg)                                                                                       |
| Front Cover  | 0.13 in (3.2mm) thermally pre-stressed glass with anti-reflection technology                           |
| Back Cover   | Composite film                                                                                         |
| Frame        | Black anodized aluminum                                                                                |
| Cell         | 6 x 22 monocrystalline Q ANTUM solar half cells                                                        |
| Junction Box | 2.09-3.98 in x 1.26-2.36 in x 0.59-0.71 in<br>(53-101mm x 32-60mm x 15-18mm), IP67, with bypass diodes |
| Cable        | 4mm <sup>2</sup> Solar cable; (+) $\geq$ 49.2 in (1250mm), (-) $\geq$ 49.2 in (1250mm)                 |
| Connector    | Stäubli MC4, IP68                                                                                      |

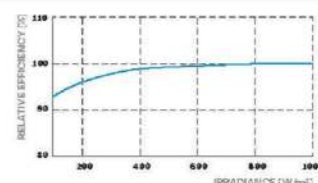


| POWER CLASS                                                                                     |                                    |                      | 385   | 390   | 395   | 400   | 405   |
|-------------------------------------------------------------------------------------------------|------------------------------------|----------------------|-------|-------|-------|-------|-------|
| MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC <sup>1</sup> (POWER TOLERANCE +5 W / -0 W) |                                    |                      |       |       |       |       |       |
| Minimum                                                                                         | Power at MPP <sup>2</sup>          | P <sub>MPP</sub> [W] | 385   | 390   | 395   | 400   | 405   |
|                                                                                                 | Short Circuit Current <sup>3</sup> | I <sub>SC</sub> [A]  | 11.04 | 11.07 | 11.10 | 11.14 | 11.17 |
|                                                                                                 | Open Circuit Voltage <sup>4</sup>  | V <sub>OC</sub> [V]  | 45.19 | 45.23 | 45.27 | 45.30 | 45.34 |
|                                                                                                 | Current at MPP                     | I <sub>MPP</sub> [A] | 10.58 | 10.65 | 10.71 | 10.77 | 10.83 |
|                                                                                                 | Voltage at MPP                     | V <sub>MPP</sub> [V] | 36.36 | 36.62 | 36.88 | 37.13 | 37.39 |
|                                                                                                 | Efficiency <sup>5</sup>            | η [%]                | ≥19.6 | ≥19.9 | ≥20.1 | ≥20.4 | ≥20.6 |
| MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT <sup>3</sup>                           |                                    |                      |       |       |       |       |       |
| Minimum                                                                                         | Power at MPP                       | P <sub>MPP</sub> [W] | 288.8 | 292.6 | 296.3 | 300.1 | 303.8 |
|                                                                                                 | Short Circuit Current              | I <sub>SC</sub> [A]  | 8.90  | 8.92  | 8.95  | 8.97  | 9.00  |
|                                                                                                 | Open Circuit Voltage               | V <sub>OC</sub> [V]  | 42.62 | 42.65 | 42.69 | 42.72 | 42.76 |
|                                                                                                 | Current at MPP                     | I <sub>MPP</sub> [A] | 8.35  | 8.41  | 8.46  | 8.51  | 8.57  |
|                                                                                                 | Voltage at MPP                     | V <sub>MPP</sub> [V] | 34.59 | 34.81 | 35.03 | 35.25 | 35.48 |



At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.



Typical module performance under low irradiance conditions in comparison to STC conditions (25°C, 1000 W/m<sup>2</sup>)

| TEMPERATURE COEFFICIENTS             |          |       |       |                                      |         |       |                  |
|--------------------------------------|----------|-------|-------|--------------------------------------|---------|-------|------------------|
| Temperature Coefficient of $I_{SC}$  | $\alpha$ | [%/K] | +0.04 | Temperature Coefficient of $V_{OC}$  | $\beta$ | [%/K] | -0.27            |
| Temperature Coefficient of $P_{MPP}$ | $\gamma$ | [%/K] | -0.34 | Nominal Module Operating Temperature | NMOT    | [°F]  | 109±5.4 (43±3°C) |

