



- HEADWORKS
BIOLOGY
SEPARATION
▶ MEMBRANE
DISINFECTION
BIOSOLIDS
SYSTEMS
- ALL IN ONE
- COMPACT
- PLUG AND PLAY
- UPGRADEABLE



- ▶ Applications
- Drinking water :
 - Small communities
 - Remote locations
 - Resorts
 - Process water
 - Emergency uses

- ▶ Main characteristics
- **ULTRASOURCE®** from 6 to 16 modules
 - Easy modularity by adding or removing module(s)

The ULTRASOURCE® is a compact, autonomous, automatic and flexible unit thanks to its range of flow delivering from 3 to 13 m³/h of Ultrafiltered water from network, ground and surface water.

MAIN FEATURES

- Bacteria and Cysts removal > 7 log
- Low electrical consumption
- Viruses removal > 6 log
- No backwash tank required
- User friendly: easy to install and operate (Commissioning in one day)

MEMBRANE TECHNOLOGY: ULTRASOURCE®

Degrémont Technologies-Aquasource's Ultrafiltration is simply a physical process for the removal of particles such as turbidity, bacteria and viruses. This filtration technique involves passing water through porous and hollow fiber membranes. The membrane acts as a filter for all particles larger than 0.01 µm: pollen, algae, parasites, bacteria, viruses, germ and large organic molecules. The result is a perfectly pure water, with a turbidity of less than 0.1 NFU.

The protection of the membrane is ensured by a 100 µm pre-filter. Pre-filtered water is distributed to the modules using the feeding valves. Under the effect of the pressure, it crosses the Ultrafiltration membrane. Ultrafiltered water is then collected and directed to the treated water outlet.

HOW IT WORKS

The ULTRASOURCE® is a compact self-contained unit, using a dead-end filtration process. The different operating cycles are fully controlled by PLC (Programmable Logic Controller) and automatic valves, allowing significant reduction of operating costs. Each module is backwashed with ultrafiltered water from another operating module.

Therefore, no backwash pump or tank are required to operate the unit.

The ULTRASOURCE® is equipped with all the accessories required for proper operation and its compact design makes it easy to install in various environments.

TECHNICAL DATA

Ultrasource® Model	Number of modules	Production ⁽¹⁾
		m ³ /day
Ultrasource® 6	6	90
Ultrasource® 8	8	120
Ultrasource® 12	12	180
Ultrasource® 16	16	240

(1) at 20°C depending on raw water

► Standard

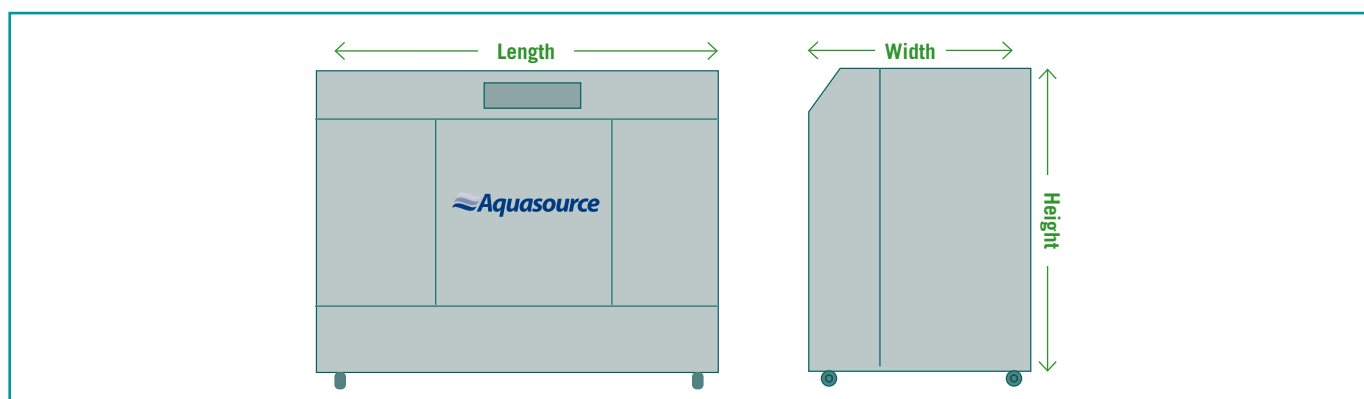
- Feeding pump
- Dosing pump for chlorination (backwash)
- PLC (Programmable Logic Controller)
- CIP (Cleaning In Place)
- Semi-automatically integrity test for modules

► Materials

- Cellulose triacetate modules (Type A1A35 or M1A35)
- PVC Pipes
- Stainless steel pumps
- PVC housing
- Aluminum frame
- Raw water inlet diameter (ND/Ext) U3P PVC F1 1/2"
- Treated water outlet diameter (ND/Ext) U3P PVC F1 1/2"
- Backwash water (ND/Ext) U3P PVC F1 1/2"

DIMENSIONS

Ultrasource® Model	Number of modules	I x h x w	Weight in water
		mm	kg
Ultrasource® 6	6	1800 x 1500 x 1350	510
Ultrasource® 8	8	1800 x 1500 x 1350	590
Ultrasource® 12	12	1800 x 1500 x 1350	630
Ultrasource® 16	16	1800 x 1500 x 1350	750



- Voltage: 230 V single phase
- Installed power: < 3500 W
- Backpressure at production outlet: < 1 bar

► Remote controls and alarms

- General alarm can be activated by using relay
- On-screen alarm indicators

► Options

- Dosing pump for production chlorination
- Chlorine gas option
- Standby feeding pump