

OPUS[®] C



Pure Water, Anywhere, Anytime

When clean drinking water is out of reach, **OPUS[®] One** delivers.

Portable • Power-Free • Sustainable • SDG-Aligned Water Innovation

When safe drinking water is unavailable, **OPUS® One** provides clean, reliable, and sustainable access—anywhere on Earth. Designed and built by **Nordic Technologies**, this rugged, portable, hand-operated purification system transforms even highly contaminated surface water into high-quality drinking water **without electricity or chemicals**.

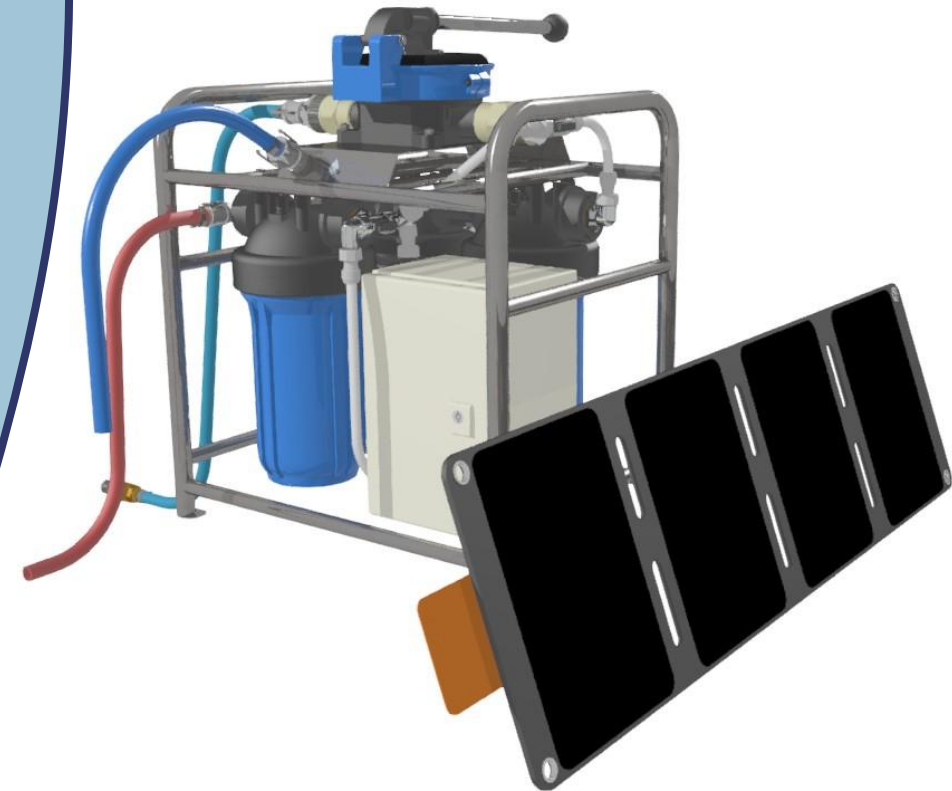
Designed for communities, schools, hospitals, NGOs, emergency responders, military units, and climate-affected regions, OPUS® One brings long-term water security in a compact, durable, human-powered system even in the most remote locations.

Small in size. Big in impact.

Lightweight and user-friendly, the hand pump is easy to operate—even for women and children—and the portable design allows it to be moved wherever water is needed most. Built on a **durable stainless steel frame** with minimal moving parts, OPUS® One ensures reliability and long service life.

Flexible

Based on the local contaminations different prefiltration medias can be used to clean the specific raw water.



Size:
Width 545
Depth 392
Height 658

OPUS® One

Why OPUS® One?

- Produces 8-10 liters of clean water per minute
- Operates entirely without power
- Lightweight and easy to use—ideal for adults and children
- Removes bacteria, particles, chemicals, and heavy metals
- Durable stainless-steel frame with minimal maintenance needs
- Supports UN Sustainable Development Goals (SDGs)



Sustainable Development Goals

3 GOOD HEALTH AND WELL-BEING



Eliminates waterborne pathogens, heavy metals, and chemical contaminants—preventing disease and improving public health. **No use of chlorine or chemicals** in the cleaning process with the OPUS® One.