|                                          |                       |                            |                                                    |                                           |
|------------------------------------------|-----------------------|----------------------------|----------------------------------------------------|-------------------------------------------|
| Maximum System Voltage $V_{\text{sys}}$  | [V]                   | 1000 (EC)/1000 (UL)        | PV module classification                           | Class II                                  |
| Maximum Series Fuse Rating               | [A DC]                | 20                         | Fire Rating based on ANSI/UL 61730                 | TYPE 2                                    |
| Max. Design Load, Push/Pull <sup>8</sup> | [lbs/# <sup>2</sup> ] | 75 (3600 Pa)/55 (2660 Pa)  | Permitted Module Temperature<br>on Continuous Duty | -40°F up to +135°F<br>(-40°C up to +55°C) |
| Max. Test Load, Push/Pull <sup>8</sup>   | [lbs/# <sup>2</sup> ] | 113 (5400 Pa)/84 (4000 Pa) |                                                    |                                           |

UL 61730, CE-compliant  
Quality Controlled PV - TÜV Rheinland  
IEC 61215:2016, IEC 61730:2016,  
U.S. Patent No. 9,893,215 (solar cells),  
QCPV Certification ongoing.



|                         |                  |                  |                  |                  |               |               |               |
|-------------------------|------------------|------------------|------------------|------------------|---------------|---------------|---------------|
| Horizontal<br>packaging | 76.4in<br>1940mm | 43.3in<br>1100mm | 48.0in<br>1220mm | 1656lbs<br>751kg | 24<br>pallets | 24<br>pallets | 32<br>modules |
|-------------------------|------------------|------------------|------------------|------------------|---------------|---------------|---------------|

**Note:** Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.

400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL [inquiry@us.q-cells.com](mailto:inquiry@us.q-cells.com) | WEB [www.q-cells.us](http://www.q-cells.us)

| INPUT DATA (DC)                                      |    | I08-60-2-US                                                                                                                                                                                                                                                             | I08PLUS-72-2-US                                 |
|------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Commonly used module pairings <sup>1</sup>           | W  | 235 – 350                                                                                                                                                                                                                                                               | 235 – 440                                       |
| Module compatibility                                 |    | 60-cell/120 half-cell                                                                                                                                                                                                                                                   | 60-cell/120 half-cell and 72-cell/144 half-cell |
| MPPT voltage range                                   | V  | 27 – 37                                                                                                                                                                                                                                                                 | 29 – 45                                         |
| Operating range                                      | V  | 25 – 48                                                                                                                                                                                                                                                                 | 25 – 58                                         |
| Min/max start voltage                                | V  | 30 / 48                                                                                                                                                                                                                                                                 | 30 / 58                                         |
| Max input DC voltage                                 | V  | 50                                                                                                                                                                                                                                                                      | 60                                              |
| Max DC current <sup>2</sup> (module Isc)             | A  | 15                                                                                                                                                                                                                                                                      |                                                 |
| Overvoltage class DC port                            |    | II                                                                                                                                                                                                                                                                      |                                                 |
| DC port backfeed current                             | mA | 0                                                                                                                                                                                                                                                                       |                                                 |
| PV array configuration                               |    | 1x1 Ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit                                                                                                                                                 |                                                 |
| OUTPUT DATA (AC)                                     |    | I08-60-2-US                                                                                                                                                                                                                                                             | I08PLUS-72-2-US                                 |
| Peak output power                                    | VA | 245                                                                                                                                                                                                                                                                     | 300                                             |
| Max continuous output power                          | VA | 240                                                                                                                                                                                                                                                                     | 290                                             |
| Nominal (L-L) voltage/range <sup>3</sup>             | V  | 240 / 211 – 264                                                                                                                                                                                                                                                         |                                                 |
| Max continuous output current                        | A  | 1.0                                                                                                                                                                                                                                                                     | 1.21                                            |
| Nominal frequency                                    | Hz | 60                                                                                                                                                                                                                                                                      |                                                 |
| Extended frequency range                             | Hz | 50 – 68                                                                                                                                                                                                                                                                 |                                                 |
