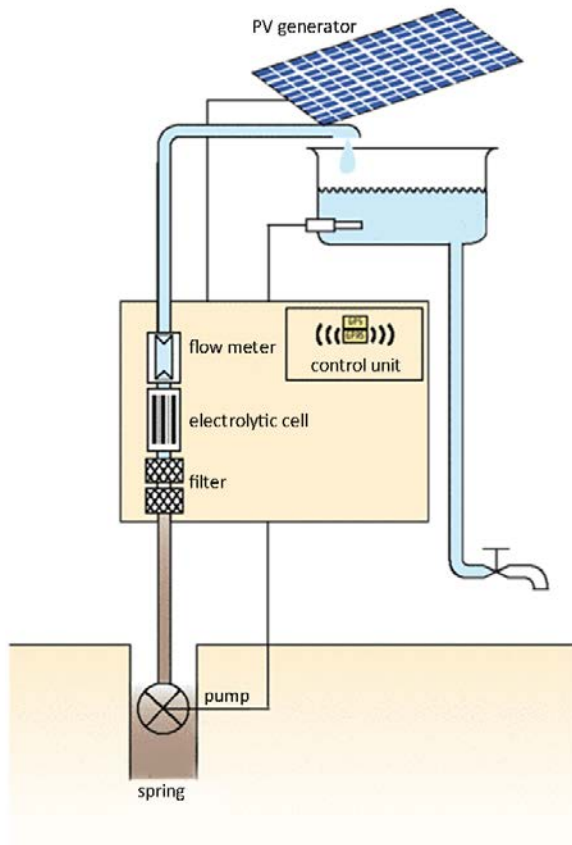


SuMeWa (Sun Meets Water): Operating principle



1. Fresh water is pumped from a depth of up to 70 m.
2. After mechanical filtration of the water, chlorine is electrolytically produced from the salts already present in the water. Germs are killed safely.
3. Water is stored in the tank. From here, the water can be taken out or routed to nearby consumers via a decentralised pipeline network.
4. A sensor constantly monitors the quality of the water.
5. Based on an electrolytic process, the required disinfectant chlorine is produced from minerals that are commonly present in the source water.
6. The control unit provides current operating information online.
7. SuMeWa|COMPLETE is a fully solar driven system for decentralized drinking water treatment and distribution. No batteries are required to run the system.



SuMeWa (Sun Meets Water): Specifications

Components	Description
Maximum flow rate (with/without batteries)	400 L/h (9.6 / 2.8 m ³ /d) ~ 9'600 L/day This amount of water can supply 5,000 people.
Cost for hardware	CHF 30,000
Project cost	CHF 3,500 (approx.) Costs for transport, installation, monitoring, training, WASH workshops and coaching.
Chlorine concentration	0.3 – 3 mg/L
Required power supply	120 W
Maximum pumping head	70 m

All values depend on source water quality and given regulation.

Anodic oxidation

Based on an electrolytic process, the required disinfectant chlorine is produced from minerals that are commonly present in the source water.

Autarcon has optimized this process for its utilization in drinking water treatment and supply. It works highly efficient to allow very low mineral concentrations in the source water.

At any given time, only the minimum required amount of disinfectant is produced.

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