4 QUALITY EDUCATION



Schools without clean water face absenteeism, illness, and hygiene challenges. **OPUS® One keeps students healthy** and in class, powering WASH-in-Schools initiatives and enabling uninterrupted learning.

5 GENDER EQUALITY



Women and girls often walk long distances to fetch or boil water. OPUS® One reduces this burden by providing **local, immediate** access to safe water. Its lightweight, manual design makes it accessible for all ages and genders.

6 CLEAN WATER AND SANITATION



Provides **high-quality treated drinking water** in places where infrastructure is damaged, limited, or non-existent.

7 AFFORDABLE AND CLEAN ENERGY



Delivers safe water **without using any energy at all**, enabling water access in off-grid regions while reducing reliance on diesel generators and fuel transport.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



- No chlorine or chemicals
- No wastewater
- Long-life, replaceable filter media
- Reduces plastic waste by eliminating dependency on bottled water

13 CLIMATE ACTION



OPUS® One has a **significantly lower carbon footprint** than conventional water distribution. More details are included in the “Climate Impact” section.

17 PARTNERSHIPS FOR THE GOALS



OPUS® One strengthens collaboration between NGOs, governments, emergency responders, and private partners to expand global access to sustainable, safe, climate-resilient drinking water.

A Cleaner Alternative to Trucked Water

Supplying clean water by trucking is costly, fuel-intensive, and carbon-heavy. OPUS® One provides a dramatically cleaner and more sustainable alternative.

Massive CO₂ Savings

Water trucking typically requires:

- Diesel-powered transport
- Long driving distances
- Frequent return trips
- Heavy vehicle operation with high emissions per liter delivered

With OPUS® One:

- **Zero fuel use**
- **Zero electricity**
- **Zero emissions at the point of use**
- **Local purification means no transport emissions**
- **No need for plastic water containers or bottled water**

A community using OPUS® One instead of trucked water can reduce annual CO₂ emissions by **several tons**, depending on distance and frequency.

Climate-Resilient Water Security

As climate change increases droughts, floods, and infrastructure failures, OPUS® One ensures rural and vulnerable communities remain water-secure even when logistics collapse.

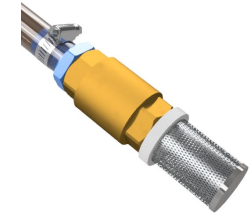


OPUS® One version 2 used by women of a coffee production plant in Kenya

Advanced Five-Stage Purification

Stage 1. Heavy-Duty Strainer

Captures large debris immediately at the intake.



Stage 2, 3 and 4

Pre-filtration alternative A: 2. Crystolite - 3. Catalytic Carbon - 4. TitanSorb

Pre-filtration alternative B: 2. ZeoSorb - 3. Crystolite - 4. Catalytic Carbon

ZeoSorb (Big Blue cartridge)

A natural mineral with exceptional adsorption capability that removes:

- Ammonia, harmful cations, dissolved organics
- Giardia, cryptosporidium, bacteria & spores
- Turbidity down to below 0.3 micron equivalent



Crystolite (Big Blue cartridge)

A microfiltration media:

- Ammonia
- Trace heavy metal removal
- Solids and SDI to below 0.1 micron equivalent



Advanced Five-Stage Purification

Catalytic Activated Carbon (GAC) (Big Blue cartridge)

Coconut-shell carbon enhanced with iron-hydroxide catalysis removes:

- Heavy metals (arsenic (III & V), fluoride, chromium (VI), copper, lead, mercury)
- Color, odor, taste
- Humic substances, tannins
- Chloramines, THMs, phenols & organic pollutants
- Cyanides and dissolved chemical contaminants



TitanSorb (Big Blue cartridge)

Adsorbent titanium dioxide removes:

- Heavy metals (arsenic, antimony, cadmium, copper, lead, zinc, uranium, chromium)
- Superior Bacteria killing capabilities



Stage 5. UVC - LED

This is the next-generation water water disinfection system. The product is energy-efficient UVC water purification system. Operated with a flow sensor the UVC-LED automatic start when flow is detected.

