

SUW-0.5

Description and Intended Use

The water treatment station was designed for applications in field conditions, crisis situations, and for military and rescue units. The device enables fast and effective removal of mechanical impurities, chemical substances, and microorganisms, ensuring safe drinking water that meets the criteria set out in the Regulation of the Minister of Health of December 7, 2017, on the quality of water intended for human consumption. Its compact design and the ability to be powered externally or by battery make the filter convenient to transport and operate.

Technical Data

Type:	<i>SUW-0.5</i>
External dimensions of a single case:	800 x 600 x 443 mm
Weight of a single case:	< 50 kg
Filtration technology:	Oxidation > microfiltration > carbon filtration > UV disinfection
Capacity (integrated pump): 500 l/h	500 l/h
Capacity (water mains):*	1000 l/h
Number of filtration stages:	6
Operating temperature:	+4°C ÷ +50°C
Setup time to obtain drinking water:	15 min
Filter takedown time:	60 min
Operation:	2 persons
Operating modes:	Surface water / tap water
Supply voltage:	24V DC
External power:	24V DC / 230V AC
Internal power:	2x 12V 55Ah battery
Runtime on internal power:	> 4h
Water intake:	Self-priming diaphragm pump
Raw water connection:	1" Female Camlock (STORZ 75 via adapter)

*capacity depends on the performance of the available water supply system

Technological Scheme

The SUW-0.5 Water Treatment Station bases its operation on technology used in filters for the Armed Forces of the Republic of Poland, consisting of oxidation (most often using chlorine compounds), which leads to the neutralization of microbiological contaminants, followed by two-stage mechanical filtration and carbon filtration, which reduces chlorine content and improves the taste and odor of the water. Additionally, the filter's operation is enhanced by a water disinfection UV lamp. The station subjects water to 6 successive stages of treatment:



SUW-0.5**Packaging and Transport**

The set is built into plastic transport cases, equipped with wheels and handles for easy carrying. The entire unit fits into two cases:

- Case 1: Filtration module
- Case 2: Power supply module and additional equipment

This solution ensures mobility, protection against mechanical damage, and ease of transport in field conditions.

**Equipment**

The SUW-0.5 Water Treatment Station consists of:

Cases & Equipment:

- Cases: x2
- Pump-filtration unit, containing: x1
- Suction strainer with check valve: x1
- 10m suction hose: x1
- Frame: x1
- 2m discharge hose: x1
- External control panel: x1
- STORZ 75 x 1" Male Camlock adapter: x1
- Column body: x3
- PVC-U hydraulic system: x1
- Filter cartridge (10 µm / 1 µm): x2
- Carbon cartridge: x1
- Power supply unit:
- UV disinfection lamp: x1
- 12V 55Ah battery (connected in series): x2
- Raw/drinking water connection: x1/x1
- 230V AC/24V DC power adapter: x1
- Self-priming diaphragm pump: x1
- Tools and spare parts:
- Dosing peristaltic pump: x1
- Set of filter cartridges: x4
- Pressure gauges: x2
- Solution preparation tablets: x300
- Water meter: x1
- Silicone lubricant for seals: x1
- Shut-off solenoid valve: x1
- Set of spare seals: x1
- Operating mode valve: x1
- Column wrench: x1
- PVC-U hydraulic system: x1

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Hydraulic Scheme Description

