EXPEDITED
HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: 10031 Pratt Place, Silver Spring            Meeting Date: 9/11/2019
Capitol View Park Historic District
Review: HAWP                                        Public Notice: 8/28/2019
Case Number: 31/7-19F                                Tax Credit: n/a
Applicant: Mary Cuanico                            Staff: Dan Bruechert
           Kelli Delacruz, Agent
Proposal: Solar Panel Installation

STAFF RECOMMENDATION:
✓ Approve
☐ Approve with conditions

PROJECT DESCRIPTION

SIGNIFICANCE: Non-Contributing Resource to the Capitol View Park Historic District
STYLE: Neo-Colonial
DATE: 1985

Figure 1: 10031 Pratt Pl. is located in a cul-de-sac with several c. 1980s houses.
PROPOSAL

The applicant proposes to install 27 (twenty-seven) roof-mounted solar panels on the rear of the roof. Due to the house shape and orientation, the solar panels will not be visible from the public right-of-way. This house does not contribute to the character of the historic district (it was considered “spatial” when the district was established in 1982).

Staff Recommends approval.

Figure 2: Front elevation of 10031 Pratt Place.

APPLICABLE GUIDELINES

The use of the expedited review form is supported by the second item on the Policy on Use of Expedited Staff Reports for Simple HAWP Cases:

2. Modifications to a property, which do not significantly alter its visual character.

Montgomery County Code; Chapter 24A-8

(b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:

(2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter.
Secretary of the Interior’s Standards for Rehabilitation

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, space and spatial relationships that characterize a property will be avoided.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportions, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

STAFF RECOMMENDATION
Staff recommends that the Commission approve the HAWP application under the Criteria for Issuance in Chapter 24A-8(b)(1) and (2) having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district, the Capitol View Park Design Guidelines, and the purposes of Chapter 24A; and with the Secretary of the Interior’s Standards for Rehabilitation #2, #9, and #10,

and with the general condition that the applicant shall present the 3 permit sets of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff’s discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make any alterations to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.
HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR
HISTORIC AREA WORK PERMIT

Contact Email: Kelli.delecruz@vivint.solar.com
Contact Person: Kelli Delacruz
Daytime Phone No.: 301 674 5219

Tax Account No.: 13 023 601 133

Name of Property Owner: Mary J. Luciano
Daytime Phone No.: 202 878 2461

Address: 10031 Pratt Pl, Silver Spring, MD 20910
Street Number: 10031
City: Silver Spring
State: MD
Zip Code: 20910

Contractor: Vivint Solar Developer, LLC
Phone No.: 877 404 4129

Contractor Registration No.: 
Agent for Owner: 
Daytime Phone No.: 

LOCATION OF BUILDING PROJECTS

House Number: 10031
Street: Pratt Pl
Town/City: Silver Spring
Nearest Cross Street: 
Lot: 
Block: 
Subdivision: 
Lib: 
Fall: 
Parcel: 

PART ONE: TYPE OF PERMIT, ACTION, AND USE

1A. CHECK ALL APPLICABLE:
☐ Construct ☐ Extend ☐ Alter/Remodel ☐ A/V
☐ Move ☐ Install ☐ Work/Renovate ☐ Slab
☐ Revision ☐ Repair ☐ Revocate ☐ Room Addition
☐ Fence/Wall (complete Section 4) ☐ Other:

1B. Construction cost estimate: $ 

1C. If this is a revision of a previously approved permit, see Permit No.

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTENSION/ADDITIONS

2A. Type of sewage disposal: 
☐ 01 ☐ WSSC ☐ Other: 
☐ 02 ☐ Septic ☐ Other: 

2B. Type of water supply: 
☐ 01 ☐ WSSC ☐ Other: 
☐ 02 ☐ Well ☐ Other: 

PART THREE: COMPLETE WHEN PERMIT TAKING WALL

3A. Height: ______ feet ______ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
☐ On party line/property line ☐ Entirely on land of owner 
☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept that to be a condition for the issuance of this permit.

