



SAFE DRINKING WATER FOR
BETTER HEALTH AND A BETTER LIFE

PAULA

POTABLE **AQUA** UNIT – LASTING & AFFORDABLE

> VIRUS AND BACTERIA FREE

> LOW COSTS

> EASY TO INSTALL

A photograph of a wooden boat on a river, with a green net draped over it. The water is murky and brown. The background shows some green vegetation and wooden poles.

PAULA MAKES WATER CLEAN



The United Nations has declared clean drinking water a fundamental human right, but the reality is quite different. Around 1.5 billion people, most of them in remote rural areas, have no access to hygienically safe drinking water. They are forced to live with unclear water and the risk of illness due to bacteria and other causes of life-threatening waterborne diseases. PAULA can change this reality and help prevent these illnesses.

WHAT IS PAULA?

PAULA stands for Potable Aqua Unit – Lasting & Affordable. PAULA is a stationary system that is capable of supplying drinking water around the clock. The system is easy to operate, consumes little power, and can be installed in remote, difficult-to-access areas. Regular monitoring ensures

that the water PAULA provides meets World Health Organization (WHO) quality standards. PAULA has a “smaller brother”, PAUL. PAUL is a “water backpack”, a mobile device that can easily be transported to disaster areas on a person’s back to provide people with vital clean drinking water.

WHO NEEDS PAULA?

PAULA’s primary benefit is for small villages in remote rural areas that are not connected by conduits to national, regional, or local water systems. Residents actually draw water of questionable quality from rivers, lakes, canals or wells – with all the concomitant detriments. Such areas are often impoverished, with residents lacking the financial resources for safe drinking water supplied in bottles or

canisters, or are far from available water sources. PAULA is also the optimal solution for companies and public institutions looking for an economical, independent drinking-water supply. The system has been developed toward the aim of providing people in threshold and developing countries with clean drinking water. PAULA provides a safe, affordable and sustainable water treatment process.



WHAT ADVANTAGES DOES PAULA OFFER?

PAULA is available in a variety of sizes, making it adaptable to the local drinking water requirements. The smallest model can clean 2,000 liters of water per day for storage in a separate tank. Currently, the largest model can handle 8,000 liters of water per day; its storage tank has a volume of 4,000 liters. Depending on the capacity chosen, PAULA can provide the vital daily water supply to between 300

and 2,600 people. Transport and construction of the treatment plant are simple: The individual components are light in weight and can therefore easily be transported to the desired location. The system is installed on a concrete plate that serves as a foundation. A roof protects it from sun and rain. The construction takes two days – then PAULA is ready for operation.

HOW DOES PAULA WORK?

Untreated surface water from rivers, lakes, and ponds is transported into the system by an electrically operated pump. In the first step, leaves, organic solids, or sand are filtered out through a fine sieve. The water is then passed through a special nanoporous membrane that holds back contaminants that are invisible to the naked eye: pathogenic and coliform bacteria are filtered out completely, and 99.9% of viruses are removed. This has been proven in scientific research by Professor Martin Exner, Director of the Institute for Hygiene and Public Health at the University

of Bonn, Germany. After the filtration process, a precise quantity of chlorine is added to the water. The chlorination prevents bacteria and viruses from re-contaminating the water. There are no other chemical additives. The chlorinated water is collected in a tank. Extensive field tests in Germany and Vietnam have shown that the treatment process provides safe drinking water.

