

Biotec
s.r.l.
UV Division

From Tradition to Technological Innovation



**Traditional open
channel UV- C
disinfection system**

BUVÀ300

Overview



The open channel **BUVA300** series is a traditional solution for the UV disinfection of wastewater.

The **BUVA300** system allows plant operators to give up the use of chlorine, thus avoiding the risks associated with the handling of chemical products and at the same time improving the effluent quality.

The **BUVA300** system can be sized to treat the flow rates of most small-to-large wastewater treatment plants. Its modularity allows for an easy expansion, to match the growth of the plant capacity.

The **BUVA300** system is also available in a prefab version, for an easy and quick installation.

The **BUVA300** system can be equipped either with simple manual controls, or with sophisticated remote control systems, to match the client's requirements.

The **UV** system includes: lamp rack, power distribution centre, level control device and all the necessary connecting cables. It is designed for an easy installation and a trouble free operation for its entire lifetime.

The **BUVA300** system is designed to operate at temperatures between 10°C and 30°C, with 5%-95% relative humidity (not condensing).

N.B. The BUVA300 system is not adequate for installation in locations with air temperature higher than 30°C. For this system, as for all the systems that house the ballasts inside the electric cabinets, it is necessary to locate the electrical cabinets in a kiosk equipped with isolation and refrigeration systems.

System features

Modular design

- The modular components are pre-assembled with quick connecting cables, for an easy installation and start-up of the system

Lamp technology

- Low pressure, high intensity, amalgam lamps

Ballast technology

- High frequency and efficiency electronic ballasts
- Variable output
- Each ballast operates 2 lamps

Automatic cleaning system

- Mechanical cleaning, not chemical

Innovative control system

- Flow or dose pacing
- Lamp status indication
- Operation hours timer
- Remote indication of alarms and bank status

UV intensity sensor

- Monitors the average UV intensity within the bank of lamps

Level control

- Stainless steel weir

Input power options

- 208/120 VAC, 3-phase, 60 Hz
- 380/220 VAC, 3-phase, 50/60 Hz
- 415/240 VAC, 3-phase, 50 Hz

Power requirements

- 330 Watt per lamp (nominal), ballast excluded

Power quality

- System power factor: 0.98 minimum
- Current Total Harmonic Distortion according to IEEE519-1992 Directives

Options

Prefab system

- It includes a stainless steel channel, weir, inlet and outlet boxes, UV system complete with pre-assembled quick connecting cables

Advanced control system

- It optimizes the system performance
- It integrates control and monitoring instruments
- It lowers operating costs