K. Delacruz
Signature of owner or authorized agent

8/9/19
Date

Approved: ___________________________ For Chairperson, Historic Preservation Commission
Disapproved: ___________________________

Application/Permit No.: 88-7206
Date Filed: 
Date Issued: 8/9/19

SEE REVERSE SIDE FOR INSTRUCTIONS
HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR
HISTORIC AREA WORK PERMIT

Contact Name: Kelli Delacruz
Contact Person: Kelli Delacruz
Contact Email: Kelli.delacruz@vivintsolar.com
Daytime Phone No.: 301-674-5219

Tax Account No.: 13 02360133

Name of Property Owner: Mary J. Iwanico
Daytime Phone No.: 202-878-2461

Address: 10031 Pratt Pl Silver Spring MD 20910

Contractor: Vivint Solar Developer, LLC Phone No.: 877-404-4129

Contractor Registration No.: ____________________________
Agent for Owner: ____________________________
Daytime Phone No.: ____________________________

LOCATION OF BUILDING PREMISES

House Number: 10031
Street: Pratt Pl
Town/City: Silver Spring
Nearest Cross Street:
Lot: ____________ Block: ____________ Subdivision: ____________
Floor: ____________ Parcel: ____________

PART ONE: PURPOSE/DESCRIPTION AND USE

1A. Check All Applicable
☐ Construct ☐ Extend ☐ Alter/Renovate
☐ A/C ☐ Sub ☐ Room Additions ☐ Porch ☐ Deck ☐ Shed
☐ Move ☐ Install ☐ Work/Trade
☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family
☐ Revision ☐ Repair ☐ Revocable
☐ Fence/Wall (complete Section 4) ☐ Other: ____________

1B. Construction cost estimate: $ ____________

1C. If this is a revision of a previously approved active permit, see Permit No. ____________

PART TWO: CONSTRUCTION, CONSTRUCTION AND EXCAVATION

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: ____________

2B. Type of water supply: 01 ☐ WSSC 02 ☐ Well 03 ☐ Other: ____________

PART THREE: COMPLETION OF FENCE OR RETAINING WALL

3A. Height: ____________ feet ____________ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
☐ On property line/property line ☐ Entirely on land of owner ☐ On public right of way/aliens

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

[Signature]

[Date] 8/9/19

Signature of owner or authorized agent

Approved: ____________________________
For Chairperson, Historic Preservation Commission

Disapproved: ____________________________
Signature: ____________________________
Date: ____________________________

Applications/Permit No.: ____________________________
Data Filed: ____________________________
Date Issued: ____________________________

SEE REVERSE SIDE FOR INSTRUCTIONS
THE FOLLOWING ITEMS MUST BE COMPLETED AND THE REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION.

1. **WRITTEN DESCRIPTION OF PROJECT**
   a. Description of existing structure(s) and environmental setting, including their historical features and significance:
      
      Install of 27 roof mounted Solar panels.

   b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

2. **SITE PLAN**
   Site and environmental setting, drawn to scale. You may use your plot. Your site plan must include:
   a. the scale, north arrow, and date;
   b. dimensions of all existing and proposed structures; and
   c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. ** PLANS AND ELEVATIONS**
   You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.
   a. Schematic construction plans, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.
   b. Elevations (façades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, contact. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each façade affected by the proposed work is required.

4. **MATERIALS SPECIFICATIONS**
   General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. **PHOTOGRAPHS**
   a. Clearly labeled photographic prints of each façade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.
   b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. **TREE SURVEY**
   If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

7. **ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS**
   For **ALL** projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question.

PLEASE PRINT IN BLUE OR BLACK INK OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.

