HISTORIC PRESERVATION COMMISSION

HAWP #: 1153063 at: 10305 Metropolitan Ave, Kensington

submitted on: 3/30/2026

has been reviewed and determined that the proposal fits into the following category/categories:

☐ Repair or replacement of a masonry foundation with new masonry materials that closely match the original in appearance;

☐ Installation of vents or venting pipes in locations not visible from the public right-of-way;

☐ New gutters and downspouts;

☐ Removal of vinyl, aluminum, asbestos, or other artificial siding when the original siding is to be repaired and/or replaced in kind;

☐ Removal of accessory buildings that are not original to the site or non-historic construction;

☐ Repair or replacement of missing or deteriorated architectural details such as trim or other millwork, stairs or stoops, porch decking or ceilings, columns, railings, balusters, brackets shutters, etc., with new materials that match the old in design, texture, visual characteristics, and, where possible materials, so long as the applicant is able to provide one extant example, photographic evidence, or physical evidence that serves as the basis for the work proposed;

☐ Construction of wooden decks that are at the rear of a structure and are not visible from a public right-of-way;

☐ Roof replacement with -compatible roofing materials, or with architectural shingles replacing 3-Tab asphalt shingles;

☐ Installation of storm windows or doors that are compatible with the historic resource or district;

☐ Repair, replacement or installation of foundation-level doors, windows, window wells, and areaways, or foundation vents, venting pipes, or exterior grills that do not alter the character-defining features and/or the historic character of the resource;

☐ Construction of fences that are compatible with the historic site or district in material, height, location, and design;

☐ Fence is lower than 48" in front of rear wall plane;

☐ Construction of walkways, parking pads, patios, driveways, or other paved areas that are not visible from a public right-of-way and measure no more than 150 square feet in size;

☐ Replacement of existing walkways, parking pads, patios, driveways, or other paved areas with materials that are compatible with the visual character of the historic site and district and that are no greater than the dimensions of the existing hardscape;

☐ Construction of small accessory buildings no larger than 250 square feet in size that are not visible from the public right-of-way;

☐ Installations of skylights on the rear of a structure that will not be visible from the public right-of-way, and would not remove or alter character-defining roof materials;

☑ Installation of solar panels and arrays in locations that are not readily visible from the public right-of-way or that are designed so as to have a minimal impact on the historic resource or the historic district (e.g., systems that are ground-mounted in areas other than the front or side yard of a corner lot, located on accessory or outbuildings, on non-historic additions, or on rear facing roof planes);

☐ Installation of car charging stations in any location on a property or in the right-of-way;

Installation of satellite dishes;

☐ Removal of trees greater than 6" in diameter (d.b.h.) that are dead, dying, or present an immediate hazard.

☐ Removal of trees greater than 6" in diameter (d.b.h.) in the rear of the property that will not impact the overall tree canopy of the surrounding district or historic site;

☐ Replacement tree required as a condition; and,

☐ Other minor alterations that may be required by the Department of Permitting Services post-Commission approval that would have no material effect on the historic character of the property.

Staff finds the proposal complies with Chapter 24A, the Secretary of the Interior's Standards for Rehabilitation, and any additional requisite guidance. Under the authority of COMCOR No. 24A.04.01, this HAWP is approved by Devon Murtha on 4/13/2026. The approval memo and stamped drawings follow.

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

Newly constructed home.

Description of Work Proposed: Please give an overview of the work to be undertaken:

Installation of roof mounted 12.74kW Solar PV System. The solar system will not be visible due to higher Parapet construction.

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Devon.Murtha at 11:21 am, Apr 13, 2026

Work Item 1: Solar

Description of Current Condition:	Proposed Work:
New Roof with Parapet blocking	Installation of 12.74kW Solar PV System

Work Item 2:

Description of Current Condition:	Proposed Work:

Work Item 3:

Description of Current Condition:	Proposed Work:

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Devon.Murtha at 11:21 am, Apr 13, 2026

HISTORIC AREA WORK PERMIT
CHECKLIST OF
APPLICATION REQUIREMENTS

	Required Attachments						
Proposed Work	I. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Excavation/Landscaing	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*

DEPARTMENT OF PERMITTING SERVICES

Marc Elrich
County Executive

Rabbiah Sabbakhan
Director

HISTORIC AREA WORK PERMIT APPLICATION

Application Date: 3/30/2026

Application No: 1153063
AP Type: HISTORIC
Customer No: 1296892

Affidavit Acknowledgement

The Contractor is the Primary applicant authorized by the property owner
This application does not violate any covenants and deed restrictions

Primary Applicant Information

Address	10305 METROPOLITAN AVE KENSINGTON, MD 20895
Othercontact	Nova Solar (Primary)

Historic Area Work Permit Details

Work Type	ALTER
Scope of Work	Installation of Roof Mounted 12.74kW Solar PV System.