| Max units per 20 A (L-L) branch circuit <sup>4</sup> |    | 16                                                                                                                                                                                                                                                                      | 13                                              |
| Total harmonic distortion                            |    | <5%                                                                                                                                                                                                                                                                     |                                                 |
| Overvoltage class AC port                            |    | III                                                                                                                                                                                                                                                                     |                                                 |
| AC port backfeed current                             | mA | 30                                                                                                                                                                                                                                                                      |                                                 |
| Power factor setting                                 |    | 1.0                                                                                                                                                                                                                                                                     |                                                 |
| Grid-tied power factor (adjustable)                  |    | 0.85 leading – 0.85 lagging                                                                                                                                                                                                                                             |                                                 |
| Peak efficiency                                      | %  | 97.5                                                                                                                                                                                                                                                                    | 97.6                                            |
| CEC weighted efficiency                              | %  | 97                                                                                                                                                                                                                                                                      | 97                                              |
| Night-time power consumption                         | mW | 60                                                                                                                                                                                                                                                                      |                                                 |
| MECHANICAL DATA                                      |    |                                                                                                                                                                                                                                                                         |                                                 |
| Ambient temperature range                            |    | -40°C to +60°C (-40°F to +140°F)                                                                                                                                                                                                                                        |                                                 |
| Relative humidity range                              |    | 4% to 100% (condensing)                                                                                                                                                                                                                                                 |                                                 |
| DC Connector type                                    |    | MC4                                                                                                                                                                                                                                                                     |                                                 |
| Dimensions (HxWxD)                                   |    | 212 mm (8.3") x 175 mm (6.9") x 30.2 mm (1.2")                                                                                                                                                                                                                          |                                                 |
| Weight                                               |    | 1.08 kg (2.38 lbs)                                                                                                                                                                                                                                                      |                                                 |
| Cooling                                              |    | Natural convection – no fans                                                                                                                                                                                                                                            |                                                 |
| Approved for wet locations                           |    | Yes                                                                                                                                                                                                                                                                     |                                                 |
| Acoustic noise at 1 m                                |    | <60 dBA                                                                                                                                                                                                                                                                 |                                                 |
| Pollution degree                                     |    | PD3                                                                                                                                                                                                                                                                     |                                                 |
| Enclosure                                            |    | Class II double-insulated, corrosion resistant polymeric enclosure                                                                                                                                                                                                      |                                                 |
| Environ. category / UV exposure rating               |    | NEMA Type 6 / outdoor                                                                                                                                                                                                                                                   |                                                 |
| COMPLIANCE                                           |    |                                                                                                                                                                                                                                                                         |                                                 |
|                                                      |    | CA Rule 21 (UL 1741-SA), UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 1071-01                                                                                                                                                 |                                                 |
| Certifications                                       |    | This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions. |                                                 |

