Wagner&Co

Dimensioning of Photovoltaic Off Grid Systems

This planning list helps you calculating your daily energy demand, so we can provide you with a well dimensioned system that caters your needs perfectly.

You will find information on the energy demand of some typical electric devices in the chart on page 2. These specifications can also be found in the manual or on the identification plate of your device. Essential is your indication of the operating time (in hours) of every device.

Alternatively you can tell us your whole daily energy demand.

General data

Name _____

Streetaddress _____

Town and postcode _____

Phone _____

Email _____

Address / Assembly site _____

_____

System Design

Available surface area for modules _____ m²

Module orientation (in compass degrees) _____°
Recommended: true south (northern Hemisphere), true north (southern hemisphere)

Module inclination (recommended 45° - 50° in Central Europe) _____°

Type of mounting: ☐ Rooftop ☐ Flat roof ☐ Freestanding ☐ Other _____

System Operation

All year round: ☐ yes ☐ no

If no, please indicate operating months:

☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec

No. of operating days per week _____

Required reserve days in case of bad weather _____

Loads

Electrical appliances	Quantity	Voltage [V]	Power [W]	Daily operating time [h]	Comments

Electrical appliances	Power [W]
Energy-saving lamp	10- 25
Halogen uplight	300
TV	80 - 300
Hi-fi system	100
Laptop	60
Computer	180
Ventilator	25
Air conditioner	5000
Radiant heater	3000
Mikrowave	2000
Kettle	2000
Coffee machine	1500
Toaster	1500
Fridge	90
Freezer	250
Electrical shaver	15
Hair drier	1500
Electric iron	1500
Vacuum cleaner	1500
Washing machine	2500
Tumble drier	2500
Dish washer	2500

Other Information

Which level of supply security would you like? ☐ high ☐ medium ☐ low

Is a motor or wind generator available? ☐ yes ☐ no

Planned budget: _____ EUR

It is recommended that an AC-coupled system is applied for continuously operating off grid installations with 230V system voltage. Please request our "AC- coupled system" planning list.

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