HISTORIC PRESERVATION COMMISSION

Marc Elrich
County Executive

Robert Sutton
Chairman

Date: March 12, 2024

MEMORANDUM

TO: Rabbiah Sabbakhan
Department of Permitting Services
FROM: Rebeccah Ballo
Historic Preservation Section
Maryland-National Capital Park & Planning Commission
SUBJECT: Historic Area Work Permit #1054797 - Rooftop Solar

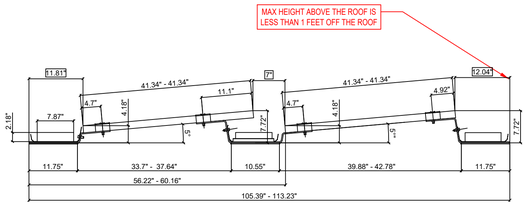
The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved** by Historic Preservation Staff.

The HPC staff has reviewed and stamped the attached construction drawings**.**

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant: Urciolo Properties, LLC (John Urciolo, Agent)
Address: 6909-6939 Laurel Avenue, Takoma Park (Filed under 6935 Laurel Ave.)

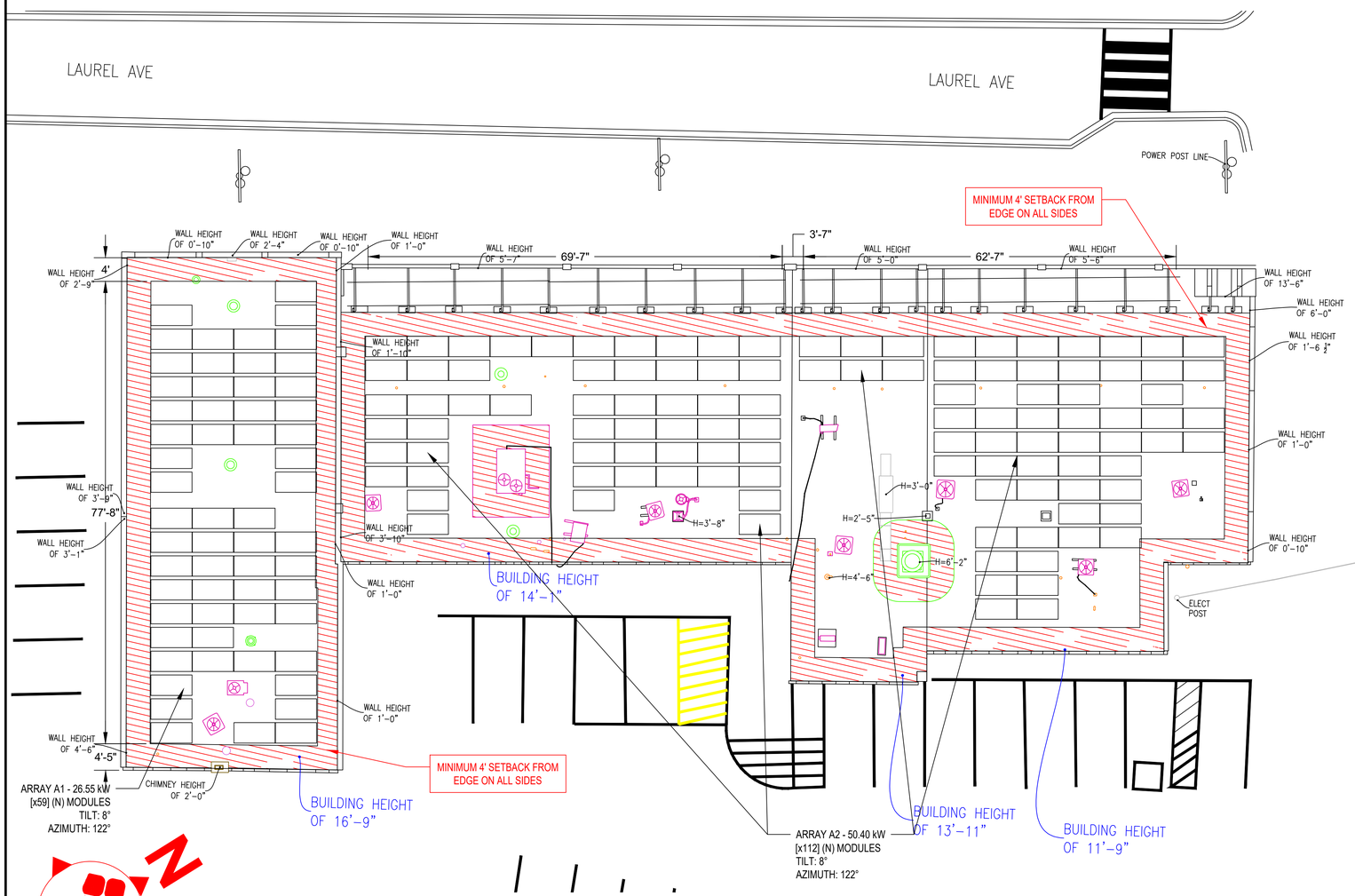
This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made. Once work is complete the applicant will contact Dan Bruechert at 301.563.3408 Dan.Bruechert@montgomeryplanning.org to schedule a follow-up site visit.

