

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 //sam.nrel.gov) that allow for more precise and complex modeling of PV

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 $PVWatts^{\textcircled{R}}$ 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.

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 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, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESUITS

8,247 kWh/Year*

System output may range from 7,870 to 8,525 kWh per year near this location.

Month	Solar Radiation	AC Energy
	(kWh / m ² / day)	(kWh)
January	1.69	319
February	2.71	465
March	3.38	631
April	5.11	894
May	5.13	925
June	5.44	926
July	6.16	1,061
August	6.04	1,047
September	4.90	838
October	2.92	533
November	1.69	313
December	1.54	296
nnual	3.89	8,248

Location and Station Identification

Requested Location	5300 Butterworth Rd Mercer Island, WA 98040	
Weather Data Source	Lat, Lng: 47.57, -122.22 1.0 mi	
Latitude	47.57° N	
Longitude	122.22° W	

PV System Specifications				
DC System Size	7.7 kW			
Module Type	Standard			
Array Type	Fixed (roof mount)			
System Losses	14.08%			
Array Tilt	30°			
Array Azimuth	180°			
DC to AC Size Ratio	1.2			
Inverter Efficiency	96%			
Ground Coverage Ratio	0.4			
Albedo	From weather file			
Bifacial	No (0)			
	Jan Feb Mar Apr May June			
Monthly Irradiance Loss	0% 0% 0% 0% 0%			
Monthly Irradiance Loss	July Aug Sept Oct Nov Dec			
	0% 0% 0% 0% 0%			

9/17/23, 12:13 PM PVWatts Calculator

Performance Metrics		
DC Capacity Factor	12.2%	