(1) No enforced DC/AC ratio. See the compatibility calculator at <https://link.enphase.com/module-compatibility> (2) Maximum continuous input DC current is 10.6A (3) Nominal voltage range can be extended beyond nominal if required by the utility. (4) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

IQ8SP-DS-0002-01-EN-US-2021-10-19

**ATLANTIC KEY ENERGY LLC**  
12600 CHALLENGER PARKWAY  
SUITE 200  
ORLANDO, FL 32826  
1 (407) 988-0273

Lumio\*

PROJECT NAME &amp; ADDRESS

TIMOTHY BAKER

RESIDENCE

PROJECT # P-0065772

3558 SOUTHWEST WHITETAIL CIRCLE

LAKE CITY, FL 32024

SIGNATURE WITH SEAL

## REVISIONS

| REVISIONS   |         |     |
|-------------|---------|-----|
| DESCRIPTION | DATE    | REV |
| LAYOUT      | 2/10/23 | A   |
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Drawn by: X.X

Date: xx/xx/2022

SHEET NAME

EQUIPMENT  
SPECIFICATIONS

SHEET NUMBER

E-3

Enphase IQ Combiner 4/4C

| MODEL NUMBER                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IQ Combiner 4 (X-IQ-AM1-240-4)                                                                                    | IQ Combiner 4 with Enphase IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 +/- 0.5%) and consumption monitoring (+/- 2.5%). Includes a silver solar shield to match the IQ Battery system and IQ System Controller 2 and to deflect heat.                                                                                                                                                                                                                                                                                                    |
| IQ Combiner 4C (X-IQ-AM1-240-4C)                                                                                  | IQ Combiner 4C with Enphase IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 +/- 0.5%) and consumption monitoring (+/- 2.5%). Includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), a plug-and-play industrial-grade cell modem for systems up to 60 microinverters. (Available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.) Includes a silver solar shield to match the IQ Battery and IQ System Controller and to deflect heat. |
| ACCESSORIES AND REPLACEMENT PARTS                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (not included, order separately)                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ensemble Communications Kit<br>COMMS-CELLMODEM-M1-06<br>CELLMODEM-M1-06-SP-05<br>CELLMODEM-M1-06-AT-05            | - Includes COMMS-KIT-01 and CELLMODEM-M1-06-SP-05 with 5-year Sprint data plan for Ensemble sites<br>- 4G based LTE-M1 cellular modem with 5-year Sprint data plan<br>- 4G based LTE-M1 cellular modem with 5-year AT&T data plan                                                                                                                                                                                                                                                                                                                                                              |
| Circuit Breakers<br>BRK-10A-2-240V<br>BRK-15A-2-240V<br>BRK-20A-2P-240V<br>BRK-15A-2P-240V-B<br>BRK-20A-2P-240V-B | Supports Eaton BR210, BR215, BR220, BR230, BR240, BR250, and BR260 circuit breakers.<br>Circuit breaker, 2 pole, 10A, Eaton BR210<br>Circuit breaker, 2 pole, 15A, Eaton BR215<br>Circuit breaker, 2 pole, 20A, Eaton BR220<br>Circuit breaker, 2 pole, 15A, Eaton BR215B with hold down kit support<br>Circuit breaker, 2 pole, 20A, Eaton BR220B with hold down kit support                                                                                                                                                                                                                  |
| EPLC-01                                                                                                           | Power line carrier (communication bridge pair), quantity - one pair                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| XA-SOLARSHIELD-ES                                                                                                 | Replacement solar shield for IQ Combiner 4/4C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| XA-PLUG-120-3                                                                                                     | Accessory receptacle for Power Line Carrier in IQ Combiner 4/4C (required for EPLC-01)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| XA-ENV-PCBA-3                                                                                                     | Replacement IQ Gateway printed circuit board (PCB) for Combiner 4/4C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| X-IQ-NA-HD-125A                                                                                                   | Hold down kit for Eaton circuit breaker with screws.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ELECTRICAL SPECIFICATIONS                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Rating                                                                                                            | Continuous duty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| System voltage                                                                                                    | 120/240 VAC, 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Eaton BR series busbar rating                                                                                     | 125 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Max. continuous current rating                                                                                    | 65 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Max. continuous current rating (input from PV/storage)                                                            | 64 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Max. fuse/circuit rating (output)                                                                                 | 90 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Branch circuits (solar and/or storage)                                                                            | Up to four 2-pole Eaton BR series Distributed Generation (DG) breakers only (not included)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Max. total branch circuit breaker rating (input)                                                                  | 80A of distributed generation / 95A with IQ Gateway breaker included                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Production metering CT                                                                                            | 200 A solid core pre-installed and wired to IQ Gateway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Consumption monitoring CT (CT-200-SPLIT)                                                                          | A pair of 200 A split core current transformers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| MECHANICAL DATA                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Dimensions (WxHxD)                                                                                                | 37.5 x 49.5 x 16.8 cm (14.75" x 19.5" x 6.63"). Height is 21.06" (53.5 cm) with mounting brackets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Weight                                                                                                            | 7.5 kg (16.5 lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Ambient temperature range                                                                                         | -40° C to +46° C (-40° to 115° F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Cooling                                                                                                           | Natural convection, plus heat shield                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Enclosure environmental rating                                                                                    | Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Wire sizes                                                                                                        | - 20 A to 50 A breaker inputs: 14 to 4 AWG copper conductors<br>- 60 A breaker branch input: 4 to 1/0 AWG copper conductors<br>- Main lug combined output: 10 to 2/0 AWG copper conductors<br>- Neutral and ground: 14 to 1/0 copper conductors<br>Always follow local code requirements for conductor sizing.                                                                                                                                                                                                                                                                                 |
| Altitude                                                                                                          | To 2000 meters (6,560 feet)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| INTERNET CONNECTION OPTIONS                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Integrated Wi-Fi                                                                                                  | 802.11b/g/n                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Cellular                                                                                                          | CELLMODEM-M1-06-SP-05, CELLMODEM-M1-06-AT-05 (4G based LTE-M1 cellular modem). Note that an Enphase Mobile Connect cellular modem is required for all Ensemble installations.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Ethernet                                                                                                          | Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| COMPLIANCE                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Compliance, IQ Combiner                                                                                           | UL 1741, CAN/CSA C22.2 No. 107.1, 47 CFR, Part 15, Class B, ICES 003<br>Production metering: ANSI C12.20 accuracy class 0.5 (PV production)<br>Consumption metering: accuracy class 2.5                                                                                                                                                                                                                                                                                                                                                                                                        |
| Compliance, IQ Gateway                                                                                            | UL 60601-1/CANCSA 22.2 No. 61010-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