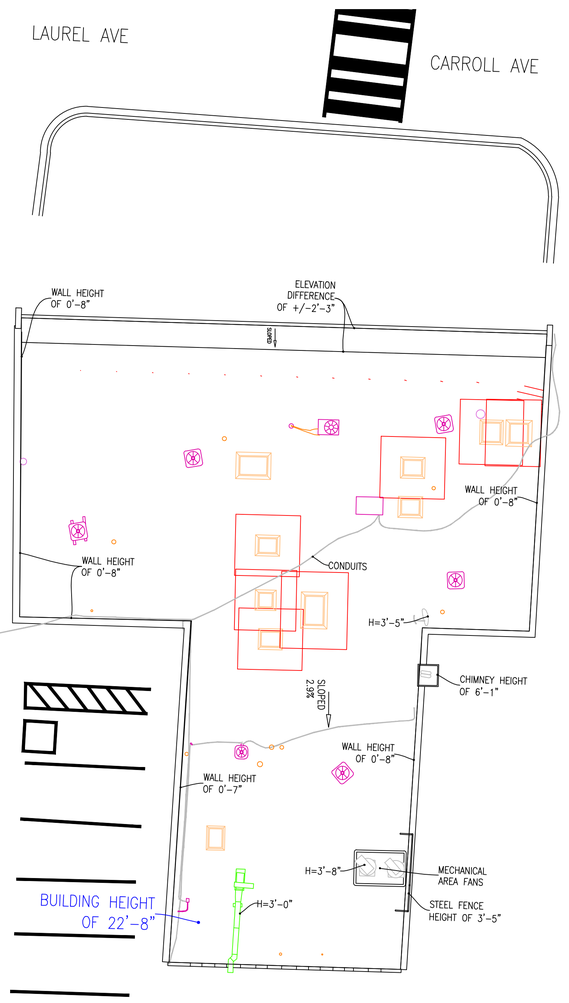


SYSTEM SUMMARY	
SYSTEM SIZE (DC)	93.6 kWp
SYSTEM SIZE (AC)	67.3 kWp
PV MODULES	(208) PHONO SOLAR PS450M4H-24/TH
INVERTERS	(1) SOLAREDGE SE50K-US (1) SOLAREDGE SE17.3K-US
POWER OPTIMIZERS	(105) SOLAREDGE P1101

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Dan.Bruechert at 1:05 pm, Mar 12, 2024

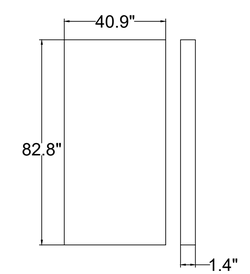




LEGENDS

- A/C UNITS HEIGHT OF 2'-10"
- PIPES
- VENTS HEIGHT OF 1'-8"
- STEEL CHIMNEY HEIGHT OF 5'-6"
- ELEVATIONS ABOVE SEA LEVEL
- SWALLOW LIGHTS HEIGHT OF 1'-5"

(208) PHONO SOLAR
PS450M4H-24/TH
450W



NOTE:
NO PERSONNEL SHALL, LAY, STEP OR STAND ON PHOTOVOLTAIC (PV) MODULES (SOLAR PANELS) AT ANY TIME. RACK STRUCTURE AND PV MODULES ARE NOT DESIGNED FOR LIVE LOADS AND MAY VOID WARRANTY.

REVISIONS

NO.	DESCRIPTION	DATE	BY
1.1	50%	1/18/2024	P.A

NEW COLUMBIA SOLAR
705 Edgewood St NE,
Suite 110
Washington, DC 20017
T: (202) 810-1661

DRAWN:	PATRICIO ALVAREZ
CHECKED:	CHECKED
APPROVED:	J. ZERBARINI
DATE:	1/2/2023
SCALE:	3/32"=1'-0"

ORIGINAL PAPER SIZE : 24" X 36"

