MYPV

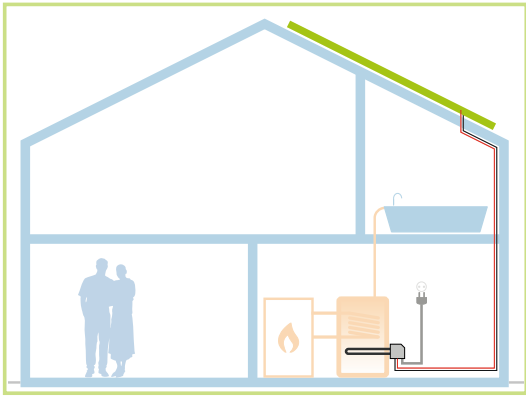
HOT WATER FROM PHOTOVOLTAICS

ELWA - My smart alternative to solar thermal energy

20 advantages!

„Cables instead of pipes"
is our motto.

How hot water from photovoltaics works compared to conventional solar thermal energy.



Cables instead of pipes is our motto. Power from PV modules is used directly for water heating. Without any grid connection. This results in a very simple system design!
Many other advantages are explained in this brochure.

Find with our solution coach your individual analysis on www.my-pv.com

Simple
Clean
Noiseless
Efficient

The key element: ELWA®

ELWA is a compact unit, consisting of a digitally controlled power electronics and a high-quality heating element. The number of system components is drastically reduced.
With 2 kW DC nominal power and the patented boost function this device is unique at the market.

Made in
Austria

Advantage 1

Saves raw materials

Eliminating pipes **saves up to 90 % valuable copper.**

Advantage 2

High Efficiency

Thermal solar systems have more and more losses with decreasing outside temperatures. The **efficiency of photovoltaics even increases.**

Advantage 3

Cost-effective

Cables instead of pipes: **Significant cost reduction by substantial lower installation work.** Less maintenance. Less chisel work during retrofitting.

Highest reliability and easiest installation convince!

Advantage 4

Even works in winter

In contrast to solar thermal collectors, photovoltaic modules work even under lowest solar irradiation conditions. This means **high solar coverage in winter!**

Advantage 5

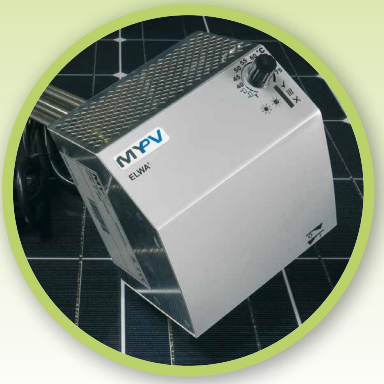
Efficiency-records

Photovoltaics is developing rapidly with **repeated new records in efficiency,** while solar thermal energy no significant increase has been achieved since years. This trend will continue.

Advantage 6

Hot water at any time

For ELWA, the temperature level of hot water doesn´t matter. Efficiency is completely independent from desired target temperature. **Even very hot water can be generated any time!**



Advantage 7

Very simple

ELWA is a compact all-in-one unit. **Compared to solar thermal, a large number of expensive elements are eliminated:** pipes, pumps, valves, expansion vessels, antifreeze liquid, insulation, cabling for sensors and control unit.

Advantage 8

Performance guarantee

Boiling collectors („stagnation") are past! There is no material wearout with PV modules: **20 years performance warranty is industry standard!**

Service life **and** performance are guaranteed!

Advantage 9

Electricity and hot water

The AC ELWA series is suitable for **grid - connected PV - systems.** PV electricity is primarily used for electrical appliances, secondarily for hot water. Any excess energy is fed.

Advantage 10

No frost protection

No antifreeze protection is required for photovoltaic water heating.

Advantage 11

Maintenance free

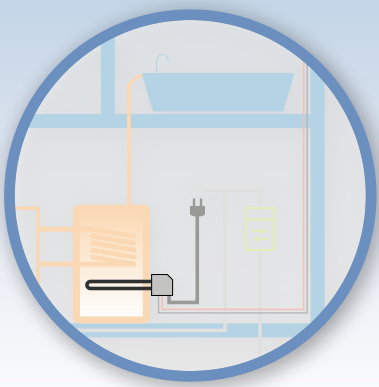
PV-Systems with ELWA are **maintainance-free.** In contrast to solar thermal energy, regular monitoring of glycol quality, pressure in circulation and leakage are eliminated.

