



# RESULTS

# Smartflower Solar Dual-Axis Tracker **5,065 kWh/Year\***

*System output may range from 4,573 to 5,185 kWh per year near this location.*

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at <https://sam.nrel.gov>) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

Disclaimer: The PVWatts® Model ("Model") is provided by the National Renewable Energy Laboratory ("NREL"), which is operated by the Alliance for Sustainable Energy, LLC ("Alliance") for the U.S. Department Of Energy ("DOE") and may be used for any purpose whatsoever.

The names DOE/NREL/ALLIANCE shall not be used in any representation, advertising, publicity or other manner whatsoever to endorse or promote any entity that adopts or uses the Model. DOE/NREL/ALLIANCE shall not provide

any support, consulting, training or assistance of any kind with regard to the use of the Model or any updates, revisions or new versions of the Model.

YOU AGREE TO INDEMNIFY DOE/NREL/ALLIANCE, AND ITS AFFILIATES, OFFICERS, AGENTS, AND EMPLOYEES AGAINST ANY CLAIM OR DEMAND, INCLUDING REASONABLE ATTORNEYS' FEES, RELATED TO YOUR USE, RELIANCE, OR ADOPTION OF THE MODEL FOR ANY PURPOSE WHATSOEVER. THE MODEL IS PROVIDED BY DOE/NREL/ALLIANCE "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT

Month	Solar Radiation ( kWh / m <sup>2</sup> / day )	AC Energy ( kWh )	Value ( \$ )
January	4.33	299	45
February	5.83	359	54
March	6.73	456	68
April	7.42	474	71
May	7.96	519	77
June	8.19	510	76
July	8.84	555	83
August	8.22	517	77
September	7.21	443	66
October	6.01	391	58
November	4.30	280	42
December	3.91	263	39
<b>Annual</b>	<b>6.58</b>	<b>5,066</b>	<b>\$ 756</b>

## Location and Station Identification

**Requested Location** edgartown, MA  
**Weather Data Source** Lat, Lon: 41.41, -70.5 1.6 mi

LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. IN NO EVENT SHALL DOE/NREL/ALLIANCE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO CLAIMS ASSOCIATED WITH THE LOSS OF DATA OR PROFITS, WHICH MAY RESULT FROM ANY ACTION IN CONTRACT, NEGLIGENCE OR OTHER TORTIOUS CLAIM THAT ARISES OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE MODEL.

The energy output range is based on analysis of 30 years of historical weather data for nearby , and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

<b>Latitude</b>	<b>41.41° N</b>
<b>Longitude</b>	<b>70.5° W</b>

---

### **PV System Specifications** *(Residential)*

---

<b>DC System Size</b>	<b>2.5 kW</b>
<b>Module Type</b>	<b>Premium</b>
<b>Array Type</b>	<b>2-Axis Tracking</b>
<b>Array Tilt</b>	<b>0°</b>
<b>Array Azimuth</b>	<b>180°</b>
<b>System Losses</b>	<b>11%</b>
<b>Inverter Efficiency</b>	<b>96.7%</b>
<b>DC to AC Size Ratio</b>	<b>.8</b>

---

### **Economics**

---

<b>Average Retail Electricity Rate</b>	<b>0.149 \$/kWh</b>
--	---------------------

---

### **Performance Metrics**

---

<b>Capacity Factor</b>	<b>23.1%</b>
------------------------	--------------

---