To learn more about Enphase offerings, visit [enphase.com](https://enphase.com)

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ATLANTIC KEY ENERGY LLC  
12600 CHALLENGER PARKWAY  
SUITE 200  
ORLANDO, FL 32826  
1 (407) 988-0273



| PROJECT NAME & ADDRESS                                                                                     |         |     |
|------------------------------------------------------------------------------------------------------------|---------|-----|
| TIMOTHY BAKER<br>RESIDENCE<br>PROJECT # P-0065772<br>358 SOUTHWEST WHITETAIL CIRCLE<br>LAKE CITY, FL 32024 |         |     |
|                                                                                                            |         |     |
| SIGNATURE WITH SEAL                                                                                        |         |     |
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| REVISIONS                                                                                                  |         |     |
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| Date: xx/xx/2023                                                                                           |         |     |
| SHEET NAME                                                                                                 |         |     |
| EQUIPMENT<br>SPECIFICATIONS                                                                                |         |     |
| SHEET NUMBER                                                                                               |         |     |
| E-4                                                                                                        |         |     |

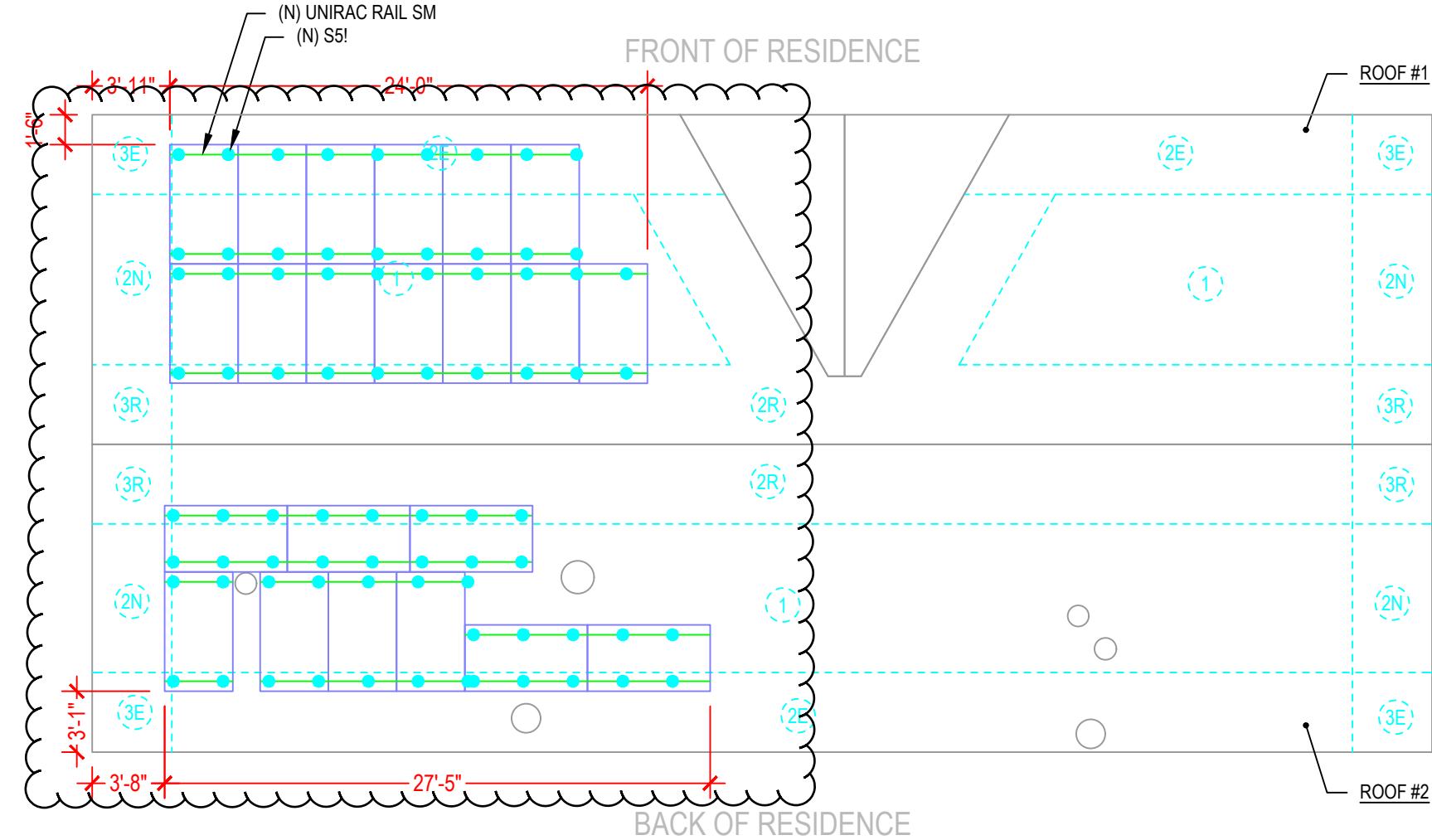
| ARRAY DESCRIPTION |              |         |            |               |                  |
|-------------------|--------------|---------|------------|---------------|------------------|
| ROOF              | # OF MODULES | AZIMUTH | TRUSS SIZE | TRUSS SPACING | ROOF MATERIAL    |
| #1                | 13           | 298     | 2X4        | 24"O.C.       | CORRUGATED METAL |
| #2                | 9            | 118     | 2X4        | 24"O.C.       | CORRUGATED METAL |