- Sterilization of harmful bacteria, (Escherichia coli, Salmonella, Legionella)
- Viruses
- Protozoa (Giardia, Cryptosporidium)
- Algae and microbial growth
- Waterborne pathogens causing gastrointestinal illness



This unique **Zero Liquid Discharge** design of the OPUS One, guarantees that all incoming water becomes usable drinking water — maximizing output and sustainability.

The different features

To operate the advanced 5 stage cleaning stages the OPUS One features solutions that make easy operation possible.

Handpump

The hand pump is a proven bilge pump designed to displace large volumes of water efficiently. It provides reliable suction and lift capability, ensuring dependable operation even without electrical power.

Power bank with foldable solar panels

The system includes a smart power bank with integrated solar panels to operate the UVC-LED unit. The power bank and UVC-LED control unit are housed in an IP65-rated cabinet for protection against dust and water ingress.

The power bank stores sufficient energy to operate the UVC-LED throughout the entire night.

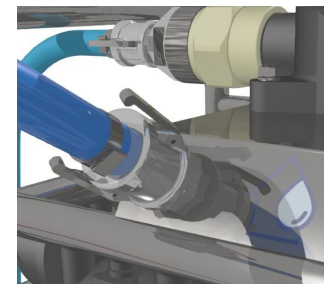
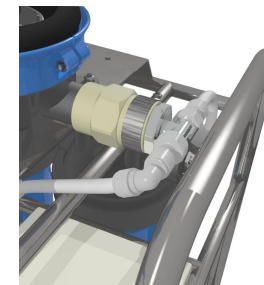
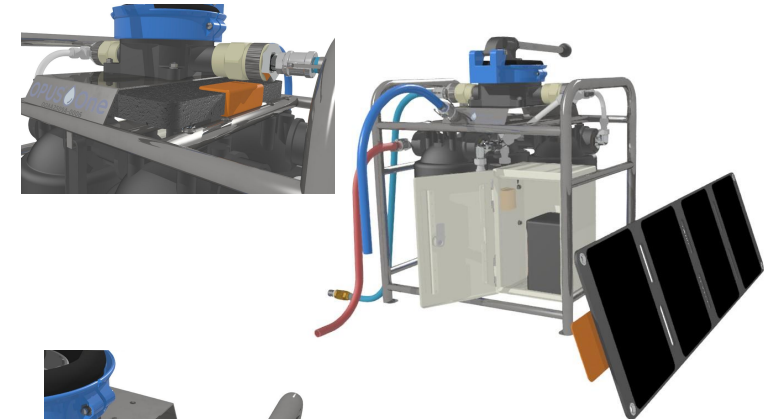
Slim, foldable solar panels are conveniently stored beneath the pump for easy deployment and compact transport.

Integrated backwash system

To extend the service life of the filter media, regular backwashing is essential. The OPUS One system features both double and single filter housings, with the single housing equipped with an integrated backwash system operated via three-way valves for simple and efficient maintenance.

Hose connections

All hose connections use ½" camlock couplings, a standard widely adopted within UN equipment, ensuring compatibility and quick, secure connections.



Operating Breakdown

The OPUS® One gives 0,5 liter per stroke, giving about 10 liter per minute. If a person drinks 4 liters per day with a 15 hours operating use and a utilization of 35%, one unit can serve 787 people.

Based on those numbers for a **6 year period**, almost 7 million liter water can be produced and the operational cost for the OPUS® One unit is € 0,043 per cubic meter water or € 0,36 per person*

*based on a UVC-LED replacement year five and a natural friendly regeneration media needed for Catalytic Carbon

Eco-friendly and power-free, it delivers safe water with a **low carbon footprint**. Meanwhile no drinking water needs to be trucked saving additional on carbon emissions.

No chlorine is used in the the OPUS® One often a cause for all different kind of health issues.

OPUS® One EUR 2 600,-

EXW Malmö Sweden



OPUS® One used by women of a coffee production plant in Kenya

MORE INFORMATION

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