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Montgomery County
Historic Preservation Commission

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By Devon.Murtha at 11:21 am, Apr 13, 2026

FRANK SHIELDS
NEW GRID-INTERACTIVE PHOTOVOLTAIC SYSTEM
DC SYSTEM SIZE (12.740KW)

SYSTEM DETAILS

DESCRIPTION	NEW GRID-INTERACTIVE PHOTOVOLTAIC SYSTEM WITH NO BATTERY STORAGE
DC RATING OF SYSTEM	SYSTEM SIZE :12.740KW DC STC
AC RATING OF SYSTEM	8.960KW
AC OUTPUT CURRENT	37.24 A
NO. OF MODULES	(28) CANADIAN SOLAR CS6.1-54TM-455H(455W) SOLAR MODULES
NO. OF INVERTERS	(28) ENPHASE IQ8MC-72-M-US MICROINVERTERS
POINT OF CONNECTION	LINE SIDE TAP IN THE MSD
ARRAY STRINGING	(1) STRING OF 6 MODULES (2) STRINGS OF 11 MODULES

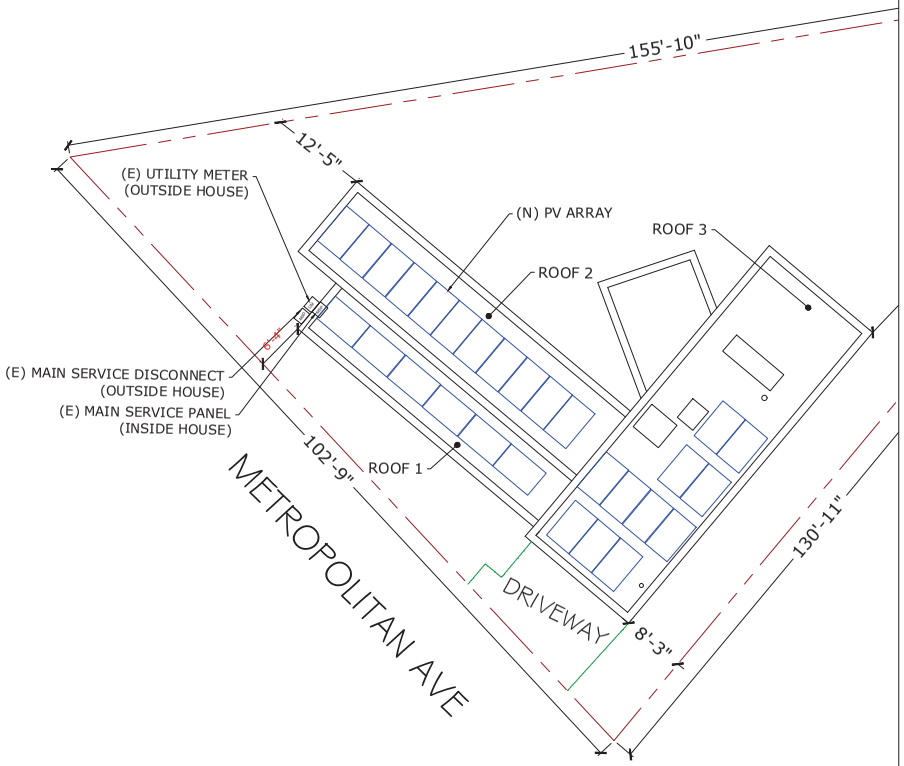
SITE DETAILS

ASHRAE EXTREME LOW	-12°C
ASHRAE 2% HIGH	34°C
GROUND SNOW LOAD	30 PSF
WIND SPEED	115MPH
RISK CATEGORY	II
WIND EXPOSURE CATEGORY	B
AHJ	MONTGOMERY COUNTY

