

Commonwealth Solar Residential Solar Photovoltaic Calculator

The following calculator is intended to provide residential customers with only a rough estimate of solar photovoltaic system sizing and pricing. Customers should consult installers for more information. Further disclaimer information is below.

Key

YOU MAY EDIT THESE CELLS

DO NOT EDIT THESE CELLS (Calculation Cells Not for Entry)

What is your annual electricity use?

The average home in Massachusetts consumes about 8,000 kilowatt-hours per (kWh) year. You can determine your annual electricity use by looking at your electricity bill and totaling the kWh that you use each month for a year. Typically this information is located on the lower left corner of your electricity bill.

Enter your annual electricity usage (default is 4,000 kWh)?

4,000

How much will a typical solar system generate (assuming an optimal fixed south facing free from shading location)?

The following table estimates how much of your electricity use can be offset by solar systems of different sizes. It is important to note that while residential customers can apply for rebates for systems as large as they want, the maximum size that is used in the calculation of a residential rebate is 5 kilowatts (kW) or 5,000 watts (w).

System Size	Estimated Optimal Annual Generation (kWh)	Percent of your Annual Usage	Percent of Average Customer Annual Usage
1 kW (~100 sqft of panels)	1200	30%	15%
2 kW	2400	60%	30%
3 kW	3600	90%	45%
4 kW	4800	120%	60%
5 kW	6000	150%	75%

How much will a solar system cost?

Typical residential systems cost about \$12,250 per kWh installed. Some systems cost less and others cost more depending upon equipment and installation variables. Customers should consult installers for more accurate cost estimates.

What size system are you interested in? (default is 4 kW)

4
4,000

How much will your system cost \$/kW?

\$12,500

Estimated total installed cost

\$50,000
