





WHAT APPLIANCES CAN I POWER WITH A 500W PLUG-IN SOLAR KIT?

Plug-In Solar 500W Kit Details

Solar Energy Generated Per Year: 493kWh

Solar Energy Generated Over 20 Years: 9,860kWh

A 500W 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				
	1.07kWh (Per cycle at 55°C)	93 cycles per year (over 1 cycle per week) 1,860 cycles over 20 year lifetime	100kWh	2,000kWh
ELECTRIC OVEN				
	1.56kWh (Per cycle)	135 cycles per year (over 2 cycles per week) 2,700 cycles over 20 year lifetime	211kWh	4,220kWh
LCD TV (32IN)				
	0.37kWh (Per day - on power)	3 hours per day (365 days per year) 21,900 hours over 20 year lifetime	135kWh	2,700kWh
WASHING MACHINE				
	0.63kWh (Per cycle - average 2kg load)	74 cycles per year (over 1 cycle per week) 1,480 cycles over 20 year lifetime	47kWh	940kWh
TOTAL KWH PER YEAR, PROVIDED BY PLUG-IN SOLAR KIT, FOR SPECIFIED APPLIANCES:			493kWh	9,860kWh

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.