GOVERNING CODES

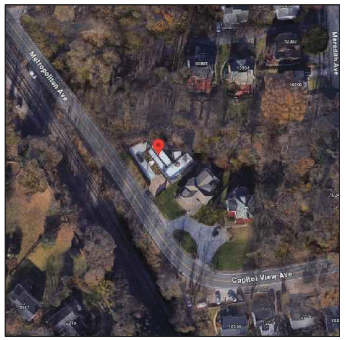
INTERNATIONAL BUILDING CODE (IBC) 2021
INTERNATIONAL FIRE CODE (IFC) 2021
NATIONAL ELECTRICAL CODE (NEC) 2017
INTERNATIONAL RESIDENTIAL CODE (IRC) 2021

SHEET INDEX

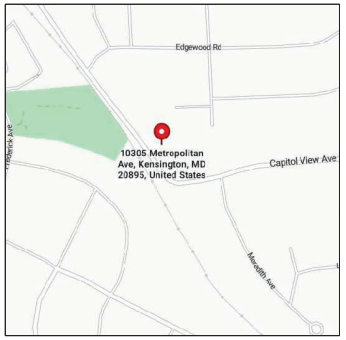


DRAWING SCALE:- 1/16" = 1'-0"

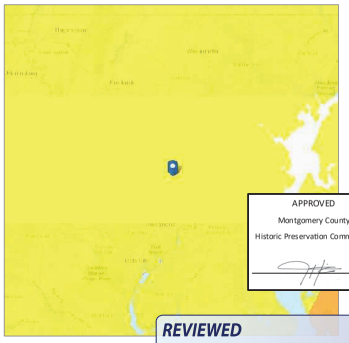
SITE MAP (N.T.S)



VICINITY MAP



WIND FLOW MAP



APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Devon.Murtha at 11:21 am, Apr 13, 2026

Nova Solar
NOVA SOLAR, INC.
3305 DYE DR, FALLS CHURCH, VA 22042

Signature with Seal

FRANK SHIELDS
10305 METROPOLITAN AVE, KENSINGTON, MD 20895

Green World Renewable Energy
Clean, Safe, Renewable
4408, RICKIE HWY, BALTIMORE, MD 21225, USA.