| DESIGN SPECIFICATION   |             |
|------------------------|-------------|
| RISK CATEGORY          | II          |
| CONSTRUCTION           | SFD         |
| ZONING                 | RESIDENTIAL |
| SNOW LOAD (ASCE 7-16)  | 0 PSF       |
| EXPOSURE CATEGORY      | B           |
| WIND SPEED (ASCE 7-16) | 120 MPH     |

THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY SCOTT WYSSLING, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



Wyssling Consulting, PLLC  
76 N Meadowbrook Drive Alpine UT 84004  
Florida License # RY34912  
Date Signed 2/10/2023



| LEGEND |            |
|--------|------------|
| (E)    | - EXISTING |
| (N)    | - NEW      |



ATLANTIC KEY ENERGY LLC  
12600 CHALLENGER PARKWAY  
SUITE 200  
ORLANDO, FL 32826  
1 (407) 988-0273



PROJECT NAME & ADDRESS

TIMOTHY BAKER  
RESIDENCE  
PROJECT # P-0065772  
358 SOUTHWEST WHITETAIL CIRCLE  
LAKE CITY, FL 32024

SIGNATURE WITH SEAL

| REVISIONS   |         |     |
|-------------|---------|-----|
| DESCRIPTION | DATE    | REV |
| LAYOUT      | 2/10/23 | A   |
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Drawn by: X.X.

Date: xx/xx/2023

| SHEET NAME            |  |
|-----------------------|--|
| ROOF PLAN AND MODULES |  |
| SHEET NUMBER          |  |

S-0

# S-5!®

## The Right Way!™

NEW

NOW AVAILABLE  
IN ALUMINUM

ProteaBracket™

### ProteaBracket™

A versatile bracket for mounting solar PV to trapezoidal roof profiles

ProteaBracket™ is now made in aluminum. Still the most versatile trapezoidal metal roof attachment solution on the market, the S-5! ProteaBracket just got better!

The bracket features an adjustable attachment base and module attachment options to accommodate different roof profile dimensions and mounting options.

Our pre-applied EPDM gasket with peel and stick adhesive makes installation a snap, ensuring accurate and secure placement the first time.

With no messy sealants, faster installation, and a weather-proof fit, ProteaBracket offers you the most versatile solar attachment solution available.

ProteaBracket\* can be used for rail mounting or "direct-attach" with S-5! PVKIT™

### Features and Benefits

- 34% lighter - saves on shipping
- Stronger L-Foot™
- Load-tested for engineered application
- Corrosion-resistant materials
- Adjustable - Fits rib profiles up to 3"
- Peel-and-Stick prevents accidental shifting during installation
- Fully pre-assembled
- 25-year warranty\*

\*When ProteaBracket is used in conjunction with the S-5! PVKIT, an additional nut is required during installation.

