



AC•THOR

AC•THOR is a 0 – 3 kW linearly powered photovoltaic power manager for domestic hot water, electric heating devices, and optionally space heating.

Simple & efficient: AC•THOR controls electric heating devices based on the availability of PV energy and heating demand – covering both domestic hot water and space heating.



- Continuous control from 0 to 3 kW
- 30 % cost savings compared to conventional systems through self-generated energy
- Maintenance-free thanks to cables instead of pipes
- Reduced utility room space requirements
- System-compatible with various inverters, battery systems, and smart homes
- Enables affordable housing even in multi-family buildings
- Up to 85 % PV self-consumption even without a battery storage system
- Can also be used with existing heating elements
- Hot water preparation possible with dynamic electricity tariffs using the my-PV DTO

AC•THOR: Linearly powered for photovoltaic heating

AC•THOR enables control of the entire domestic hot water and heating system in a single compact device. With continuous control from 0 to 3 kW, it maximizes the self-consumption of surplus photovoltaic energy.

What is AC•THOR?

The AC•THOR is a linearly powered photovoltaic power manager that supplies electric heating devices with surplus PV energy, making domestic hot water and space heating solar-electric. It uses only surplus photovoltaic energy that would normally be fed into the grid for minimal compensation. The AC•THOR receives surplus information via network from a built-in my-PV WiFi Meter or from metering points of our compatible partners (inverters, battery storage systems, or smart home systems). Missing energy, for example on rainy days, can be drawn from the public grid – even price-optimized with dynamic electricity tariffs!

The advantage: from spring to autumn, the heating can be switched off while the AC•THOR handles hot water preparation.

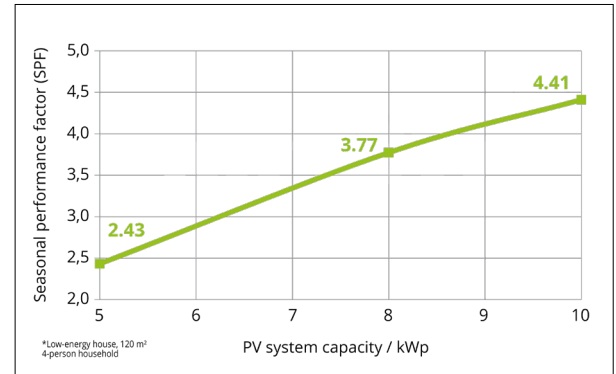
In a residential building built or renovated to current thermal standards, the AC•THOR can fully replace conventional water-based heating systems. Of course, it can also be integrated into conventional water-based systems, such as buffer storage tanks.

Innovative home technology offering many advantageous benefits

Achieve higher self-consumption with innovative PV-powered heating: this saves operating costs, reduces runtime of the primary heating system, and minimizes CO₂ emissions. Other benefits include:

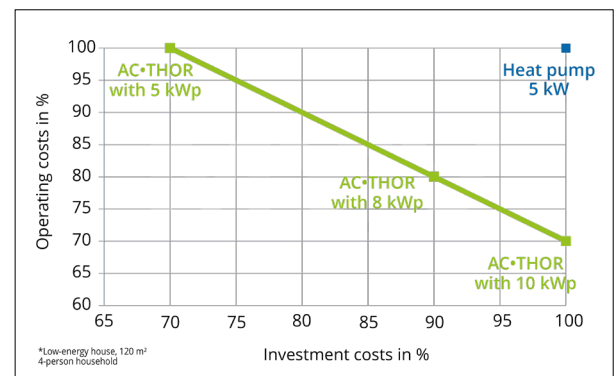
- Increased energy independence through maximum self-consumption
- Simplest installation of the AC•THOR – no device opening required
- Reduced utility room space
- System-compatible with various inverters, battery systems, and smart homes
- Grid-supporting control contributes to overall grid stability

AC•THOR Annual performance factors*



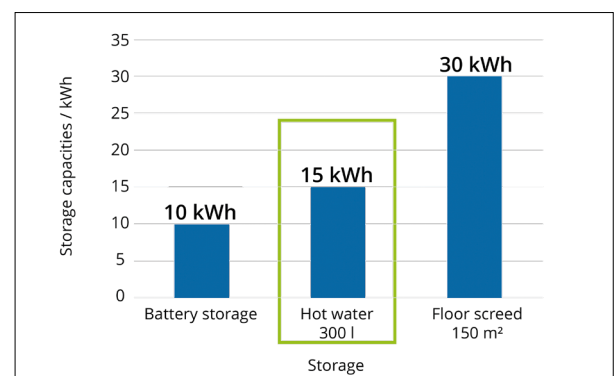
Remarkable annual performance factors are achieved with photovoltaic-powered heating.

AC•THOR Cost comparison with heat pumps*



Unlike heat pumps, with the AC•THOR, investment and operating costs can be significantly influenced by the sizing of the photovoltaic system. A reduction of 30 % is easily achievable.

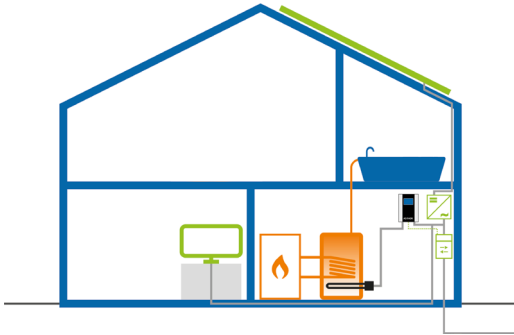
Storage capacities for a single-family house*



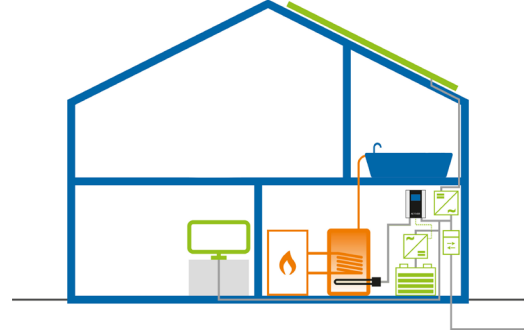
With the AC•THOR, you can cost-effectively unlock enormous storage capacity in your home.