PERMIT DEVELOPER	
DATE	03/13/2026
DESIGNER	ORD
REVIEWER	

SHEET NAME
SITE MAP & VICINITY MAP

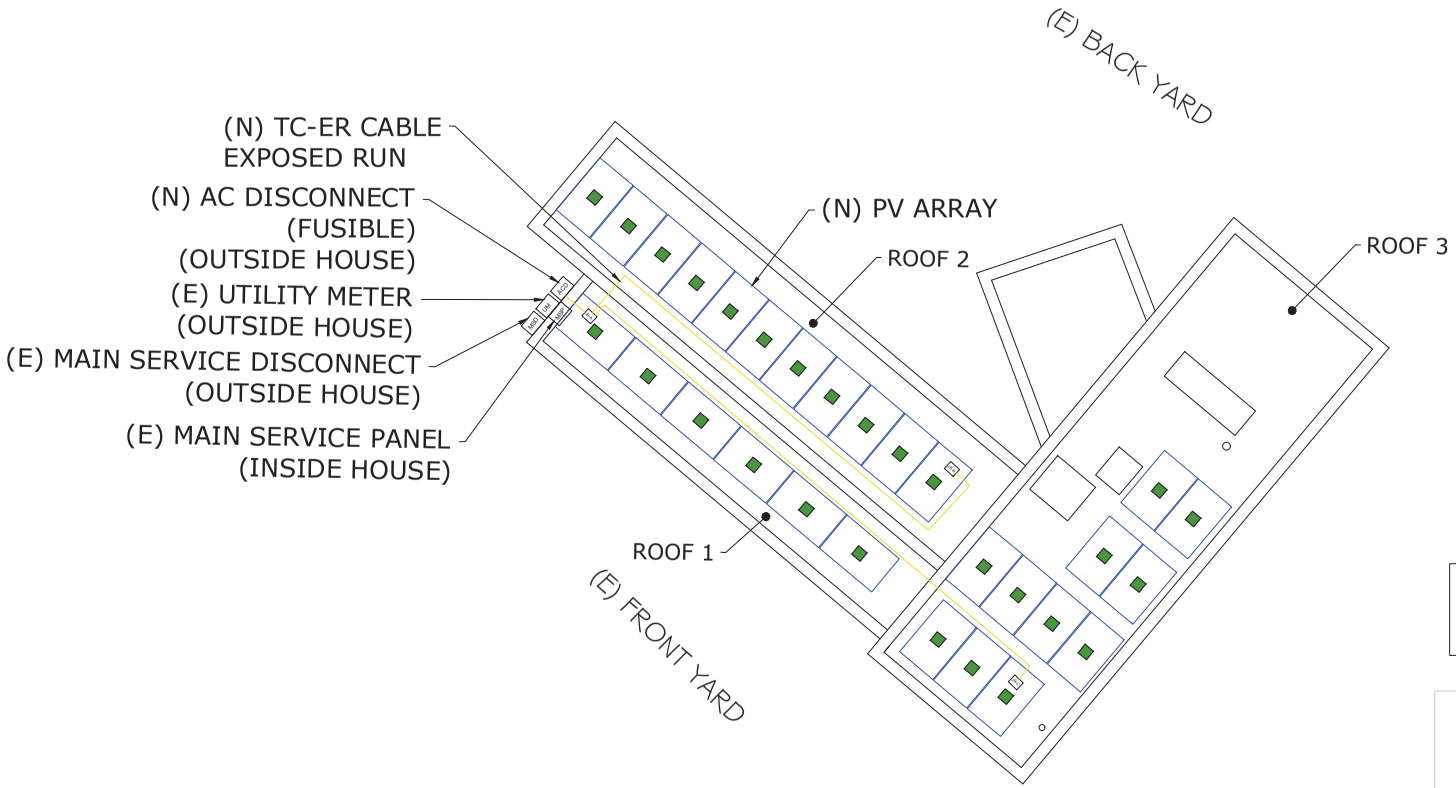
SHEET NUMBER
A-00

MODULE TYPE, DIMENSIONS & WEIGHT

NUMBER OF MODULES = 28 MODULES
MODULE TYPE = CANADIAN SOLAR CS6.1-54TM-455H(455W) SOLAR MODULES
WEIGHT = 50.71 LBS / 23.0 KG.
MODULE DIMENSIONS = 70.9" X 44.6" = 21.96 SF

NUMBER OF INVERTER = 28 MICROINVERTERS
INVERTER TYPE = ENPHASE IQ8MC-72-M-US MICROINVERTERS

DC SYSTEM SIZE: 12.740KW
AC SYSTEM SIZE: 8.960KW



ROOF AREA: 1857SQ. FT
PV AREA: 614.86 SQ.FT
ROOF COVERAGE % : 33.11%

LEGENDS

- UM - UTILITY METER
- MSP - MAIN SERVICE PANEL
- MSD - MAIN SERVICE DISCONNECT
- ACD - AC DISCONNECT
- SJB - JUNCTION BOX
- MICROINVERTERS
- VENT, ATTIC FAN (ROOF OBSTRUCTION)
- CABLE

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Devon.Murtha at 11:21 am, Apr 13, 2026

DRAWING SCALE:- 3/32" = 1'-0"

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PERMIT DEVELOPER	
DATE	03/13/2026
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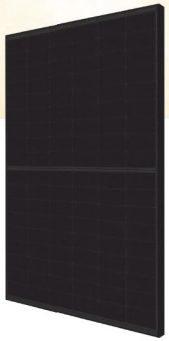
REVIEWER	

SHEET NAME
ROOF PLAN & MODULES

SHEET NUMBER
A-01

NEW

CanadianSolar



TOPHiKu6 (All-Black)

N-type TOPCon Technology

445 W ~ 470 W

CS6.1-54TM-445|450|455|460|465|470H

MORE POWER

- 470 W — Module power up to 470 W; Module efficiency up to 23.0 %
- Excellent anti-LeTID & anti-PID performance. Low power degradation, high energy yield
- Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate
- Lower LCOE & system cost

MORE RELIABLE

- Minimizes micro-crack impacts
- Heavy snow load up to 8100 Pa, wind load up to 6000 Pa*

* For detailed information, please refer to the Installation Manual.

25 Years Industry Leading Product Warranty on Materials and Workmanship*

30 Years Linear Power Performance Warranty*

1st year power degradation no more than 1%
Subsequent annual power degradation no more than 0.4%

*Subject to the terms and conditions contained in the applicable Canadian Solar Limited Warranty Statement. Also this 25-year limited product warranty is available only for products installed and operating on rooftops in certain regions.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
ISO 45001: 2018 / International standards for occupational health & safety
IEC62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730
IEC 61701 / IEC 62716 / IEC 60068-2-68
Take-e-way

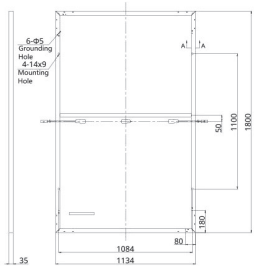
* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 22 years, it has successfully delivered over 100 GW of premium-quality solar modules across the world.

