

Use of excess PV energy Limit grid feed-in Log and visualise data

POWER TO



What does "Power to Heat" mean?

Power to Heat is the usage of electrical energy for the preparation or "generation" of heat.

This mostly implies **DHW preparation using** (excess) energy from photovoltaic plants. This heat is stored in a fresh water tank and/or heating buffer.

Ideally, an externally controllable heat pump which uses in-house energy is available to pump DHW. If you're interested in such a solution, please contact your trusted heating/ electrical engineer. We offer our freely programmable x2 series as suitable devices.

SIMPLE & AFFORDABLE

If no heat pump is available, our **ATON power to heat set** is an efficient plug & play solution.

NO WIRING NECESSARY

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With just two devices, **which communicate wirelessly**, installation ⁽¹⁾ is quick.



Our **power to heat set ATON** consists of our energy meter CAN-EZ3A and the variable-control 3 kW immersion heater EHS-R ⁽²⁾.

The energy meter detects **how much excess power (if any) is available** and tells the immersion heater how much energy to consume (from 50 Watts to 3 kW). The devices communicate several times a second, allowing for fast and precise energy usage.

Communication occurs over wireless CORA or CORA DL (wired). A connection to the power inverter is not necessary. The ATON energy meter functions like a smart meter and comes with three snap-on energy sensors.

ATON can be expanded with additional immersion heater of ours. For up to three immersion heaters, factory settings are available for free download on our website.

👌 A T O N+

ATON+ comes with the same functionalities as the standard version of "ATON", although its energy meter features an **additional Modbus RTU interface**, S0 pulse output and four sensory inputs.

This enables communication with foreign devices (e.g., power inverter) without additional modules, as long as the CAN-EZ3 is **programmed accordingly**, using our programming software TAPPS2.

DYNAMIC OUTPUT CONTROL

Certain grid operators limit the amount of power that can be fed into their grids. This maximum amount can be a hard limit set in the power inverter, or it can also be a soft limit, set dynamically by an intelligent controller, under consideration of own consumption.

The CAN-EZ3 energy meter can cover the dynamic power control of compatible solar inverters without additional hardware.

FACTS

- » **No wiring** of the energy meter required (possible, however)
- » Minor installation effort ⁽¹⁾
- » Programmed and coupled ex-works
- » No connection to the power inverter or smart meter necessary
- » Adjustable input and output thresholds (ex-works 200 W of excess energy)
- » Adjustable forced output to ensure minimum temperatures for DHW, regardless of excess energy

ADDITIONAL POSSIBILITIES

- » Inclusion of power controllers and other extensions for further energy and load management
- » Expansion with additional immersion heaters for power up to 36 kW
- Remote access, data logging and visualisation using our C.M.I. Gateway
- » Free web portal (C.M.I. required) <u>https://cmi.ta.co.at</u>

(1) Installation and implementation only by qualified experts

(2) Stainless steel V4A (1.4571),Teflon coating

(3) Our devices are freely programmable for any particular case. This is done using our software TAPPS2, available for free download on our website, and carried out by trained experts.

- » **Suitable** for enamelled DHW tanks and heating buffers
- » Freely programmable
- » Wireless range ~1km in the open / 2 reinforced concrete walls/floors
- » No separate power controller required
- » High quality materials⁽²⁾



simplified visualisation to clearify the setup of a possible use case



Visualisation & Data logging

The extension module C.M.I. **enables** ⁽¹⁾ **remote access and data logging**. Want to quickly check up on current values or adjust some settings? The additional, free C.M.I. app offers a practical solution.

More information can be found on our website https://ta.co.at/en/aton/

(1) We've created a visualisation fitting for the ATON factory settings, allowing for operation via app or browser. Adjustments by an expert necessary.



C.M.I. Gateway



SALES PARTNERS

We sell our devices to specialist wholesalers and expert technicians (heating/electrical engineering and plumbing). As a private individual, please contact your trusted wholesaler. If questions arise, our free support lines are open.



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