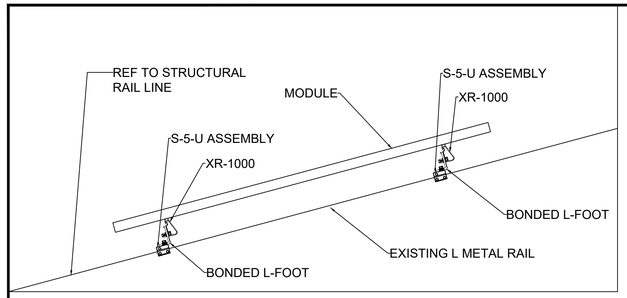
STAMP

PROJECT NAME AND ADDRESS

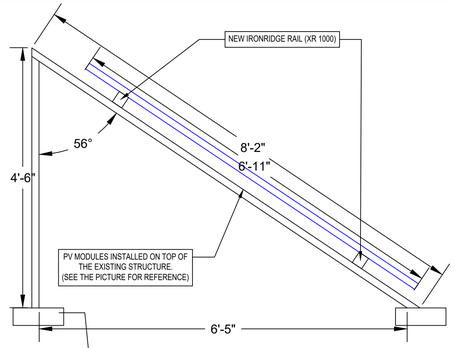
TAKOMA SHOPPING CENTER
6909 LAUREL AVE
TAKOMA PARK, MD 20912

DRAWING NAME AND NUMBER

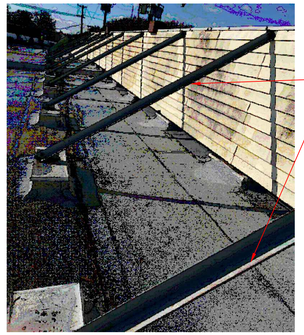
A - 1 ARRAY LAYOUT



ARRAY ATTACHMENT DETAIL



ARRAY DIMENSIONS



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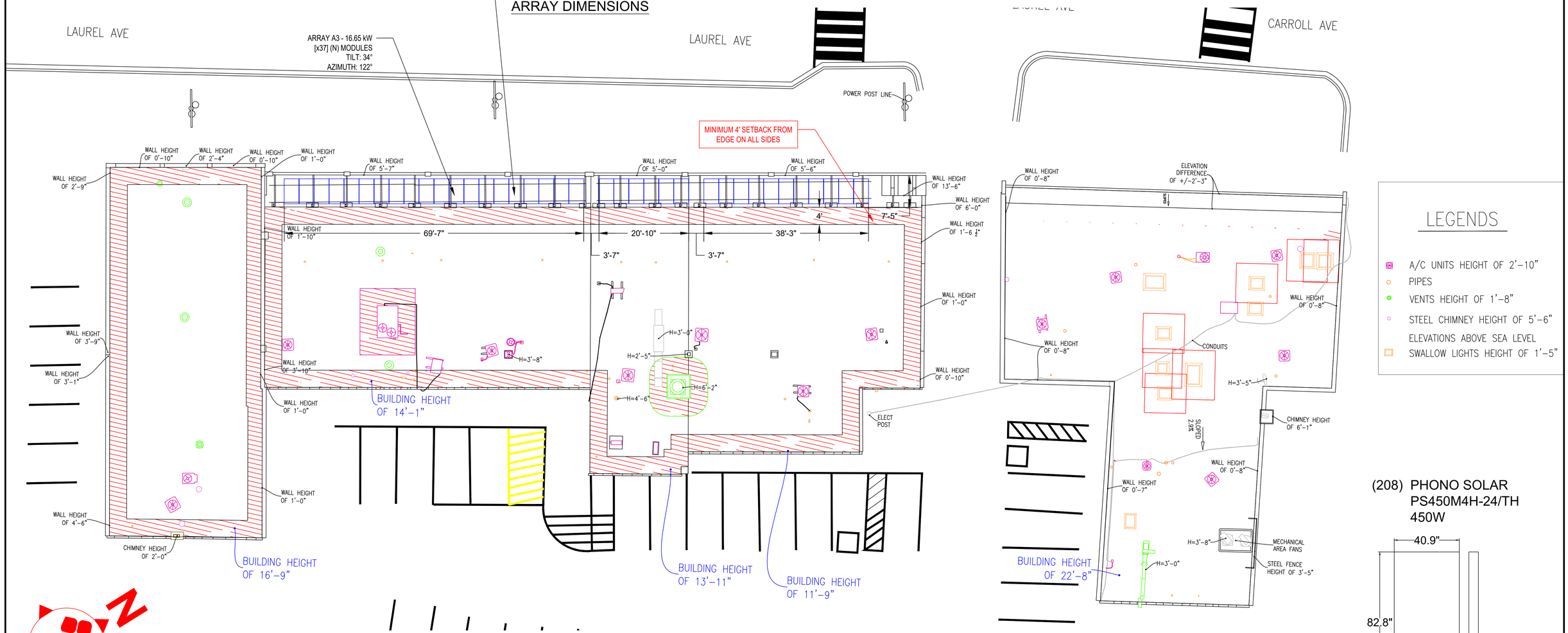

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A - 1.1 ARRAY LAYOUT

Phono Solar

TWINPLUS MODULE SERIES

HIGH EFFICIENCY MONO-PERC M4-9B-R

430-450W

OUTSTANDING PRODUCT PERFORMANCE

- Competitive high-temperature performance with ameliorated temperature coefficient
- Minimized power loss in cell connection
- Better performance under shading effect
- Decreased nominal operating cell temperature to 43 ± 2°C
- Higher power generation with multi-busbar and half-cut technology

