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RESULTS

600 kWh per Year

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)	Energy Value ($)
January	2.89	43	4.40
February	3.57	48	4.91
March	4.07	58	5.96
April	4.15	55	5.63
May	4.62	60	6.08
June	4.34	52	5.32
July	4.41	54	5.51
August	4.47	56	5.74
September	4.52	57	5.82
October	3.62	48	4.91
November	2.65	36	3.67
December	2.27	32	3.26
Annual	**3.80**	**600**	**$ 61**

Location and Station Identification

Requested Location	48174
Weather Data Source	DETROIT METROPOLITAN ARPT, MI (TMY3)
Latitude	42.22° N
Longitude	83.35° W

PV System Specifications *(Residential)*

DC Rating	0.8 kW
DC to AC Derate Factor	0.585225
Array Type	Fixed (open rack)
Array Tilt	65.52°
Array Azimuth	180°

Initial Economic Comparison

Average Cost of Electricity Purchased from Utility	0.10 $/kWh
Cost of Electricity Generated by System	0.40 $/kWh

These values can be compared to get an idea of the cost-effectiveness of this system. However, system costs, system financing options (including 3rd party ownership) and complex utility rates can significantly change the relative value of the PV system

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

RESULTS

426 kWh per Year

Month	Solar Radiation (kWh / m² / day)	AC Energy (kWh)	Energy Value ($)
January	2.61	−4 39 < 43	3.94
February	3.07	−7 41 < 48	4.16
March	3.24	45 < 58	4.60
April	2.93	36 < 55	3.69
May	2.94	+26 34 < 60	3.44
June	2.65	+25 27 < 52	2.78
July	2.73	+25 29 < 54	2.94
August	3.04	+21 35 < 56	3.58
September	3.47	42 < 57	4.28
October	2.98	39 < 48	3.97
November	2.36	−5 31 < 36	3.20
December	2.06	−4 28 < 32	2.91
Annual	2.84	426	$ 43

Location and Station Identification

Requested Location	48174
Weather Data Source	DETROIT METROPOLITAN ARPT, MI (TMY3)
Latitude	42.22° N
Longitude	83.35° W

PV System Specifications *(Residential)*

DC Rating	0.8 kW
DC to AC Derate Factor	0.585225
Array Type	Fixed (open rack)
Array Tilt	90°
Array Azimuth	180°

Initial Economic Comparison

Average Cost of Electricity Purchased from Utility	0.10 $/kWh
Cost of Electricity Generated by System	0.56 $/kWh

These values can be compared to get an idea of the cost-effectiveness of this system. However, system costs, system financing options (including 3rd party ownership) and complex utility rates can significantly change the relative value of the PV system.