\*See [www.S-5.com](http://www.S-5.com) for details.



888-825-3432 | [www.S-5.com](http://www.S-5.com)

# S-5!®

The Right Way!™

ProteaBracket™ is the perfect solar attachment solution for most trapezoidal rib, exposed-fastened metal roof profiles!

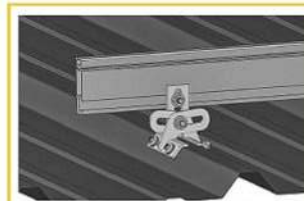
ProteaBracket™ is compatible with common metal roofing materials and comes with a pre-applied EPDM gasket on the base.

**Note:** All four pre-punched holes must be used to achieve tested strength. Fasteners are provided.

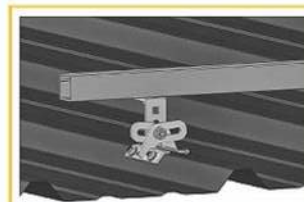
For design assistance, ask your distributor, or visit [www.S-5.com](http://www.S-5.com) for the independent lab test data that can be used for load-critical designs and applications. Also, please visit our website for more information including metallurgical compatibilities and specifications.

S-5!® holding strength is unmatched in the industry.

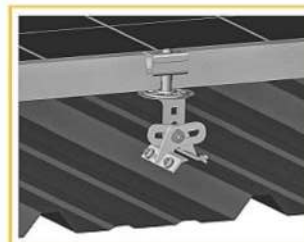
### Multiple Attachment Options:



Side  
Mount Rail



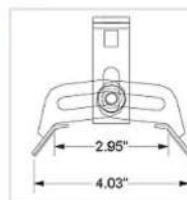
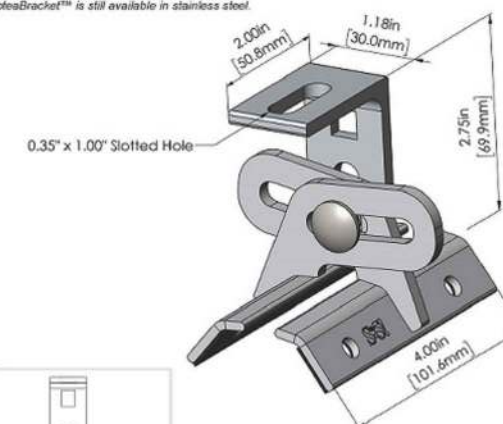
Bottom  
Mount Rail



w/ S-5!  
PVKIT™  
(rail-less)

### ProteaBracket™

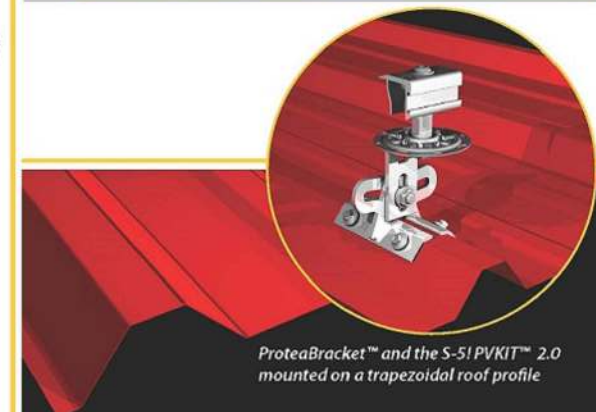
ProteaBracket™ is still available in stainless steel.



ProteaBracket fits profiles  
up to 3 inches

INSTALLATION:

No surface preparation needed. (1) Wipe away excess oil and debris. (2) Peel off adhesive release paper. (3) Align and mount bracket directly onto crown of panel. (4) Secure ProteaBracket through pre-punched holes, using piercing-point S-5! screws.



ProteaBracket™ and the S-5! PVKIT™ 2.0  
mounted on a trapezoidal roof profile

S-5!® Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. For published data regarding holding strength, bolt torque, patents, and trademarks, visit the S-5! website at [www.S-5.com](http://www.S-5.com).