TRUSTWORTHY QUALITY AND RELIABILITY

- Guaranteed 0~+5W positive tolerance secures reliable power output
- 5400Pa maximum snow load, 2400Pa maximum wind load
- Optimized electrical design lowers hot spot risk and operating current

PID RESISTANT

- Industry-leading cell processing technology and electrical design ensure solid PID resistance

12-year Product Warranty | **25-year** Linear Performance Warranty

MANAGEMENT SYSTEM CERTIFICATES

IEC 61215, IEC 61730
ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety
IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules-guidelines for increased confidence in PV module design qualification and type approval

Bloomberg NEW ENERGY FINANCE Tier1

2019 TOP PERFORMER
PVEL | DNV·GL
PV MODULE RELIABILITY SCORECARD

www.phonosolar.com info@phonosolar.com

ELECTRICAL TYPICAL VALUES

Model	PS430M4-24/TH PS430M4H-24/TH		PS435M4-24/TH PS435M4H-24/TH		PS440M4-24/TH PS440M4H-24/TH		PS445M4-24/TH PS445M4H-24/TH		PS450M4-24/TH PS450M4H-24/TH	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Rated Power (Pmpp)	430	318	435	322	440	325	445	329	450	333
Rated Current (Impp)	10.59	8.56	10.66	8.61	10.73	8.67	10.80	8.73	10.87	8.78
Rated Voltage (Vmpp)	40.61	37.15	40.81	37.33	41.01	37.51	41.21	37.70	41.40	37.87
Short Circuit Current (Isc)	11.09	8.96	11.15	9.01	11.21	9.06	11.27	9.11	11.33	9.15
Open Circuit Voltage (Voc)	48.85	44.69	48.92	44.75	48.99	44.82	49.06	44.88	49.13	44.94
Modula Efficiency (%)	19.65		19.88		20.11		20.34		20.57	

STC(Standard Testing Conditions):Irradiance 1000W/m², AM 1.5, Cell Temperature 25°C
NOCT (Nominal Operation Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline 166mm x 83mm
Dimension (L× W × H)	Length: 2103mm (82.79 inch) Width: 1040mm (40.94 inch) Height: 35mm (1.38 inch)
Weight	24.5kg (54.01 lbs)
Front Glass	3.2mm Toughened Glass
Frame	Anodized Aluminium Alloy
Cable	4mm² (IEC), Length-350mm (vertical) 1250mm (horizontal) or Customized Length
Junction Box	IP 68 Rated

TEMPERATURE RATINGS

Voltage Temperature Coefficient	-0.30%/°C
Current Temperature Coefficient	+0.05%/°C
Power Temperature Coefficient	-0.38%/°C
Tolerance	0~+5w
NOCT	43±2°C

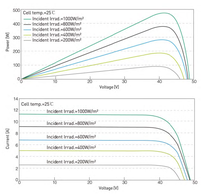
ABSOLUTE MAXIMUM RATING

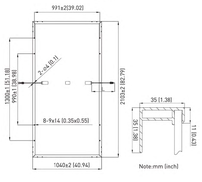
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Maximum Series Fuse Rating	20A
PV Module Classification	II
Module Fire Performance (UL 1703)	Type 4
Maximum System Voltage	DC 1500V/1000V

PACKING CONFIGURATION

Container	20' GP	40' HQ
Pieces/Container	255	682

ELECTRICAL CHARACTERISTICS





Note: mm (inch)

Phono Solar

PHONO SOLAR TECHNOLOGY CO.,LTD reserves the right to make necessary adjustments to the information described herein at any time without further notice. The specifications and certificates contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Please be sure to use the most recent version of data.

Three Phase Inverter with Synergy Technology

For the 208V Grid for North America

SE50KUS

INVERTERS

Powered by unique pre-commissioning process for rapid system installation

- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy 2-person installation with lightweight, modular design (each inverter consists of 3 Synergy units and one Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

*Applicable only for DC and AC SPDs

solaredge.com

solaredge

Three Phase Inverter with Synergy Technology

For the 208V Grid for North America

SE43.2KUS / SE50KUS

Applicable to inverter with Part Numbers	SExxK-USx2Inxxx SE50KUS	
INSTALLATION SPECIFICATIONS		
Number of Synergy Units per Inverter	3	
AC Max Conduit Size	2 ½"	in
Max AWG Line / PE	4/0 / 1/0	
DC Max Conduit Size	1 x 3" , 2 x 2"	in
DC Input Inverter / Synergy Unit	12 / 4 pairs, 6-12 AWG	
Dimensions (H x W x D)	Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295	in / mm
Weight	Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18	lb / kg
Operating Temperature Range	-40 to +140 / -40 to +60(4)	°F / °C
Cooling	Fan (user replaceable)	
Noise	< 67	dBA
Protection Rating	NEMA 3R	
Mounting	Brackets provided	

