NREL
NATIONAL RENEWABLE ENERGY LABORATORY

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.

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.

RESULTS

152,852 kWh/Year*

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	6.54	14,201	N/A
February	6.99	13,423	N/A
March	7.12	14,992	N/A
April	6.72	13,665	N/A
May	6.23	13,421	N/A
June	5.48	11,770	N/A
July	4.96	11,165	N/A
August	5.07	11,272	N/A
September	5.87	12,529	N/A
October	5.40	11,922	N/A
November	5.57	11,891	N/A
December	5.70	12,600	N/A
Annual	**5.97**	**152,851**	**0**

Location and Station Identification

Requested Location	13.065056, 77.579559	
Weather Data Source	Lat, Lon: 13.05, 77.55	2.2 mi
Latitude	13.05° N	
Longitude	77.55° E	

PV System Specifications *(Residential)*

DC System Size	100 kW
Module Type	Premium
Array Type	Fixed (open rack)
Array Tilt	11°
Array Azimuth	180°
System Losses	20%
Inverter Efficiency	96%
DC to AC Size Ratio	1.2

Economics

Average Retail Electricity Rate	No utility data available

Performance Metrics

Capacity Factor	17.4%