

PHOTOBIOLOGICAL-OXIDATION APPARATUS

1200W, U.V. ★



Standard unit for liberation of inorganic phosphate from organically bound phosphorus compounds, oxidation of carbon inorganic matter and oxidation of organic nitrogen compounds. Oxidation of organic compounds in water and sediment samples is accomplished by exposure to ultraviolet radiation in the presence of excess oxygen. Organically bound phosphorus is liberated as the ortho-phosphate in as little as one hour. Organic matter is oxidized to CO₂. Nitrogen compounds are oxidized to the nitrate and nitrite ions.

Additional applications include decomposition of organometallic compounds, providing organic-free samples for culture, nutrition and vitamin assay, destruction of algal suspensions, and oxidation of sediment or residue samples.

Apparatus consists of a cylindrical lamp housing with twelve-position sample tube chamber for twelve quartz tubes of approximately 100mL capacity that surround a 1200 watt medium pressure photochemical lamp. **Access door is provided for set-up, inspection and repairs only – for your safety, do not use this door while the unit is in operation.**

A cooling fan is located at bottom of housing for air movement. Lamp power supply includes a manual or automatic twelve-hour timer selector for programming exposure time. Available in 220v, 60Hz or 230v, 50Hz. Lamp housing measures 12" wide x 20" deep x 36" high, and weighs 75lbs. Power supply measures 11" wide x 18" deep x 11" high, and weighs approximately 75lbs.

- Liberation of inorganic phosphate from organically bound phosphorous compounds
- Oxidation of organic nitrogen compounds, and carbon in organic matter

Complete Apparatus

Frequency, Hz	Power, Volts	Order Code
60	220	7900-31
50	230	7900-30

Description	Qty	Order Code
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Components

Lamp Housing, only	1	7900-81
Power Supply w/Timer, 60Hz, 220V	1	7900-71
Power Supply w/Timer, 50Hz, 230V	1	7900-74
Lamp, 1200W	1	7825-40
Quartz Sample Tubes, 35 x 2.5cm, 100mL	12	7900-12
Pyrex Stopper	12	7900-13