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

CE RoHS

Three Phase Inverters for the 120/208V Grid

For North America

SE10KUS / SE17.3KUS

INVERTERS

The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp
- Fixed voltage inverter for superior efficiency and longer strings
- Built-in type 2 DC and AC Surge Protection, to better withstand lightning events
- Small, lightest in its class, and easy to install outdoors or indoors on provided bracket
- Integrated arc fault protection and rapid shutdown for NEC 2014, 2017, and 2020, per article 690.11 and 690.12
- Built-in module-level monitoring with Ethernet, wireless or cellular communication for full system visibility
- Integrated Safety Switch
- UL1741 SA and SB certified, for CPUC Rule 21 grid compliance

solaredge.com

solaredge

Three Phase Inverters for the 120/208V Grid(1)

For North America

SE10KUS / SE17.3KUS

Model Number Applicable to inverters with part number	SE10KUS SEXXK-USX21IXXXX	SE17.3KUS	
OUTPUT			
Rated AC Power Output	10000	17300	W
Maximum Apparent AC Output Power	10000	17300	VA
AC Output Line Connections	3W + PE, 4W + PE		
AC Output Voltage Minimum-Nominal-Maximum(2) (L-N)	105 – 120 – 132.5		Vac
AC Output Voltage Minimum-Nominal-Maximum(2) (L-L)	183 – 208 – 229		Vac
AC Frequency Minimum-Nominal-Maximum(2)	59.3 – 60 – 60.5		Hz
Continuous Output Current (per Phase)	27.8	48.25	Aac
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes		
THD	≤ 3		%
Power Factor Range	+/- 0.85 to 1		
INPUT			
Maximum DC Power (Module STC)	17500	30275	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC+ to DC-	600		Vdc
Operating Voltage Range	370 – 600		Vdc
Maximum Input Current	27.8	48.25	Adc
Maximum Input Short Circuit Current	55		Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	167kΩ Sensitivity(3)		
CEC Weighted Efficiency	97	97.5	%
Night-time Power Consumption	< 4		W
ADDITIONAL FEATURES			
Supported Communication Interfaces	2 x RS485, Ethernet, Cellular (optional)		
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection		
Rapid Shutdown	NEC2014, NEC2017 and NEC2020 compliant/certified		
RS485 Surge Protection Plug-in	Supplied with the inverter, Built-in		
AC, DC Surge Protection	Type II, field replaceable, Built-in		
DC Fuses (Single Pole)	25A, Built-in		
Smart Energy Management	Export Limitation		
DC SAFETY SWITCH			
DC Disconnect	Integrated		
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1741 SB, UL16998, CSA C22.2, Canadian AFCI according to T.I.L. M-07		
Grid Connection Standards	IEEE1547-2018, Rule 21, Rule 14 (HI)		
Emissions	FCC part15 class A		
INSTALLATION SPECIFICATIONS			
AC Output Conduit size /AWG range	¾" or 1" / 6 - 10 AWG		
DC Input Conduit size / AWG range	¾" or 1" / 6 - 12 AWG		
Number of DC inputs pairs	4		
Dimensions with Safety Switch (H x W x D)	31.8 x 12.5 x 11.8 / 808 x 317 x 300		in / mm
Weight with Safety Switch	78.2 / 35.5		lb / kg
Cooling	Fans (user replaceable)		
Noise	< 62		dBA
Operating Temperature Range	-40 to +140 / -40 to +60(4)		°F / °C
Protection Rating	NEMA 3R		
Mounting	Bracket provided		

(1) For 277/480V inverters refer to the Three Phase Inverters for the 277/480V Grid for North America datasheet
(2) For other regional settings please contact SolarEdge support
(3) Where permitted by local regulations
(4) For power de-rating information refer to the Temperature De-rating - Technical Note (North America)

CE

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Montgomery County
Historic Preservation Commission

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R - 1 RESOURCE DOCUMENT

Power Optimizer
For North America
P1101

POWER OPTIMIZER

PV power optimization at the module level
The most cost-effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses, and combiner boxes; over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)

solaredge.com

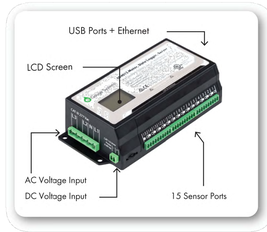
solaredge

Gauge Systems

eGauge Core Specifications
Model: EG4015

Measurement

AC Voltage: **(Y: L-N, Δ: L-L)**	L1: 85-277 Vrms L2: 0-277 Vrms L3: 0-277 Vrms
DC Voltage:	42 Vrms Power: 9-60 Vdc Measurement: -60-60Vdc
Current:	15 sensor ports 6900A max Sensor ports isolated from USB, Ethernet and voltage inputs
Frequency:	50 or 60 Hz
Logging Values:	V, A, W, Wh, Hz, VA VAr, THD, deg
Power Draw:	12W max, 2W typical 2 .5V USB Ports @ 1A max
Accuracy:	ANSI C12.20 - 0.5% Compliant