Expensive and time-consuming maintenance costs are completely eliminated!

Advantage 12

Cables instead of pipes

Heating system components can be damaged by high stagnation temperatures in solar thermal systems.
Photovoltaic heat generation does not require expensive special parts - just cables!



Advantage 13

Quick starter

Photovoltaic heat generation eliminates start-up-losses. It's no longer necessary generating inefficiency while starting up the heating circuit.

Advantage 14

Uncomplicated installation

Any type of heat exchanger is no longer required. Installing ELWA in the storage tank is easy, fast and uncomplicated.

Numerous explanatory videos on www.my-pv.com/en/info/downloads

Advantage 15

Standby-free

There is no need for electricity to drive circulation pumps and controls in photovoltaic heat generation.
ELWA eliminates stand-by consumption.

Advantage 16

Current cost reduction

While system price for solar thermal heating in the past partially even increased, **cost reduction of photovoltaics is advancing inexorably.**

Advantage 17

Loss-free distribution

Appartment buildings: with ELWA, solar water heating can be carried out directly in the appartments. This eliminates huge ringmain losses. **Solar energy is converted to heat exactly where it is needed.**

Advantage 18

Hot water with and without sun

With ELWA, hot water is ensured all year. In summer, **your room heating system can be switched off completely.**

Advantage 19

World's cheapest form of energy

Electricity is the energy source of the future. Solar power is becoming the cheapest form of energy worldwide. **Photovoltaic water heating with ELWA is more beneficial than solar thermal energy.**

Photovoltaic modules are much cheaper than solar collectors.

Advantage 20

Enthusiastic customers

Our customers are enthusiastic: ELWA is simple, loss-free, revolutionary!


Direct - It's that easy.

Self-generated energy - directly and without any detours - can be used by yourself.

Our principle allows you to use your self-generated solar power in the best possible way in your own home. Because electricity can do a lot - and generating heat works very well - preferably directly.

We have now developed a wide range of products for various applications from this patented technology.

- Autonomous without grid-connection: **ELWA**
- Grid-connected: **AC ELWA-E**
- Our flagship: **AC•THOR**

ELWA

The 2 kW PV-water heater: direct – and the better principle

ELWA uses direct current directly from your PV-modules in a built-in immersion heater element and thus produces hot water directly and without any loss.

- pure island off-grid operation – no grid connection required
- boost-backup for operating in bad weather
- in summer 100 % hot water without additional heat sources
- lower operating costs and longer service life for the heating system

AC ELWA-E

The 3 kW water heater with linear power control for on-grid systems

PV-systems connected to the grid achieve on average only 30% pv-self-consumption ratio. In an average household (5 kWp PV-system), self-consumption can thus easily be improved to up to 75%.

- Installation in hot water and buffer storage tanks possible
- Heating power is linearly controlled
- Practically no energy is fed into the grid
- Self-consumption increases markedly

AC•THOR

The 3 kW linear power controlled PV-power manager for hot water, electric heat sources and optional space heating

The AC•THOR controls electric heat sources and provides comfort, according to the availability of PV-energy and demand for heating.

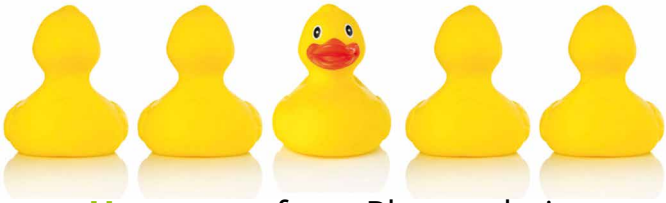
- Use of the PV for electricity, water and optional heating
- Installation is easy
- Heat generation – as simple as the function of domestic electric appliances
- Heating power is linearly controlled
- Maximum self-consumption, minimum feed-in to the grid

AC ELWA-E und AC•THOR

... with my-PV Power Meter
Due to the intelligent control of my-PV Power Meter, AC ELWA-E and AC•THOR only use surplus energy from the PV-system.

... with Smart-Home or battery storage
Thanks to their flexible control, AC ELWA-E and AC•THOR also communicate with energy management systems or battery storage units. As an alternative to my-PV power meter, surplus information can also be received from these sources.
Optimum priority regulation between battery and hot water storage is assured.

The other way of smart energy storage



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