6
Eagle 60M G2
305-325 Watt
MONO PERC MODULE
Positive power tolerance of 0〜+3%

KEY FEATURES

- **Diamond Cell Technology**
  Uniquely designed high performance 5 busbar mono PERC cell

- **PID FREE**
  Reinforced cell prevents potential induced degradation

- **Better Low-Light Performance**
  Excellent performance in low-light environments

- **Strength and Durability**
  Certified for high snow (5400 Pa) and wind (2400 Pa) loads

- **Weather Resistance**
  Certified for salt mist and ammonia resistance

LINEAR PERFORMANCE WARRANTY

- 10 Year Product Warranty • 25 Year Linear Power Warranty

![Graph showing linear performance warranty](image)

![UL Listed, IEC, TUV, CE](image)

<table>
<thead>
<tr>
<th>Code</th>
<th>Backsheet</th>
<th>Code</th>
<th>Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>suit</td>
<td>White</td>
<td>suit</td>
<td>Normal Diamond</td>
</tr>
</tbody>
</table>
**Engineering Drawings**

- Front
- Side
- Back

**Electrical Performance & Temperature Dependence**

- Current-Voltage & Power-Voltage Curves (15W)
- Temperature Dependence

**Mechanical Characteristics**

- **Cell Type**: Mono PERC Diamond Cell (158.75 x 158.75 mm)
- **No. of cells**: 60 (6 x 10)
- **Dimensions**: 1605 x 1002 x 35mm (63.5 x 39.4 x 1.38 inch)
- **Weight**: 12.0 kg (26.4 lb)
- **Front Glass**: 3.2 mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
- **Frame**: Anodized Aluminium Alloy
- **Junction Box**: P67 Rated
- **Output Connectors**: 12 AWG, Length 1000mm (39.37 in) or Customized Length
- **Fire Type**: Type 1

**Packaging Configuration**

- (Two pallets - One stack)
- 30 pcs/pallet, 60 pcs/stack, 840 pcs/40 HQ Container

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Module Type</th>
<th>JKM32M1406-01L</th>
<th>JKM110M1406-01L</th>
<th>JKM150M1406-01L</th>
<th>JKM320M406-01L</th>
<th>JKM320M406-01L</th>
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<td>STC NOCT</td>
<td>STC NOCT</td>
<td>STC NOCT</td>
<td>STC NOCT</td>
<td>STC NOCT</td>
<td>STC NOCT</td>
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<tr>
<td>Maximum Power Voltage (Vmp)</td>
<td>32.8V</td>
<td>30.8V</td>
<td>33.0V</td>
<td>31.0V</td>
<td>32.8V</td>
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<tr>
<td>Open-circuit Voltage (Voc)</td>
<td>40.7V</td>
<td>37.7V</td>
<td>40.9V</td>
<td>37.4V</td>
<td>40.7V</td>
</tr>
<tr>
<td>Short circuit Current (Isc)</td>
<td>9.83A</td>
<td>8.21A</td>
<td>9.93A</td>
<td>8.20A</td>
<td>9.84A</td>
</tr>
<tr>
<td>Module Efficiency STC (%)</td>
<td>16.28%</td>
<td>16.56%</td>
<td>16.88%</td>
<td>16.88%</td>
<td>16.18%</td>
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<tr>
<td>Operating Temperature (C)</td>
<td>-40°C to +85°C</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Maximum System Voltage</td>
<td>1000VDC (UL)/1000VDC (IEC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Series Fuse Rating</td>
<td>20A</td>
<td></td>
<td></td>
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<tr>
<td>Power Tolerance</td>
<td>0 ± 13%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Temperature Coefficient of Pmax</td>
<td>-0.57%/°C</td>
<td></td>
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<tr>
<td>Temperature Coefficient of Voc</td>
<td>-0.28%/°C</td>
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<tr>
<td>Temperature Coefficient of Isc</td>
<td>-0.44%/°C</td>
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</tr>
<tr>
<td>Nominal Operating Cell Temperature (NOCT)</td>
<td>45±12°C</td>
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</table>

**STC**: ☀️ Irradiance 1000W/m² 🌡️ Cell Temperature 25°C 📌 AM=1.5

**NOCT**: ☀️ Irradiance 800W/m² 🌡️ Ambient Temperature 20°C 📌 AM=1.5 ⚡️ Wind Speed 1m/s

*Power measurement tolerance ±3%*

**CAUTION**: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
© Jinke Solar Co., Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice. JKM10A-32M-01L-A111S
SolarEdge Power Optimizer
Module Add-On For North America
P320 / P370 / P400 / P405 / P505