Environment Conditions

Operating Temp:	-30° to 70°C (-22° to 158°F)
Max Altitude:	4000m (13,123ft)
Max Humidity:	80% up to 31°C
Meas. Category:	Overvoltage Category III
Location:	Open type indoor device
Pollution Degree:	2

Data Logger Capacity

Register Count:	64 (data storage points)
Granularity: *(duration/avg)*	1 hr/1 sec 1 yr/1 minute 10 yrs/15 minute Device Lifetime/1 day

Safety and Regulatory

Safety:	IEC/UL 61010-1 Ed. 3.0 B:2010
CE:	IEC 61000-6-1 Ed. 3.0 B:2016 IEC 61000-6-3 Ed. 2.1 B:2011
FCC:	FCC Title 47 CFR Part 15- Subpart B Class B ICES-003 Information Technology- Equipment Class B

www.eGauge.net (720) 545-9767 x1 sales@egauge.net

/ Power Optimizer
For North America
P1101

Power Optimizer Model (Typical Module Compatibility)		P1101 (for up to 2 x high power or bi-facial modules)	Units
INPUT			
Rated Input DC Power[1]		1100	W
Connection Method		Single input for series connected modules	
Absolute Maximum Input Voltage (Voc at lowest temperature)		125	Vdc
MPPT Operating Range		12.5 – 105	Vdc
Maximum Short Circuit Current (Isc)		14.1	Adc
Maximum Short Circuit Current per Input (Isc)		7	Adc
Maximum Efficiency		99.5	%
Weighted Efficiency		98.6	%
Overvoltage Category		II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)			
Maximum Output Current		18	Adc
Maximum Output Voltage		80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)			
Safety Output Voltage per Power Optimizer		1 ± 0.1	Vdc
STANDARD COMPLIANCE			
Photovoltaic Rapid Shutdown System		Compliant with NEC 2014, 2017, 2020	
EMC		FCC Part 15 Class A, IEC61000-6-2, IEC61000-6-3	
Safety		IEC62109-1 (class II safety), UL1741, UL3741	
Material		UL94 V-0, UV resistant	
RoHS		Yes	
INSTALLATION SPECIFICATIONS			
Compatible SolarEdge Inverters		All commercial three phase inverters	
Maximum Allowed System Voltage		1000	Vdc
Dimensions (W x L x H)		129 x 162 x 59 / 5.1 x 6.4 x 2.32	mm / in
Weight		1064 / 2.34	gr / lb
Input Connector		MC4[2]	
Input Wire Length Options	1 2 3	1.6 / 5.2	m / ft
Output Wire Type / Connector		Double insulated; MC4	
Output Wire Length		2.4 / 7.8	m / ft
Operating Temperature Range[3]		-40 to +85 / -40 to +185	°C / °F
Protection Rating		IP68 / NEMA6P	
Relative Humidity		0 – 100	%

(1) Rated power of the module at STC will not exceed the Power Optimizer "Rated Input DC Power". Modules with up to +5% power tolerance are allowed.
(2) For other connector types please refer to the Power Optimizer Input Connector Compatibility Technical Note
(3) For ambient temperatures above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers De-Rating Application Note for more details.

PV System Design Using a SolarEdge Inverter[4][5]		208V Grid SE10K	208V Grid SE11.4K*	277/480V Grid SE33K	277/480V Grid SE40K*	
Compatible Power Optimizers		P1101				
Minimum String Length	Power Optimizers	15	19	27	27	
	PV Modules	15	19	27	27	
Maximum String Length	Power Optimizers	30	30	30	30	
	PV Modules	60	60	60	60	
Maximum Continuous Power per String		7200	8800	15300	15300	W
Maximum Allowed Connected Power per String[6]		1 string – 8400 2 strings or more – 9800	1 string – 10020 2 strings or more – 12020	1 string – 17550 2 strings or more – 20300	2 strings or less – 17550 3 strings or more – 20300	W
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimizers				

* The same rules apply for Synergy units of equivalent power ratings, that are part of the module Synergy Technology inverter.
(4) For each string, a Power Optimizer may be connected to a single PV module if 1) each Power Optimizer is connected to a single PV module or 2) it is the only Power Optimizer connected to a single PV module in the string.
(5) Design with three phase 208V inverters is limited. Use the SolarEdge Designer for verification.
(6) To connect more STC power per string, design your project using SolarEdge Designer.