Canadian Solar (USA) Inc.
1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597 | www.csisolar.com/na | service.ca@csisolar.com

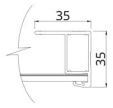
ENGINEERING DRAWING (mm)

Rear View



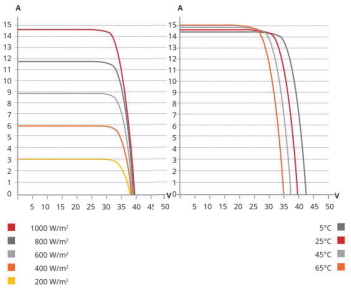
Frame Cross Section

A - A



Mounting Hole

CS6.1-54TM-455H / I-V CURVES



ELECTRICAL DATA | STC*

CS6.1-54TM	445H	450H	455H	460H	465H	470H
Nominal Max. Power (Pmax)	445 W	450 W	455 W	460 W	465 W	470 W
Opt. Operating Voltage (Vmp)	32.8 V	33.0 V	33.2 V	33.4 V	33.6 V	33.8 V
Opt. Operating Current (Imp)	13.59 A	13.66 A	13.72 A	13.78 A	13.85 A	13.91 A
Open Circuit Voltage (Voc)	38.7 V	38.9 V	39.1 V	39.3 V	39.5 V	39.7 V
Short Circuit Current (Isc)	14.48 A	14.55 A	14.61 A	14.69 A	14.77 A	14.86 A
Module Efficiency	21.8%	22.0%	22.3%	22.5%	22.8%	23.0%
Operating Temperature	-40°C ~ +85°C					
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)					
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)					
Max. Series Fuse Rating	25 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10 W					

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

MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	108 [2 X (9 X 6)]
Dimensions	1800 × 1134 × 35 mm (70.9 × 44.6 × 1.38 in)
Weight	23 kg (50.7 lbs)
Front Cover	3.2 mm tempered glass with anti-reflective coating
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Connector	T6, MC4, MC4-EVO2 or MC4- EVO2A
Cable Length (Including Connector)	1550 mm (61.0 in) (+) / 1100 mm (43.3 in) (-)
Per Pallet	31 pieces
Per Container (40' HQ)	744 pieces

ELECTRICAL DATA | NMOT*

CS6.1-54TM	445H	450H	455H	460H	465H	470H
Nominal Max. Power (Pmax)	335 W	339 W	343 W	347 W	351 W	354 W
Opt. Operating Voltage (Vmp)	30.9 V	31.1 V	31.3 V	31.5 V	31.7 V	31.9 V
Opt. Operating Current (Imp)	10.85 A	10.91 A	10.96 A	11.02 A	11.07 A	11.12 A
Open Circuit Voltage (Voc)	36.5 V	36.7 V	36.9 V	37.1 V	37.3 V	37.5 V
Short Circuit Current (Isc)	11.68 A	11.74 A	11.79 A	11.85 A	11.92 A	11.99 A

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

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

PARTNER SECTION

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

APPROVED
Montgomery County
Historic Preservation Commission

REVIEWED
By Devon.Murtha at 11:21 am, Apr 13, 2026

Nova Solar

NOVA SOLAR, INC.
3305 DYE DR, FALLS CHURCH, VA 22042

Signature with Seal

FRANK SHIELDS

10305 METROPOLITAN AVE, KENSINGTON, MD 20895

Green World Renewable Energy
Clean, Safe, Renewable

4408, RICKIE HWY, BALTIMORE, MD 21225, USA.

PERMIT DEVELOPER	
DATE	03/13/2026
DESIGNER	ORD
REVIEWER	

SHEET NAME
MODULE DATASHEET

SHEET NUMBER
DS-01

ENPHASE.

DATA SHEET

IQ8MC Microinverter

Our newest IQ8 Series Microinverters are the industry's first microgrid-forming*, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC), which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55-nm technology with high-speed digital logic and has superfast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.

Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the IQ Battery, IQ Gateway, and the Enphase App monitoring and analysis software.

Enphase 25 year limited warranty

IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.

Connect PV modules quickly and easily to the IQ8 Series Microinverters that have integrated MC4 connectors.

UL CERTIFIED SAFETY

IQ8 Series Microinverters are UL Listed as PV rapid shutdown equipment and conforms with various regulations when installed according to the manufacturer's instructions.

*Meets UL 1741 only when installed with IQ System Controller 2 and 3.

Easy to install

- Lightweight and compact with plug-and-play connectors
- Powerline communication (PLC) between components
- Faster installation with simple two-wire cabling

High productivity and reliability

- Produces power even when the grid is down*
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

Microgrid-forming

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) and IEEE 1547:2018 (UL 1741-SB)

NOTE:

- IQ8 Microinverters cannot be mixed together with previous generations of Enphase microinverters (IQ7 Series, IQ6 Series, etc.) in the same system.
- IQ Gateway is required to change the default grid profile at the time of installation to meet the local Authority Having Jurisdiction (AHJ) requirements.

IQ8MC Microinverter

INPUT DATA (DC)	UNITS	IQ8MC-72-M-US
Commonly used module pairings [1]	W	260–460
wModule compatibility		To meet compatibility, PV modules must be within the following max. input DC voltage and max. module I_{sc}. Module compatibility can be checked at https://enphase.com/installers/microinverters/calculator.
MPPT voltage range	V	25–45
Operating range	V	18–58
Min./Max. start voltage	V	22/58
Max. input DC voltage	V	60
Max. continuous operating DC current	A	14
Max. input DC short-circuit current	A	25
Max. module I_{sc}	A	20
Overvoltage class DC port		II
DC port backfeed current	mA	0
PV array configuration		Ungrounded array; no additional DC side protection required; AC side protection requires max 20 A per branch circuit

OUTPUT DATA (AC)	UNITS	IQ8MC-72-M-US @240 VAC	IQ8MC-72-M-US @208 VAC
Peak output power	VA	330	315
Max. continuous output power	VA	320	310
Nominal grid voltage (L-L)	V	240, split-phase (L-L), 180°	208, single-phase (L-L), 120°
Min./Max. grid voltage [2]	V	211–264	183–229
Max. continuous output current	A	1.33	1.49
Nominal frequency	Hz	60	
Extended frequency range	Hz	47–68	
AC short circuit fault current over three cycles	A_{rms}	2.70	
Max. units per 20 A (L-L) branch circuit [3]		12	10
Total harmonic distortion	%	<5	
Overvoltage class AC port		III	
AC port backfeed current	mA	18	
Power factor setting		1.0	
Grid-tied power factor (adjustable)		0.85 leading ... 0.85 lagging	
Peak efficiency	%	97.4	97.2
CEC weighted efficiency	%	97.0	96.5
Nighttime power consumption	mW	33	25

MECHANICAL DATA	UNITS
Ambient temperature range	-40°C to 65°C (-40°F to 149°F)
Relative humidity range	4% to 100% (condensing)
DC connector type	Stäubli MC4
Dimensions (H × W × D); Weight	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2"); 1.1 kg (2.43 lbs)
Cooling	Natural convection – no fans
Approved for wet locations; Pollution degree	Yes; PD3
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure
Environ. category; UV exposure rating	NEMA Type 6; outdoor

COMPLIANCE	
Certifications	CA Rule 21 (UL 1741-SA), UL 62109-1, IEEE 1547:2018 (UL 1741-SB), FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV rapid shutdown equipment and conforms with NEC 2014, NEC 2017, NEC 2020, and NEC 2023 section 690.12 and C22.1-2018 Rule 64-218 rapid shutdown of PV systems for AC and DC conductors when installed according to the manufacturer's instructions.

orced DC/AC ratio.
al voltage range can be extended beyond nominal if required by the utility.
may vary. Refer to local requirements to define the number of microinverters per branch in your area.

APPROVED
Montgomery County
Historic Preservation Commission

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Historic Preservation Commission

REVIEWED
By Devon.Murtha at 11:21 am, Apr 13, 2026

Nova Solar

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PERMIT DEVELOPER	
DATE	03/13/2026
DESIGNER	ORD
REVIEWER	

SHEET NAME
INVERTER DATASHEET

SHEET NUMBER
DS-02

APPROVED
Montgomery County
Historic Preservation Commission

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