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12600 CHALLENGER PARKWAY  
SUITE 200  
ORLANDO, FL 32826  
1 (407) 988-0273

# Lumio\*

PROJECT NAME & ADDRESS

TIMOTHY BAKER  
RESIDENCE  
PROJECT # P-0065772  
358 SOUTHWEST WHITETAIL CIRCLE  
LAKE CITY, FL 32024

SIGNATURE WITH SEAL

### REVISIONS

| DESCRIPTION | DATE    | REV |
|-------------|---------|-----|
| LAYOUT      | 2/10/23 | A   |
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Drawn by: X.X.

Date: xx/xx/2023

SHEET NAME

EQUIPMENT  
SPECIFICATIONS

SHEET NUMBER

S-1

# SOLARMOUNT



**SOLARMOUNT** defined the standard in solar racking. Features are designed to get installers off the roof faster. Our grounding & bonding process eliminates copper wire and grounding straps to reduce costs. Systems can be configured with standard or light rail to meet your design requirements at the lowest cost possible. The superior aesthetics package provides a streamlined clean edge for enhanced curb appeal, with no special brackets required for installation.



Now Featuring:  
**THE NEW FACE OF SOLAR RACKING**  
Superior Aesthetics Package



**LOSE ALL OF THE COPPER & LUGS**  
System grounding through Enphase microinverters and trunk cables



**SMALL IS THE NEXT NEW BIG THING**  
Light Rail is Fully Compatible with all SM Components



**ENHANCED DESIGN & LAYOUT TOOLS**  
Featuring Google Map Capabilities within U-Builder

## FAST INSTALLATION. SUPERIOR AESTHETICS

OPTIMIZED COMPONENTS • VERSATILITY • DESIGN TOOLS • QUALITY PROVIDER

# SOLARMOUNT



## OPTIMIZED COMPONENTS

### INTEGRATED BONDING & PRE-ASSEMBLED PARTS

Components are pre-assembled and optimized to reduce installation steps and save labor time. Our new grounding & bonding process eliminates copper wire and grounding straps or bonding jumpers to reduce costs. Utilize the microinverter mount with a wire management clip for an easier installation.

## VERSATILITY

### ONE PRODUCT - MANY APPLICATIONS

Quickly set modules flush to the roof or at a desired tilt angle. Change module orientation to portrait or landscape while securing a large variety of framed modules on flat, low slope or steep pitched roofs. Available in mill, clear and dark anodized finishes to outperform your projects financial and aesthetic aspirations.

## AUTOMATED DESIGN TOOL

### DESIGN PLATFORM AT YOUR SERVICE

Creating a bill of materials is just a few clicks away with U-Builder, a powerful online tool that streamlines the process of designing a code compliant solar mounting system. Save time by creating a user profile, and recall preferences and projects automatically when you log in. You will enjoy the ability to share projects with customers; there's no need to print results and send to a distributor, just click and share.



## UNIRAC CUSTOMER SERVICE MEANS THE HIGHEST LEVEL OF PRODUCT SUPPORT



### TECHNICAL SUPPORT

Unirac's technical support team is dedicated to answering questions & addressing issues in real time. An online library of documents including engineering reports, stamped letters and technical data sheets greatly simplifies your permitting and project planning process.

### CERTIFIED QUALITY PROVIDER

Unirac is the only PV mounting vendor with ISO certifications for 9001:2015, 14001:2015 and OHSAS 18001:2007, which means we deliver the highest standards for fit, form, and function. These certifications demonstrate our excellence and commitment to first class business practices.

### BANKABLE WARRANTY

Don't leave your project to chance. Unirac has the financial strength to back our products and reduce your risk. Have peace of mind knowing you are receiving products of exceptional quality. SOLARMOUNT is covered by a twenty five (25) year limited product warranty and a five (5) year limited finish warranty.

PROTECT YOUR REPUTATION WITH QUALITY RACKING SOLUTIONS BACKED BY ENGINEERING EXCELLENCE AND A SUPERIOR SUPPLY CHAIN

PLE200101020 - PRINTED



ATLANTIC KEY ENERGY LLC  
12600 CHALLENGER PARKWAY  
SUITE 200  
ORLANDO, FL 32826  
1 (407) 988-0273



PROJECT NAME & ADDRESS

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SIGNATURE WITH SEAL

### REVISIONS

| DESCRIPTION | DATE    | REV |
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Drawn by: X.X.

Date: xx/xx/2023

SHEET NAME

EQUIPMENT  
SPECIFICATIONS

SHEET NUMBER