RoHS

Gauge Systems

eGauge Core Specifications

General

Warranty:	2 years, 5 years

Network Connection

Powerline:	None
Ethernet:	IEEE 802.3 - LAN
WiFi/Cellular:	Optional with USB accessory

Data Communication

Import:	Modbus RTU*, Modbus TCP
Export:	Modbus RTU*, Modbus TCP, BACnet IP, BACnet MS/TP*, XML * Requires USB485 converter

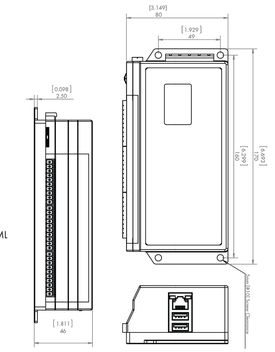
User Interface

Compatible browsers: *(Only up-to-date versions supported)*	Google Chrome Firefox Safari Microsoft Edge
Apps:	Android & IOS

Enclosure

Material:	FRABS
Dimensions:	17 x 8 x 4.6cm (6.7 x 3.15 x 1.81in)
Weight:	300g (0.66lbs)

Dimensions *([in.] mm)*



www.eGauge.net (720) 545-9767 x1 sales@egauge.net

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Dan.Bruechert at 1:05 pm, Mar 12, 2024

REVISIONS

NO.	DESCRIPTION	DATE	BY
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DRAWN:	PATRICIO ALVAREZ
CHECKED:	CHECKED
APPROVED:	J. ZERBARINI
DATE:	1/2/2023
SCALE:	

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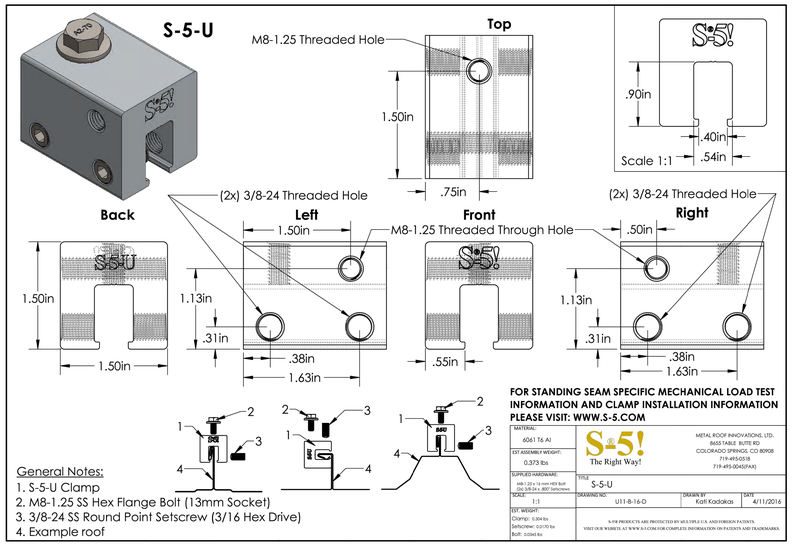
TAKOMA PARK, MD 20912

DRAWING NAME AND NUMBER

R - 2 RESOURCE DOCUMENT



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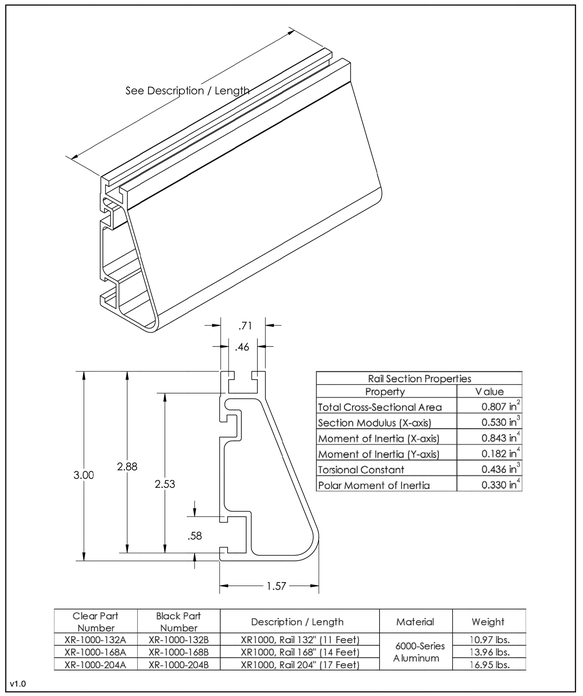
MAX HEIGHT ABOVE THE ROOF IS LESS THAN 1 FEET OFF THE ROOF

Cut Sheet

IRONRIDGE

XR1000® Rail



Rail Section Properties	
Property	Value
Total Cross-Sectional Area	0.807 in^2
Section Modulus (X-axis)	0.530 in^3
Moment of Inertia (X-axis)	0.843 in^4
Moment of Inertia (Y-axis)	0.182 in^4
Torsional Constant	0.436 in^3
Polar Moment of Inertia	0.330 in^3

