

# Sun Generator

*Working for a world running on 100%  
renewables since 1983*



# Content

1. What is it?
2. Why avoiding batteries?
3. How does it work?
4. What are the applications?
5. What are the components and costs?



# 1

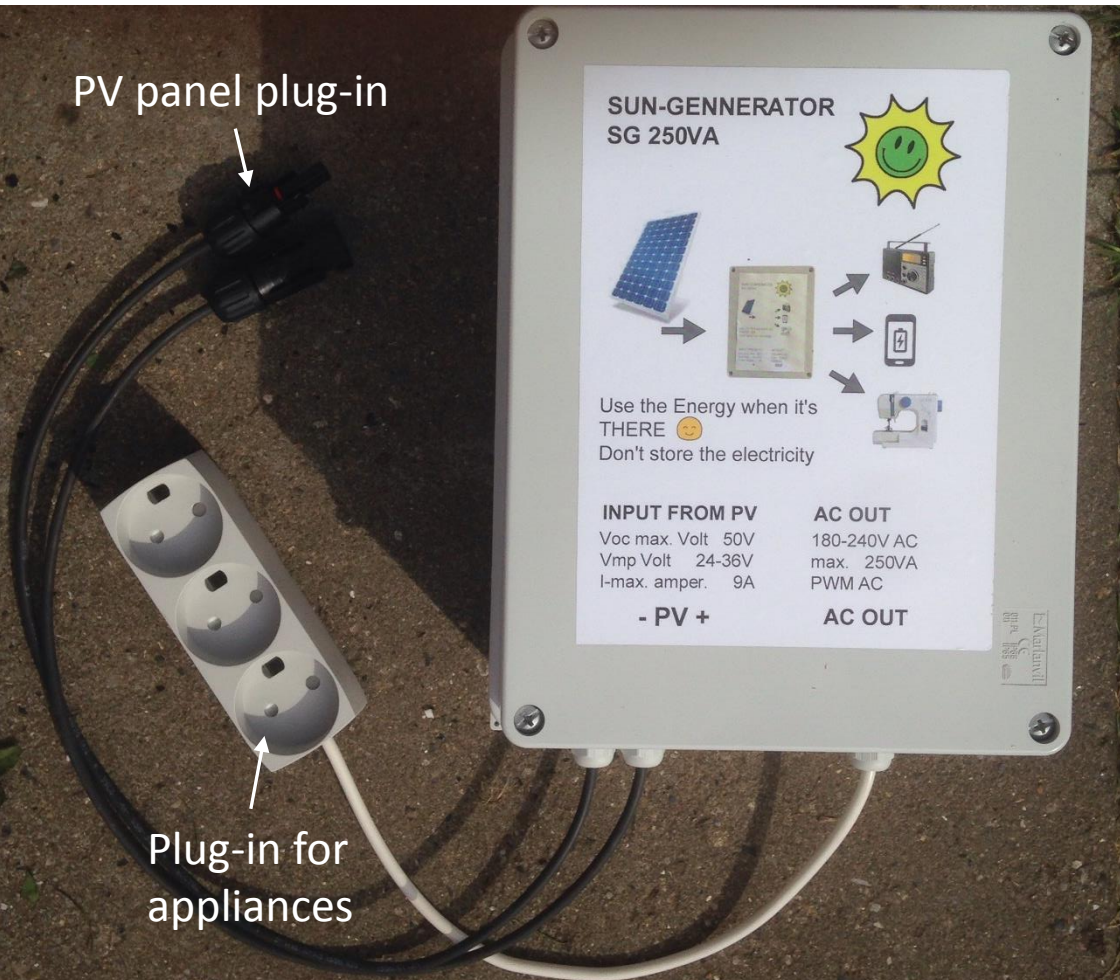
## What is it?

**“The Sun Generator is a device that makes it possible to use the energy produced by solar PV panels directly, without a battery or connection to the electrical grid. “**

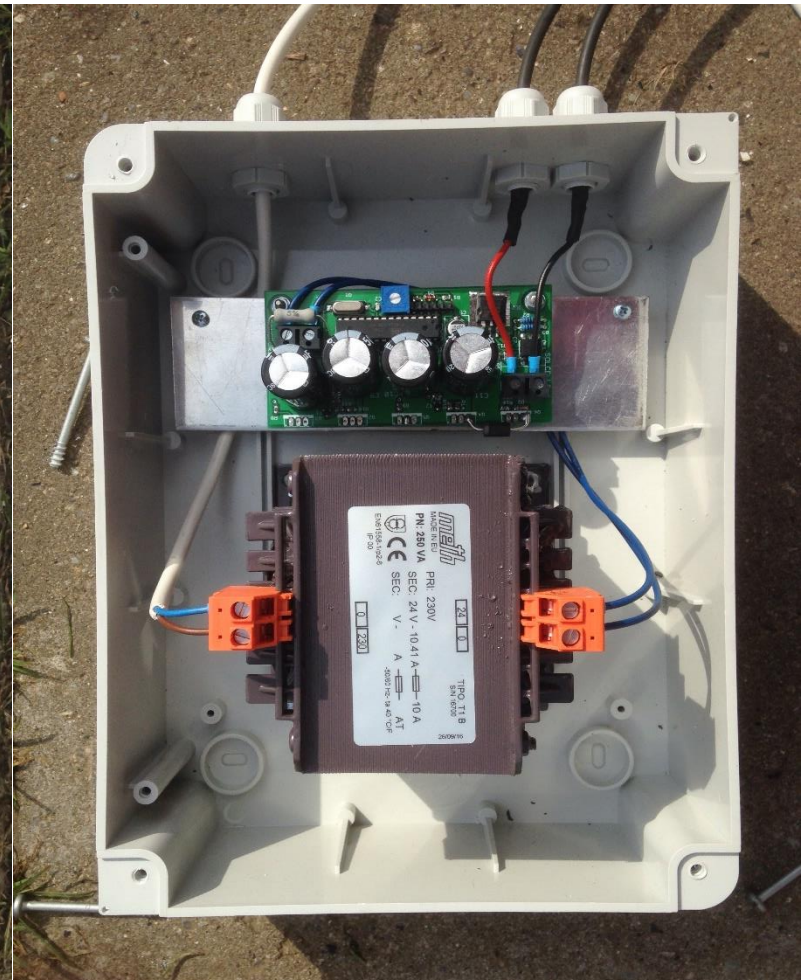
- Usage only during day time (no battery)
- The full production from the solar PV panel can be used due to no storage and conversion

