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.

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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

21,439 kWh/Year*

System output may range from 20,538 to 22,041 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Value ($)
January	3.52	1,460	234
February	4.76	1,728	276
March	5.41	2,094	335
April	5.42	2,001	320
May	5.54	2,060	330
June	5.45	1,920	307
July	5.92	2,109	338
August	5.87	2,083	333
September	5.53	1,942	311
October	4.36	1,624	260
November	3.30	1,259	202
December	2.82	1,157	185
Annual	**4.83**	**21,437**	**$ 3,431**

Location and Station Identification

Requested Location	460 Mountfort Road North Yarmouth Maine 04097
Weather Data Source	Lat, Lon: 43.85, -70.22 1.0 mi
Latitude	43.85° N
Longitude	70.22° W

PV System Specifications *(Residential)*

DC System Size	15.96 kW
Module Type	Standard
Array Type	Fixed (open rack)
Array Tilt	35°
Array Azimuth	180°
System Losses	14.08%
Inverter Efficiency	96%
DC to AC Size Ratio	1.2

Economics

Average Retail Electricity Rate	0.160 $/kWh

Performance Metrics

Capacity Factor	15.3%