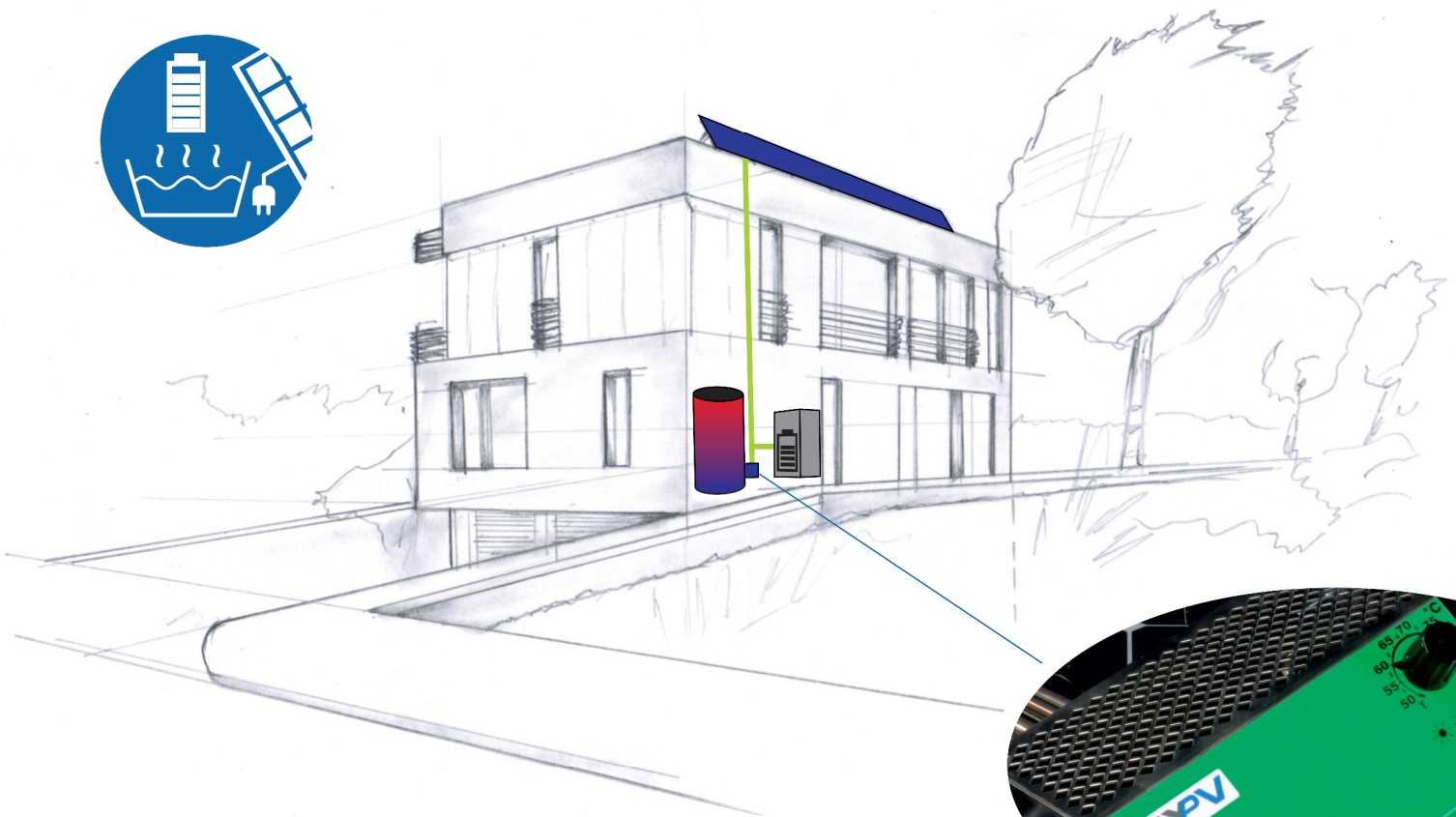# AC ELWA-E®

## Hybrid-Storage Solution for PV Excess Energy

- Uses PV excessive energy for hot water and heating
- Perfect in combination with battery storage and smart homes
- Also for commercial building applications
- Linear power control for maximum energy utilization
- No thyristors, complies with German/Austrian standards
- Automatic hot water boost function