Clear Part Number	Black Part Number	Description / Length	Material	Weight
XR-1000-132A	XR-1000-132B	XR1000, Rail 132" (11 Feet)	6000-Series Aluminum	10.97 lbs.
XR-1000-168A	XR-1000-168B	XR1000, Rail 168" (14 Feet)		13.96 lbs.
XR-1000-204A	XR-1000-204B	XR1000, Rail 204" (17 Feet)		16.95 lbs.

v1.0

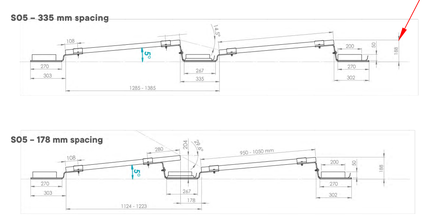
COMPACT**FLAT**

COMPACT**FLAT S05**

AERODYNAMIC. STABLE. INTELLIGENT.
Compact and tested substructure for the single-sided stand-mounting of PV modules on flat roofs

The system, as part of the COMPACT**FLAT** product range, is an aerodynamic south-facing substructure for the fixing of framed PV modules on flat roofs. It is available at an incline of 5° and with different row spacing. No additional components are necessary for reducing the clearance between the modules. With the smallest row spacing, the amount of empty space is reduced considerably, and the system offers more installed modules – meaning more performance and yield – per unit area.

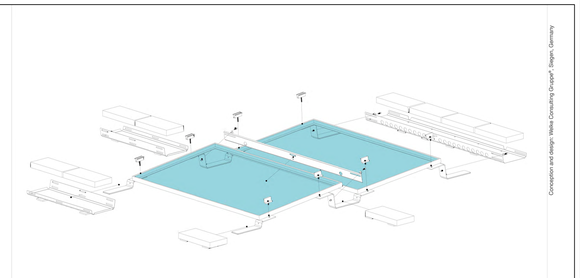
AEROCOMPACT®



TECHNICAL DATA

Description	Aerodynamic installation system for the stand-mounting of framed PV modules on flat roofs.
Scope of use	On foil and bitumen roofs with and without heat insulation beneath the sealing, as well as on concrete roofs; can be adapted for gravel and green roofs upon request
Module dimensions	950–1,050 mm x 1,475–2,080 mm (width x length)
Installation angle	5°, unilateral
Row spacing	COMPACT**FLAT S05** (15° internal shading angle): 335 mm COMPACT**FLAT S05** (30° internal shading angle): 178 mm
Distance from the roof surface / floor surface	Approx. 60 mm; potentially less on gravel roof
Distance from roof edge	1,200 mm (less corner spacing upon request); roof areas F and G as per EN 1991-1-4 can be covered
Max. building height	25 m (adapted for taller buildings upon request)
Max. roof pitch	Up to 5° possible without roof anchors; above 5° only with roof anchors
Max. field size	12 x 10 rows; 120 modules
Min. field size	1 rows for every 2 modules
Wind load	Suction load up to 2.4 kN/m^2
Snow load	Pressure load of COMPACT**FLAT S05** Standard up to 2.4 kN/m^2 Pressure load of COMPACT**FLAT S05** Alpin up to 4.4 kN/m^2
Design/stability verification	Software-supported based on wind tunnel analyses
On-site requirements	Sufficient structural load-bearing capacity of the roof structure and the building's supporting structure, as well as adequate compressive strength of the roof structure, must be ensured on site. The general terms and conditions, terms of warranty, and the user agreement apply.
Module approval	The list of approved modules is provided by AEROCOMPACT®; individual approvals through the module manufacturer
Components	Module clamps with grounding pins, flat-roof brackets, wind deflector plates, ballast stones; optional lateral plates, ballast trays, roof anchors
Materials	Bearing connecting parts made from aluminum EN AW 6060 T64; module clamps made from aluminum EN AW 6063 T66; screws made from stainless steel A2+70; wind deflector plates and ballast trays made from steel with aluminum-zinc coating; building protection mat made from polyester fleece

COMPACT**FLAT**



Conception and design: Weble Consulting Gruppe®, Stegen, Germany

› **Module clamps with integrated grounding pins**
› **No roof penetration necessary**
› **Also suitable for roof edge areas**
› **Main structure produced from aluminum and stainless steel**
› **Water drainage provided on all sides**
› **Optimum module ventilation**
› **Pre-installed building protection mat**
› **700 kWp per truck or 40-foot container**
› **Minimum order quantity only 2 kWp**
› **Quickest installation: 1 kWp / 5 min. / 2 people**
› **Optimized wind suction openings**
› **Low transport costs**
› **Fire-tested as per UL 1703**
› **TÜV-certified as per UL 2703**
› **Wind tunnel-tested**
› **Engineered in Europe**
› **General building inspectorate approval applied for**
› **25 years product warranty**

PB-S05-EN-EU-V01-2019

› **Scan QR code to watch installation video**

AEROCOMPACT®

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Phone: +43 5524 22566 // E-mail: office@aerocompact.com
www.aerocompact.com

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