# What is it?

Whole package



From the insight



# 2

## Why avoiding batteries?

- Reducing the impact on the environment during production and disposal.
- Avoiding an expensive part in producing energy. Therefore it is more affordable for developing countries.
- No parts of a solar PV panel need to be replaced for the life time up to 30 years.

# 3

## What are the applications?

250 W

→ Small household appliances

e.g. radio, sewing machine, electrical tools  
charging of laptop, cellphone, LED lamp

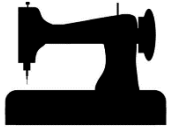
3000 W (not launched yet)

→ Small and medium enterprises, balancing black outs

e.g. conserve food or medicine by cooling or freezing it, automatically  
feeding fishes in an aquaculture, manufacturing products in a small  
scale etc.



# What are the applications?



# 4

## How does it work?

**“When the sunrays hit the solar PV panel the sun generator converts DC into AC power.”**

Two additional main functions:

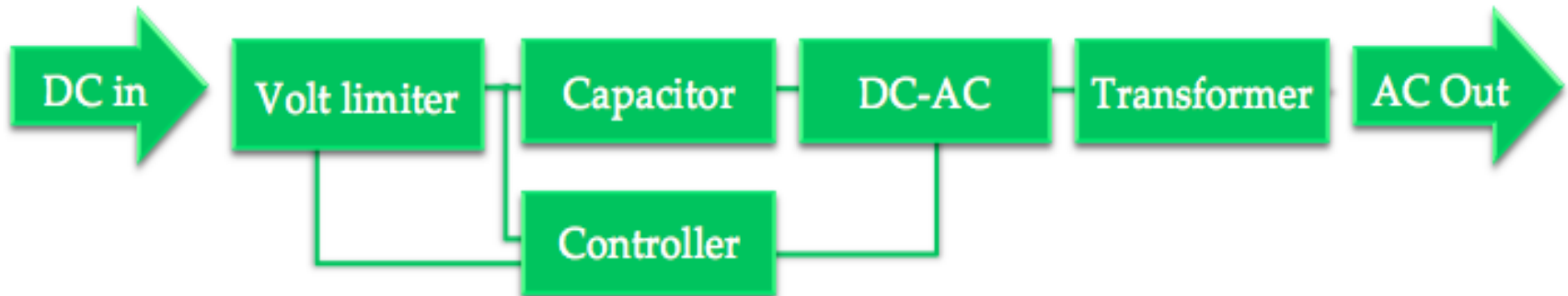
- Independent of the level of irradiation the voltage keeps stable at it  $V_{mp}$  point.
- The power is regulated by the demand.

Electricity > demand → electricity is lossed by heat in the panel

Electricity < demand → work as a dimmer, electrical devices work slower



# How does it work?



# 5

## What are the components and costs?

**250 W**

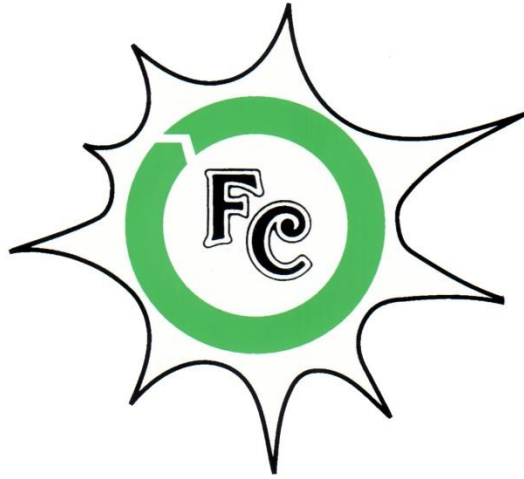
1 PV Panel  
Solar Generator

Costs approximately:  
370 \$ (excl. PV panel)  
→ **Open source instruction available**

**3000W**  
**(not launched yet)**

16 PV Panel  
Solar Generator

Costs approximately:  
**600 \$** (excl. PV panel)



# Nordic Folkecenter for Renewable Energy

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[www.folkecenter.net](http://www.folkecenter.net)

[www.folkecenterevents.net](http://www.folkecenterevents.net)



Nordisk Folkecenter

