

# Desalination

Low-cost fresh potable water where & when you need it

- Cost efficient
- Fully automatic
- EU manufactured and warranted
- Easy to scale
- Ready to use
- No civil works are required

**AQUAPHOR's desalination systems provide fully** automatic freshwater production with high energy efficiency and environmental sustainability, ensuring non-stop freshwater supply.

We offer three		Salt content	
classes of desalination	Class 1	20 – 45 g/L	Pacific, Atlantic, Arctic and Indian oceans, Mediterranean sea, Red sea, Persian Gulf
systems for different	Class 2	10 – 20 g/L	Black sea, Caspian Sea
water sources:	Class 3	5 – 10 g/L	Baltic sea, groundwater with high mineral content

### Patented multi-stage technology



#### Pretreatment

Aquaphor's robust multi-stage, automatic prefiltration and bactericidal pre-treatment is a crucial first stage of the desalination process, aimed to ensure efficient performance of the downstream equipment and lifespan of the membranes.



#### Ultrafiltration

AQUAPHOR's patented multi-stage Ultrafiltration technology is a modern, highly efficient back-washable technology for water filtration prior to desalination. The ultrafiltration membrane is an absolute barrier for filtering particles 0.1 to 0.01 microns, including bacteria, viruses, and colloids. Used for Class 1 & Class 2 desalination.



#### **Reverse Osmosis**

Reverse osmosis (RO) is a water purification technology that uses a semipermeable membrane to remove salt ions and molecules from saline water. AQUAPHOR reverse osmosis is fully automatic and provides stable & efficient operation with low energy and chemical consumption.



#### Mineralization

The final treatment stage is the remineralization column, which adds healthy minerals (magnesium and calcium) to improve drinking taste and ensure healthy, safe waterconsumption.

AQUAPHOR utilizes proprietary mineralization formula that keeps safeneutral pH and provides tasty and healthybalance of minerals.

AQUAPHOR's desalination systems provide fully automatic process with high energy efficiency and environmental sustainability, ensuring non-stop freshwater supply.

#### Pacific, Atlantic, Arctic and Indian oceans, Red Sea, Mediterranean Sea, Persian Gulf

The compact, modular, mobile, rapidly deployable system for efficient on-site seawater desalination with UF pre-treatment. Perfect for off-grid locations, resorts, and islands and as a backup source of potable water.

Liters/hour	250	500	1000	2000	6000	10000
GPM	1.1	2.2	4.4	8.8	26.4	44
Max inlet TDS, ppm	40 000	40 000	40 000	40 000	40 000	40 000
Operational pressure, bar	up to 80					

#### Black Sea, Caspian Sea

Skid-mounted, automated system for a broad range of capacities. The ultimately efficient desalination solution for a variety of municipal and industrial applications.

Liters/hour	1000	4000	6000	12000	20000	50000
GPM	1.4	17.6	26.4	52.8	88	220
Max inlet TDS, ppm	20 000	20 000	20 000	20 000	20 000	20 000
Operational pressure, bar	up to 50					

#### Baltic Sea, groundwater with high mineral content

The compact Plug&Play system with all components is installed on a single frame to minimize the footprint and ease of maintenance. Perfect for small communities, resorts, off-grid households, and light commercial use.

Liters/hour	250	500	1000	2000
GPM	1.1	2.2	4.4	8.8
Max inlet TDS, ppm	10 000	10 000	10 000	10 000
Operational pressure, bar	up to 30	up to 30	up to 30	up to 30









## European. Affordable. Excellence



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