Universal applications

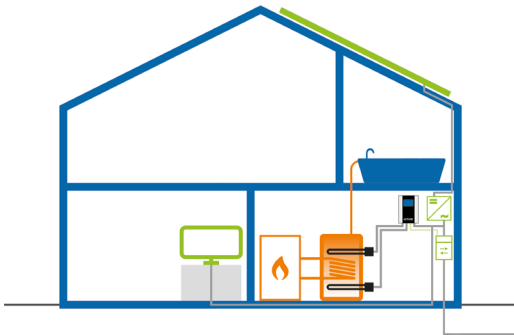
1 Pure photovoltaic water heating is self-evident.



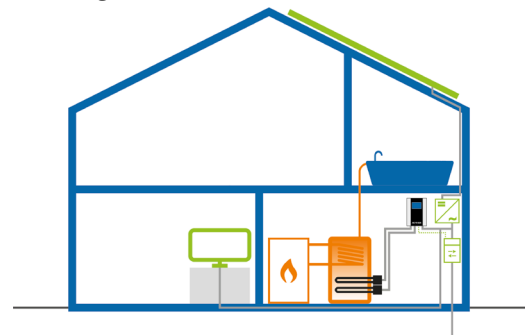
2 All variants can be combined with many of the battery storage systems.



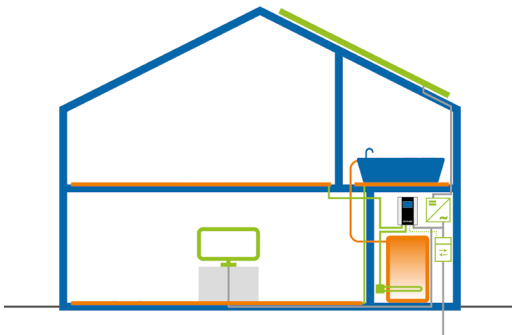
3 Easiest stratification charging.



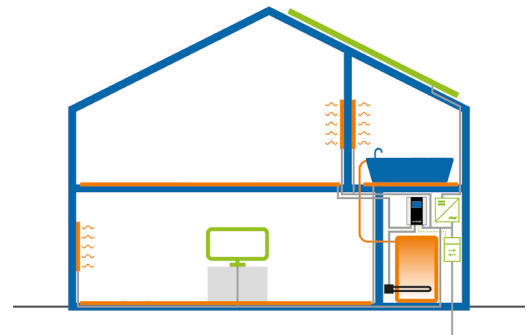
4 Linearly adjustable up to 6 kW with an additional 3 kW heating element.



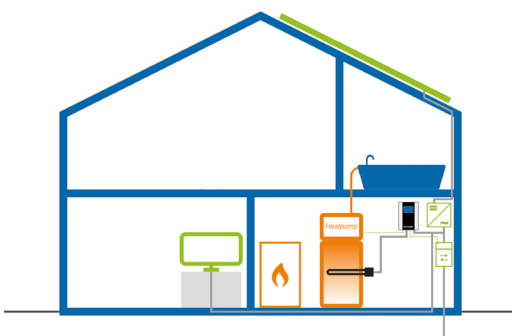
5 This is amazing: hot water and heating powered by photovoltaic energy in a single ultra-compact device.



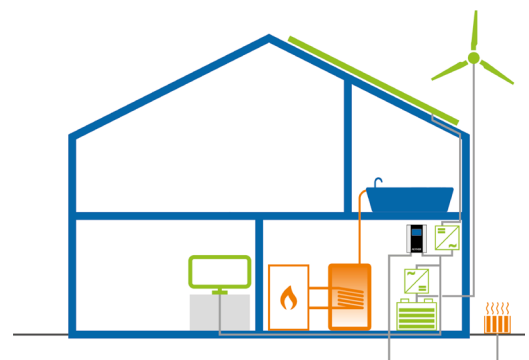
6 Or floor heating and infrared heating panels simply combined.



7 Your standard heat pump will be PV ready.



8 In off-grid systems it can be used as a dump-load controller.



Technical data

Supply voltage	230 V, 45 – 65 Hz
Linear power-control	0 – 3,000 W + relay output 16 A
Mains connection	Single-phase, mains plug
Load connection	Mains socket for resistive loads
Fuse protection 13 A or 16 A	13 A or 16 A
Power grid THDi	At 50% power < 3 %; at 100 % power < 3 %
Connecting cable	2.8 m
Self-consumption	< 1.5 W
Efficiency	> 98 % nominal power
Operating temperature range	0 °C to 40 °C
Storage temperature	-20 °C to 70 °C
Display	Color graphic, touchscreen 2.83"
Weight	1.5 kg incl. cable
Dimensions (L × H × D)	135 × 210 × 65 mm
Permissible humidity	0 – 99 % (not condensing)
Temperature sensor	my-PV temperature sensor (5 m)
Communication	Ethernet RJ45, RS485
Warranty	2 years
Compatible systems	See www.my-pv.com
my-PV material number	20-0100



All connections are pluggable.