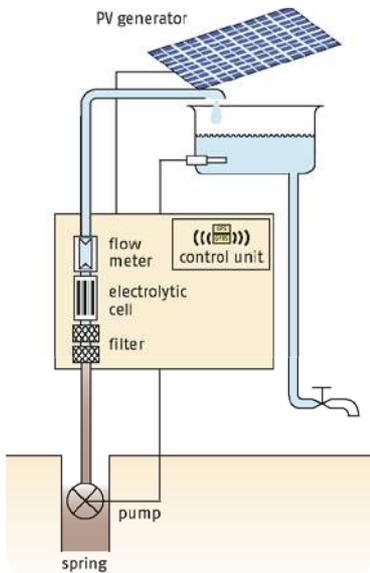


SolarAO Disinfection & Distribution



Anodic Oxidation (AO) is based on an electrolytic process in which the necessary disinfectant is produced from the minerals in the water. This process uses natural water to create chlorine which is then used to disinfect itself. Autarcon has optimised this process to the extent that it generates water absolutely safe for drinking purposes. The level of disinfectant or chlorine is automatically adjusted to the required level. This ensures safe storage of water for longer periods without risk. The SolarAO Disinfection system guarantees that water will not be recontaminated or germinated when stored or transported in a separate container. This technology has been developed by Autarcon and can be combined with all other SolarSpring systems.

System Benefits

Features

100% solar powered

Low maintenance

Flexible, stand-alone and reliable

Benefits

- Installation in remote off-grid locations
- Low operation costs

- No refilling of chlorine
- Reliable water quality
- No batteries necessary

- Modular system design
- Combinable with other technologies and treatment, water storage and supply concepts
- Automatic, PLC-controlled operation
- Online monitoring of operational parameters

AUTARCON



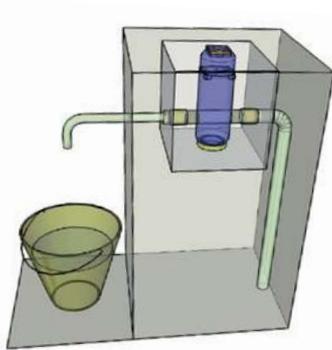
Applications

The SolarAO Disinfection system generates a disinfectant that ensures that water can be stored and transported risk-free. The level of chlorine can be adjusted according to the requirements and taste preferences. Automatic operation, use of no additional chemicals and solar off-grid operation make it extremely low maintenance and easy to use. This system is highly recommended when drinking water is stored or sold. This can be the case in a rural setting where villagers travel to the plant and use their own containers or when it is sold e.g. through the prepaid water tap system. It guarantees the provider or seller of the water will not be held accountable for recontamination of the water as it will stay drinkable for a reasonable amount of time.

Prepaid Water Tap

About SolarSpring

SolarSpring, a Fraunhofer spin-off company, is a developer of clean water systems using clean energy sources. We use solar thermal, photovoltaic (PV) or waste heat energy to power water treatment technologies such as membrane distillation and ultrafiltration. Our expertise is in the design and integration of water treatment systems that operate on low-grade or intermittent energy sources. SolarSpring is a pioneer in membrane distillation systems driven by solar energy. The first field system was deployed in the Canary Islands in 2004 and is still in operation today. Solar Spring systems have now been installed in countries from Mexico to the Middle East, Africa, Australia and India. SolarSpring is proud to cooperate with Autarcon and iSAtech to widen the scope of their systems and offer safe distribution methods and longer lasting disinfection.



The Prepaid Water Tap add-on uses prepaid cards and a special tap with a transponder to distribute the purified water either by volume or time. It ensures safety and accountability of water usage. It ensures fair and transparent distribution of water through cards which will be debited with the value of the dispensed amount of water and also helps prevent squandering and loss of water. This technology, developed by iSAtech water, can be combined with any other SolarSpring water purification system.

System Benefits

Features

Prepaid responder card system

Secure against manipulation

Flexible, stand-alone and reliable

Benefits

- Accountability
- Easy to use

- Reliable water quality
- Fair distribution of water
- Safety

- Extremely low maintenance

Applications

Whenever water is sold or distributed the Prepaid Water Tap feature can be used to guarantee accountability and transparency of water usage. In cases where the water is used by the community or by several parties this technology can help limit conflicts or wastage of water. It can also be used for commercial purposes where water is sold and the owner wants to limit corruption or ensure correct distribution of the purified water.



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