



SOLVING THE WORLD'S WATER CRISIS WITH SOLAR WATER PASTEURIZERS

The Problem

Contaminated drinking water is a worldwide health crisis. More than 5 million people, most of them children, die each year from water-borne diseases. Contaminated drinking water causes an estimated 2.5 billion illnesses annually.

The Solution

Solar Water Pasteurizers are an innovative technology that uses the heat of the sun to make water safe to drink by killing disease-causing bacteria, viruses, protozoa and worms. Contaminated water is disinfected and made safe to drink by combining two time-tested technologies: pasteurization and solar water heating. Pasteurization achieves the same result as boiling, but without the consumption of fuel.

Designed specifically for reliable operation in the harsh conditions of rural and remote areas, *Solar Water Pasteurizers* are ideal for use where conventional water treatment is unavailable, impractical or unreliable. Invented in Hawaii, more than 3,500 units are now providing safe drinking water to communities in 53 countries. Our *Solar Water Pasteurizers* are an appropriate, sustainable technology that is an effective, low-cost and long-term solution to the world's contaminated water crisis.

The Products

The **SunRay 1000** automatically disinfects 1,000 liters or more each sunny day, providing safe drinking water for 500 to 1,000 people. Multiple units can easily be installed to provide a larger volume. Villages, schools, health clinics, orphanages, and hospitals are some of the many places where the **SunRay 1000** is used.



SunRay 1000 Solar Water Pasteurizer

The **SunRay 30** is the simplest way for families or small groups to make water safe to drink. Disinfecting to 30 liters of drinking water each sunny day, it is portable, durable, and lightweight.

No installation is required. Simply pour water in, set it out in the sun and in about two hours the water will be completely disinfected.



SunRay 30

Features

- Disinfects water without electricity, pumps, chemicals, or water pressure
- 99.999% effective in killing disease-causing microorganisms
- Simple low-tech design; ideal for remote areas and developing countries
- Easy to install. Automatic operation. Only one moving part.
- Low maintenance. Long-term reliability—15+ year life
- Low life cycle cost; disinfects water for less than U.S. \$0.001 per liter
- Low operating cost: no fuel or replacement parts needed
- After initial purchase, no on-going expenses
- No supplies or chemicals (such as chlorine) needed

Benefits

- Permanent, long-term solution to contaminated water crisis
- Prevents illness and death caused by microbiologically contaminated water
- Dramatically improves health of children and adults
- Eliminates fuel, expenditures and time needed to boil water
- Benefits local economy by keeping workers healthy
- Reduces air pollution and deforestation where wood is used to boil water.

Compared to chlorine, Solar Water Pasteurizers...

- Are effective on protozoa, worms, and cysts (cryptosporidium and giardia)
- Eliminate constant need for supplies
- Eliminate need for dosing and mixing of chemicals by trained operator
- Offer alternative to unhealthy consumption of chemicals
- Offer alternative to unpleasant taste of chemicals

Compared to filters, Solar Water Pasteurizers...

- Are more (99.999%) effective
- Are much more reliable
- Don't require frequent replacement and on-going expense
- Operate without water pressure

Compared to Ultra Violet (UV), Solar Water Pasteurizers...

- Are designed to operate in remote and rural areas, electricity is not required)
- Are effective on worms and cysts ⁽¹⁾
- Are much easier to install and operate
- Need much less maintenance
- Are more effective when water is turbid