Made in Austria

■ Hot Water from Photovoltaics

One Device - many Solutions

AC ELWA-E communicates over Ethernet with battery storage systems or smart-home controllers. It minimizes feed-in energy of photovoltaic systems by using this energy for hot water or room heating. Battery storage and electric appliances have priority.
For commercial buildings, many AC ELWA-E´s can be controlled simultaniously with intelligent control systems. This allows optimum energy distribution.
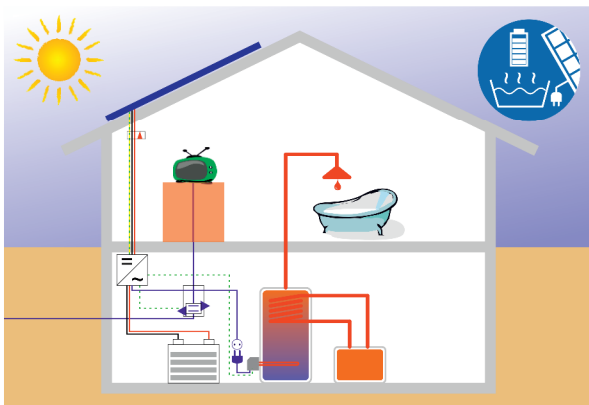
with smart homes

Smart Home ready
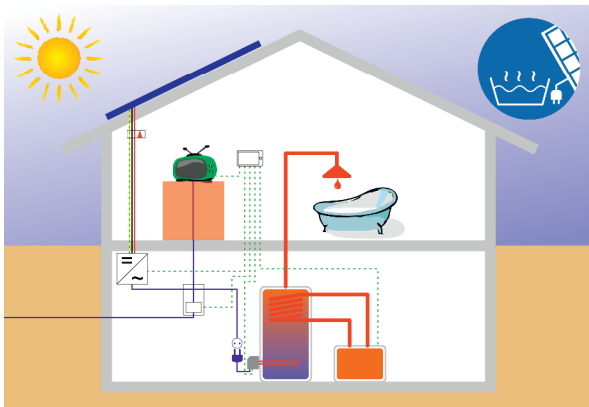
in commercial buildings
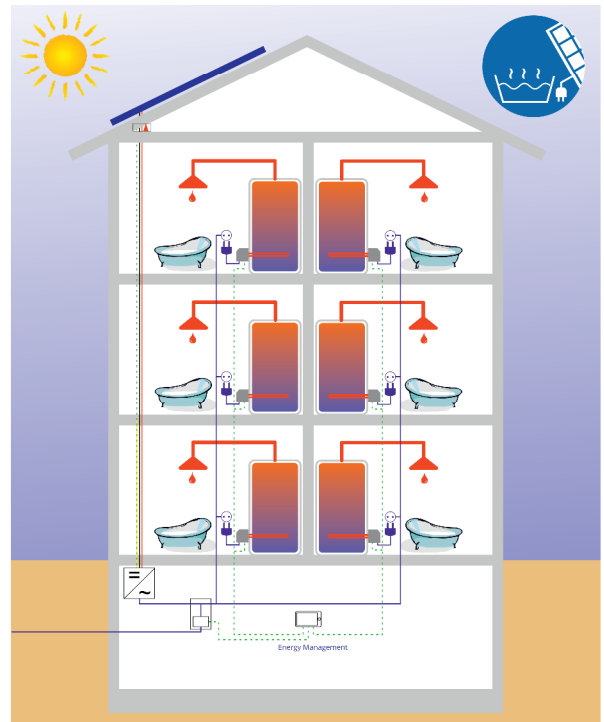

