



CUBO Environment Technologies, a Portuguese company, designs, manufactures and sells innovative compact, modular, containerized water treatment units.

CUBO's mission is to develop and manufacture **modular and containerized** technology solutions for the deployment of **water supply and wastewater treatment stations** to enable the sustainable, efficient and effective use of water resources for improving the well-being and quality of life of water-deprived populations worldwide.

Our vision is to create **Technology** solutions to enable the optimum and sustainable utilization of **Water Resources** globally.

CUBO has a worldwide market target, to deploy their units and supply safe drinking water and wastewater treatment to rural areas, small populations and decentralized waterworks. CUBO technology is also aimed to the tourism sector, hotels, condominiums, estates and to the industry.

CUBO is on the market to make a difference.

CUBO is deploying their equipment worldwide through selected and reliable partners.

CUBO has today solid partnerships and operation in Senegal, Nigeria and Kenya, enabling a strong presence in these countries and nearby regions.



www.cubo-et.com

Water for all!

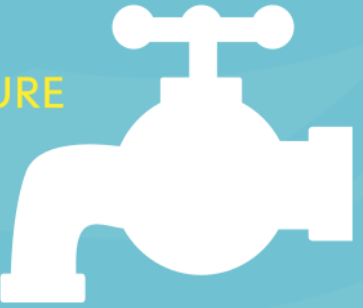
Water treatment units



WATER FOR A SUSTAINABLE FUTURE

WATER FOR A SUSTAINABLE FUTURE

Containerized water treatment



Water is the main resource indispensable to life

- Globally, 780 million people do not have access to potable water
- In Africa only, there are 345 million people without access to safe drinking water
- 3.4 million people die annually due to diseases related to water quality
- More people own a mobile phone than access to sanitation
- Most of drinking water quality problems in developing countries are related to the presence of pathogenic microbes.
- Proper wastewater treatment is a major issue concerning public health, and usually collection systems simply discharge effluents in the natural environment.



Every **\$1** invested in water and sanitation provides a **\$4** economic return.



OUR SOLUTIONS

Our units are built with the standard dimensions of shipping containers, enabling easy transportation and installation procedures.

The units are plug-and-play, completely ready to deploy and install. After placed, there is only the need for connect water inlet, water outlet and energy, and the unit is ready to operate.

Main features:

- Plug-and-play unit, easily transported, placed and installed;
- Robust and high quality materials and engineering;
- High flexibility, being able to be adapted to many situations;
- High efficiency/cost end value;
- High automation, low human intervention;
- Remote management and monitoring capabilities;
- Low operational costs (energy, chemical consumption, human operation);
- Prepared to work with different energy sources (grid, generators, renewable sources, etc.).

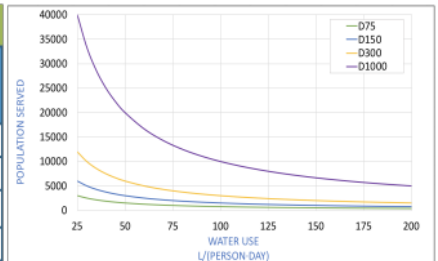
DRINKING WATER CONTAINERIZED UNITS

Our drinking water treatment plants works according to standard processes, of worldwide reference for the treatment of drinking water, in accordance with national and international standards and directives of the WHO (World Health Organization).

The basis of the treatment consists of processes of oxidation, flocculation, sedimentation, filtration, disinfection, activated carbon adsorption, storage, and distribution of treated water under pressure. We can adapt and modularize the processes necessary to achieve specific goals of treatment, such as desalination modules, chemical precipitation, ion exchange, etc. Our D models are assembled in 20' containers, with drinking water production up to 1000 m3/d, and can be used for supply of populations, hospitals, construction sites, hotels, industry, agriculture, etc.

Drinking water - D Models

DWTPs	Treatment flow m ³ /d	20' Modules
CUBO D75	75	1
CUBO D150	150	1
CUBO D300	300	2
CUBO D1000	1000	6



FREQUENTLY ASKED QUESTIONS

What types of water can be treated by CUBO's units?

For the drinking water units, fresh water, namely from rivers, lakes, boreholes, wells, etc., while the wastewater treatment units target domestic wastewaters.

How much water can be treated?

Depending on our equipment model, It ranges from 30 m3 and 1000 m3 per day. Capacity can be increased beyond that, by installing several units in parallel.

What is the cost of water treatment?

Around 0.25 USD per 1.000 liters, considering energy, operation, labor and usual maintenance.

What is the average time to place a unit to work?

The time to setup an unit is around 1 to 2 days

What is needed to install a unit and/or to relocate?

A truck with crane to transport, load and unload the unit, a flat terrain (surface), with firm soil. A hydraulic connection entering the unit and other leaving after treatment. The power supply can vary from 1ph+N+Gr 230 Vac – 50 HZ to 3ph+N+Gr 400 Vac – 50 Hz, depending on equipment model.

What energy sources can the equipment run with?

It can be connected to energy from the grid, to a power generator or to renewable energy sources such as wind and photovoltaic.

How many times does the system need to be checked, chemicals replaced, proceed to cleaning and maintenance, etc.?

The system should be checked, at least, once a week. The chemicals should be topped up as needed, and it depends on the quality of the water to be treated. Cleaning should be done as needed and it's dependable of the installed place. Maintenance should be done every 6 months according to the maintenance schedule in the manual.

What is the life expectancy of the unit?

If the maintenance plan is fulfilled, we can expect the unit to work for 15 to 20 years.

What kind of drinking water treatment is used?

Our treatment process passes through several steps to remove contaminants from water, such as chemical oxidation, flocculation, multimedia filtration, disinfection and chemical adsorption. Our equipment can adapt to specific water treatment needs by adding other processes.

Why should we choose this treatment instead of others?

Using this process chain, we can guarantee several benefits, such as efficacy on the treatment, efficiency, easiness and low cost of operation. Other technologies may present some of the main benefits, but usually not all at the same time.

What is the power consumption of the units?

Depending on the unit It ranges between 7 and 36 kW of installed power, and 2.5 and 13.5 kW of max power consumption.

Which are the chemicals used in the process?

Sodium hypochlorite, aluminum sulfate and hydrochloridric acid.

What are the defined parameters being measured ensuring that only safe drinking water is being supplied?

There is an in-line measurement of the concentration of free chlorine, pH and water temperature. A correct sampling and analysis plan reinforces safety measures for quality control.