PV power optimization at the module-level
- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module-level monitoring
- Compliant with arc fault protection and rapid shutdown NEC requirements (when installed as part of the SolarEdge system)
- Module-level voltage shutdown for installer and firefighter safety
# SolarEdge Power Optimizer

## Module Add-On for North America

<table>
<thead>
<tr>
<th>OPTIMIZER MODEL</th>
<th>P320</th>
<th>P370</th>
<th>P400</th>
<th>P405</th>
<th>P505</th>
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</thead>
<tbody>
<tr>
<td>(typical module compatibility)</td>
<td>(for high-power 60-cell modules)</td>
<td>(for high-power 60 and 72-cell modules)</td>
<td>(for 72 &amp; 96-cell modules)</td>
<td>(for thin film modules)</td>
<td>(for higher current modules)</td>
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<tr>
<td><strong>INPUT</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rated Input DC Power</td>
<td>320</td>
<td>370</td>
<td>400</td>
<td>405</td>
<td>505</td>
</tr>
<tr>
<td>(W)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Absolute Maximum Input Voltage</td>
<td>48</td>
<td>60</td>
<td>80</td>
<td>125</td>
<td>83</td>
</tr>
<tr>
<td>(Vdc)</td>
<td></td>
<td></td>
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<tr>
<td>MPPT Operating Range</td>
<td>8 - 48</td>
<td>8 - 60</td>
<td>8 - 80</td>
<td>12.5 - 105</td>
<td>12.5 - 83</td>
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<tr>
<td><strong>OUTPUT DURING OPERATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Maximum Output Current</td>
<td></td>
<td></td>
<td>15</td>
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<td></td>
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<tr>
<td>(A)</td>
<td></td>
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<tr>
<td>Maximum Output Voltage</td>
<td>60</td>
<td>85</td>
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<tr>
<td>(Vdc)</td>
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<tr>
<td><strong>OUTPUT DURING STANDBY</strong></td>
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<tr>
<td>Safety Output Voltage per Power Optimizer</td>
<td></td>
<td></td>
<td></td>
<td>1 ± 0.1</td>
<td></td>
</tr>
<tr>
<td>(Vdc)</td>
<td></td>
<td></td>
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</table>

## STANDARD COMPLIANCE

- **EMC**: FCC Part 15 Class B, IEC61000-6-2, IEC61000-6-3
- **Safety**: IEC62109-1 (class II safety), UL1741
- **RoHS**: Yes

## INSTALLATION SPECIFICATIONS

- **Maximum Allowed System Voltage**: 1000 Vdc
- **Compatible Inverters**: All SolarEdge Single Phase and Three Phase inverters
- **Dimensions (W x L x H)**: 128 x 152 x 28 / 5 x 5.97 x 1.1 mm / in
- **Weight (including cables)**: 630 / 1.4 lb / kg
- **Input Connector**: M4®
- **Output Wire Type / Connector**: Double Insulated; M4
- **Operating Temperature Range**: -40 - 485 / 3.9 °C / °F
- **Relative Humidity**: 0 - 100%

### PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER

<table>
<thead>
<tr>
<th>SINGLE PHASE</th>
<th>SINGLE PHASE</th>
<th>THREE PHASE 208V</th>
<th>THREE PHASE 480V</th>
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<tbody>
<tr>
<td>HD-WAVE</td>
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</tr>
<tr>
<td>Minimum String Length</td>
<td></td>
<td>8</td>
<td>10</td>
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<tr>
<td>(Power Optimizers)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>P320, P370, P400</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>P405 / P505</td>
<td>25</td>
<td>25</td>
<td>500</td>
</tr>
<tr>
<td>Maximum Power per String</td>
<td>5700 (6000 with SE7600H-US)</td>
<td>5250</td>
<td>6000</td>
</tr>
<tr>
<td>Parallel Strings of Different Lengths or Orientations</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
- [1] Rated STC power of the module. Module of up to ±5% power tolerance allowed.
- [2] For other connector types please contact SolarEdge.
- [4] It is not allowed to use P405/P505 with P320/P370/P400/P405/P100/P600 in the string.
- [5] A string with more than 30 optimizers does not meet NEC rapid shutdown requirements; safety voltage will be above the 30V requirement.
Optimized installation with HD-Wave technology
- Specifically designed to work with power optimizers
- Record-breaking efficiency
- Fixed voltage inverter for longer strings
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Extremely small
- High reliability without any electrolytic capacitors
- Built-in module-level monitoring
- Outdoor and indoor installation
- Optional: Revenue grade data, ANSI C12.20 Class 0.5 (0.5% accuracy)
# Single Phase Inverters for North America

