

WHAT APPLIANCES CAN I POWER WITH A 2kW PLUG-IN SOLAR KIT?

Plug-In Solar 2kW (2000W) Kit Details

Solar Energy Generated Per Year: 1,972kWh Solar Energy Generated Over 20 Years: 39,440kWh

A 2kW (2000W) PLUG-IN SOLAR KIT IS ESTIMATED TO COVER THE ENERGY CONSUMPTION OF ALL THE FOLLOWING, EACH YEAR:

APPLIANCE	KWH PER USE	APPLIANCE ENERGY USAGE (ENERGY PROVIDED BY PLUG-IN SOLAR KIT)	TOTAL KWH PER YEAR	TOTAL KWH OVER 20 YEARS
DISHWASHER	1.07 kWh (Per cycle at 55°C)	416 cycles per year (8 cycles per week) 8,320 cycles over 20 year lifetime	445kWh	8,900kWh
	1.56 kWh (Per cycle)	598 cycles per year (over 11 cycles per week) 11,960 cycles over 20 year lifetime	933kWh	18,660kWh
LCD TV (32IN)	1 kWh (Per day - on power)	8 hours per day (365 days per year) 58,400 hours over 20 year lifetime	365kWh	7,300kWh
WASHING MACHINE	0.63 kWh (Per cycle – average 2kg load)	364 cycles per year (7 cycles per week) 7,280 cycles over 20 year lifetime	229kWh	4,580kWh
TOTAL KWH PER YEAR, PROVIDED BY PLUG-IN SOLAR KIT, FOR SPECIFIED APPLIANCES:			1,972kWh	39,440kWh

Disclaimer and Assumptions

The performance of solar PV systems is impossible to predict with certainty due to the variability in the amount of solar radiation (sunlight) from location to location & from year to year. This estimate is based upon the Government's standard assessment procedure for energy rating of buildings (SAP) and is given as guidance only. Illustrative solar PV performance figures only. Figures are given in good faith but do not constitute "Financial Advice". Yearly PV output uses a factored degradation over time based on industry estimates. Photovoltaic Panels will not be shaded (e.g. by Trees or Buildings) as shading affects PV output. Specific appliance ratings and equipment age will affect energy consumption and these examples are guidelines only. Appliance consumption information from Center for Sustainable Energy (www.cse.org.uk). Based on A-Rated (or higher) appliances. These figures assume that you have south facing 250W polycrystalline solar panels, tilted at an angle of 35°, you pay 14.37p per unit of electricity (Standard rate as of May 2017 source: Energy Saving Trust) and 100% of the solar electricity that you generate will be used in your home. Calculations assume an annual energy price inflation of 10% & include solar radiation & system losses, in a western UK location, due to Temperature 6.8% and Angular Reflectance 2.9%, as well as other losses (e.g. Cables, Inverter) of 12%. Figures obtained from www.solarguide.co.uk/solar-pv-calculator.