with storage batteries

Battery ready

Decentralized hot water storage and production avoids distribution ("ring main") losses and fulfills hygienic standards.
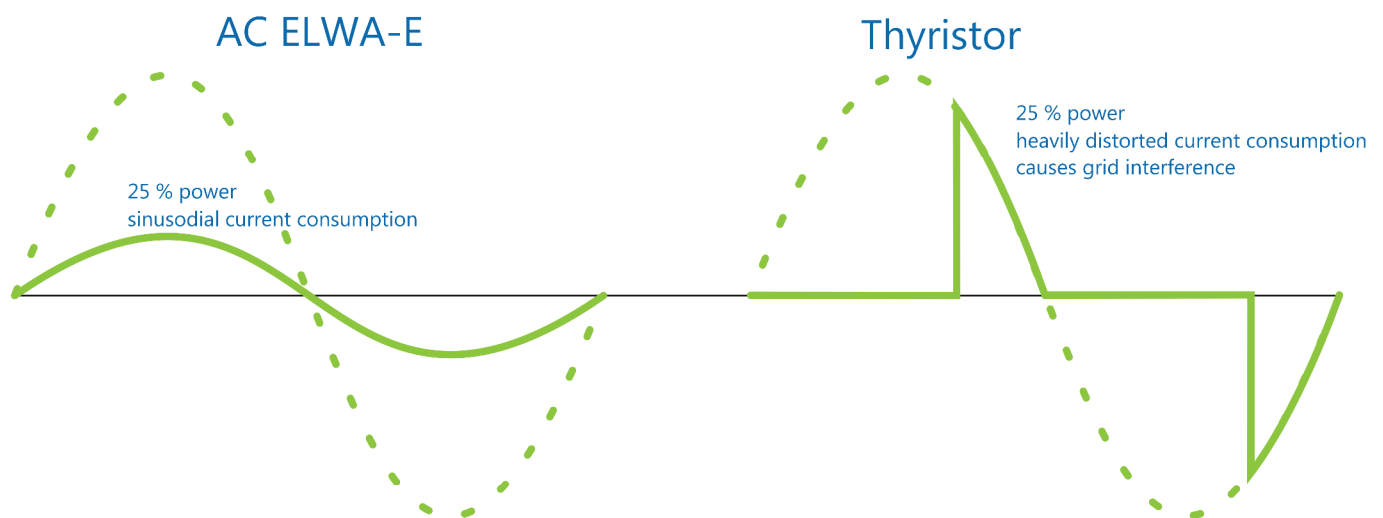Decentralized AC ELWA-E´s provide high solar coverage yields.

For compatible battery storage and smart home systems see www.my-pv.com.

Perfect PV-utilization with battery and hot water storage

Charging of the battery storage has priority. Once the battery is fully charged, AC ELWA-E starts using excessive energy for hot water heating. This avoids energy feed-in as much as possible. Hot water is by far the least expensive storage per kWh. It is a perfect add-on to battery storage systems.

Kilowatts excess power

3

2

1

0

-1

Demand

Battery-storage

Hot water storage

12:00 pm

12:00 am
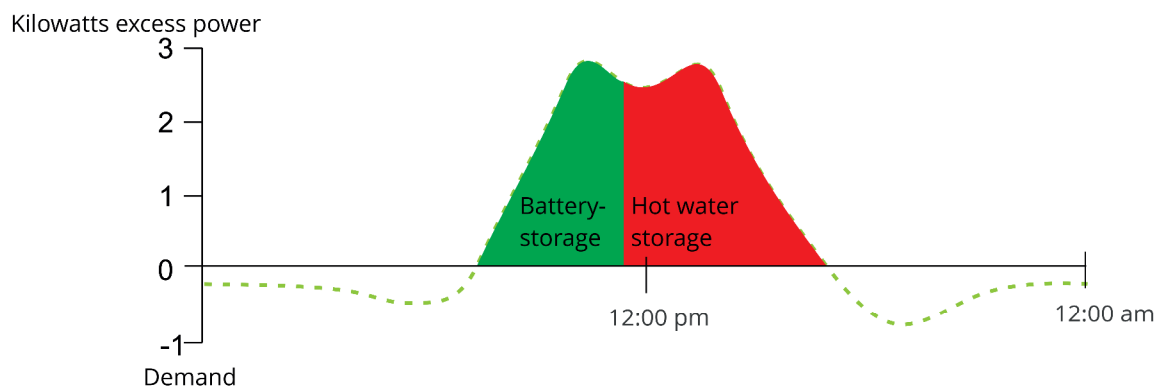
The AC ELWA-E´s linear power control works, similar to a grid connected inverter, with high-frequency switching power electronics. Grid interference is minimized.

AC ELWA-E

25 % power
sinusodial current consumption

Thyristor

25 % power
heavily distorted current consumption
causes grid interference

AC ELWA-E

Technical data	
Power	0-100 % linear, HF-switch mode
Heating power	0-3,000 W
Mains supply	Single phase, grounded plug, 230 V, 50 Hz
Power cord	3 m
Standby-consumption	<1.5 W
Efficiency	>99 % at nominal power
Cos Phi	0.999 at nominal power
Display	3 LED's
Communication	RJ45 Ethernet
Operating temperature range	10 °C to 40 °C
Protection Class	IP 21
Dimensions (WxHxD)	130 x 180 x 600 mm with heating rod
Weight	2 kg
Heating rod length	45 cm
Heating rod thread dimension	6/4 inch
Certification	CE, TOR D1, TAEV, TAB
Warranty	2 years
Maximum number of units in IP network	Network dependent
Supported protocols	http, modbus TCP
Compatible storage/smart home controllers	see www.my-pv.com

Subject to change without notice.

Hot Water from Photovoltaics