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Rated AC Power Output</td>
<td>3000</td>
<td>3800</td>
<td>5000</td>
<td>6000</td>
<td>7600</td>
<td>10000</td>
</tr>
<tr>
<td>Max. AC Power Output</td>
<td>3000</td>
<td>3800</td>
<td>5000</td>
<td>6000</td>
<td>7600</td>
<td>10000</td>
</tr>
<tr>
<td>AC Output Voltage Min.-Nom. -</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Max. (211 - 240 - 254)</td>
<td></td>
<td></td>
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<tr>
<td>AC Frequency (Nominal)</td>
<td>59.3 - 60</td>
<td>60.5&lt;sup&gt;II&lt;/sup&gt;</td>
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<tr>
<td>Maximum Continuous Output Current@240V</td>
<td>12.5</td>
<td>16</td>
<td>21</td>
<td>25</td>
<td>32</td>
<td>42</td>
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<tr>
<td>GFDI Threshold</td>
<td>1</td>
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<tr>
<td>Utility Monitoring, Islanding Protection, Country Configurable</td>
<td>Yes</td>
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<table>
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<th>INPUT</th>
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</thead>
<tbody>
<tr>
<td>Maximum DC Power</td>
<td>4650</td>
<td>5900</td>
<td>7750</td>
<td>9300</td>
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<tr>
<td>Transformer Loss, Ungrounded</td>
<td>Yes</td>
<td></td>
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<tr>
<td>Maximum Input Voltage</td>
<td>480</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal DC Input Voltage</td>
<td>380</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Input Current@240V</td>
<td>8.5</td>
<td>10.5</td>
<td>13.5</td>
<td>16.3</td>
</tr>
<tr>
<td>Max. Input Short Circuit Current</td>
<td>45</td>
<td>70</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Reverse-Polarity Protection</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground Fault Isolation Detection</td>
<td>600% Sensitivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Inverter Efficiency</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEC Weighted Efficiency</td>
<td>99%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nighttime Power Consumption</td>
<td>&lt; 2.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ADDITIONAL FEATURES
- Supported Communication Interfaces: RS485, Ethernet, ZigBee (optional), Cellular (optional)
- Optional
- Automatic Rapid Shutdown upon AC Grid Disconnect
- Rapid Shutdown - NEC 2014 and 2017 690.12 Standards

### STANDARD COMPLIANCE
- Safety: UL1741, UL1741, C37.20.2, CSA C22.2, Canadian AFCI according to T.I.I. M-07
- Grid Connection Standards: IEEE3547, Rule 21, Rule 14 (FH)
- Emissions: FCC Part 15 Class B

### INSTALLATION SPECIFICATIONS
- AC Output Conduit Size / AWG Range: 3/4" minimum / 14-4 AWG
- DC Input Conduit Size / # of Strings / AWG Range: 3/4" minimum / 1-2 strings / 14-6 AWG
- Dimensions with Safety Switch (FWN2D): 17.7 x 14.6 x 6.8 / 450 x 370 x 174
- Weight with Safety Switch: 22 / 10 lbs / kg
- Noise Cooling: < 55 Btu/hr
- Operating Temperature Range: -30°C / -25°C to +60°C (-40°F / -40°C, option)<sup>II</sup>
- Protection Rating: NEMA 3R (Inverter with Safety Switch)

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<sup>II</sup> For other regional settings, please contact SolarEdge support
<sup>III</sup> For power derating information, refer to: https://www.solaredge.com/sites/default/files/temperature-derating-note_en.pdf
<sup>IV</sup> For data on RoHS, visit: https://www.solaredge.com/sites/default/files/rohs-compliance.pdf

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