

# MEGATRON<sup>®</sup>

ULTRAVIOLET WATER DISINFECTION SYSTEM



Model M250

SINCE 1963  
**ATLANTIC** **U** **ULTRAVIOLET**  
CORPORATION<sup>®</sup>

## ABOUT US

Since 1963, Atlantic Ultraviolet Corporation® has pioneered the discovery and development of beneficial uses of ultraviolet energy. Over the years these efforts have led to the development of valuable, cost effective and environmentally sound techniques and products now known and respected throughout the world.

The UV Application Specialists at Atlantic Ultraviolet Corporation® assist customers in the selection of germicidal lamps and equipment. Their specialized knowledge is a valuable resource in formulating effective and cost-conscious ultraviolet solutions. Extensive inventories and a dedicated staff enable Atlantic Ultraviolet Corporation® to fulfill its commitment to provide fast deliveries and responsive customer service.



**Model M250**

## GERMICIDAL ULTRAVIOLET

Ultraviolet Disinfection is a unique and rapid method of disinfection without the use of heat or chemicals.

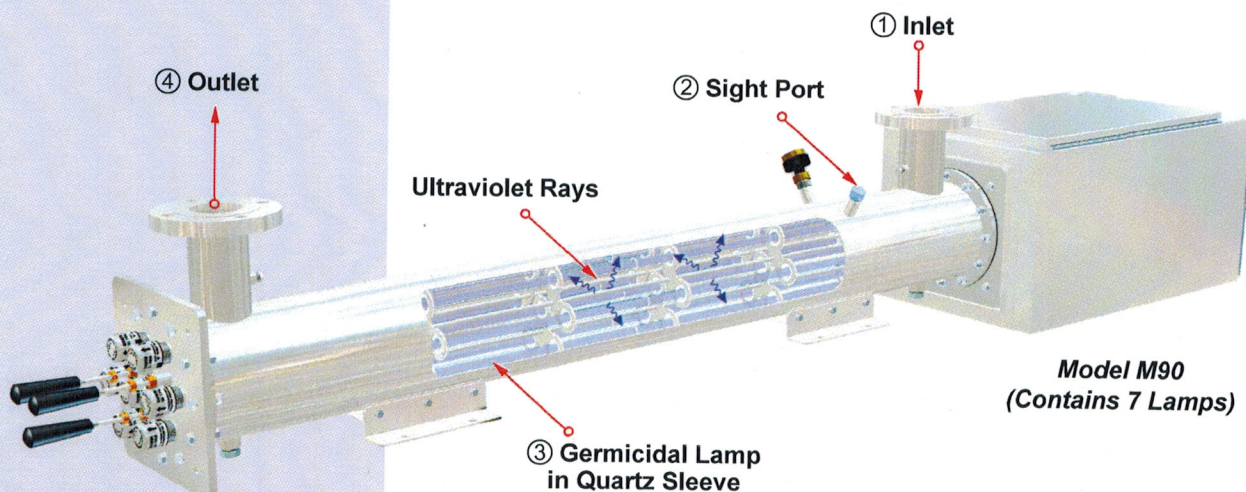
**MEGATRON®** Ultraviolet Water Disinfection Systems utilize germicidal ultraviolet lamps that produce short-wave radiation that is lethal to bacteria, viruses and other microorganisms present in water.

Economical and safe, **MEGATRON®** Ultraviolet Water Disinfection Systems offer rapid disinfection without the use of heat or dangerous chemicals – often for the lowest cost available by any means.

An ever-growing range of industries and consumer applications have found ultraviolet to be the ideal solution for their water treatment requirements.

Awareness of the environmental impact of chemical disinfectants and evolving discharge regulations have made ultraviolet purification a technology of choice in water recycling and disinfection of processed wastewater discharges.

## PRINCIPLE OF OPERATION



## ADVANTAGES

### Effective

Virtually all microorganisms are susceptible to **MEGATRON®** ultraviolet disinfection

### Economical

Hundreds of gallons are purified for each penny of operating cost

### Safe

No danger of overdosing, no addition of chemicals

### Fast

Water is ready for use as soon as it leaves the purifier – no further contact time required

### Easy

Installation and maintenance are less complicated than other methods

### Automatic

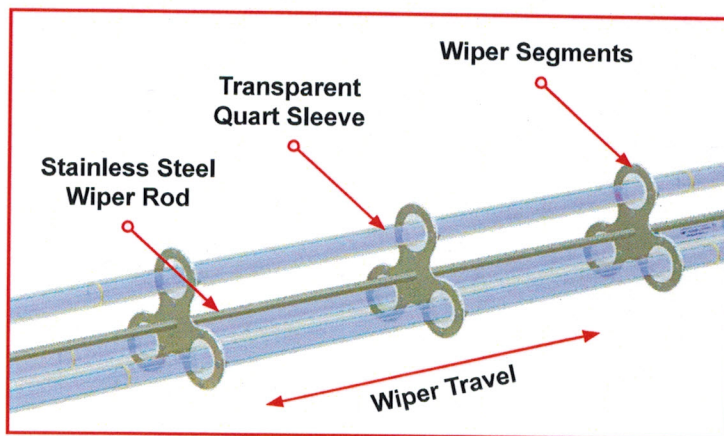
Provides continuous disinfection without special attention or measurement

### Chemical Free

No chlorine taste or corrosion problems

### Versatile

Capacities available from seventy to thousands of gallons per minute (GPM)



- ① The water enters the stainless steel disinfection chamber and flows into the space between the quartz sleeves and chamber wall where suspended microscopic organisms are exposed to intense shortwave germicidal ultraviolet radiation.
- ② Translucent sight port and front panel indicator lights (not shown) provide positive indication of germicidal lamp operation.
- ③ Manual or automatic wiper system facilitates routine cleaning of quartz sleeves without disassembly or shutdown of disinfection systems.
- ④ Water leaving the purifier is instantly ready for use.

## SPECIAL FEATURES

### Modular Design

Each **MEGATRON®** is a completely self-contained disinfection system. The electrical enclosure and disinfection chamber form an independent model simplifying installation; simply secure, plumb and supply suitable single-phase power. Multiple models can be interconnected to comply with nearly any flow requirement.

All internal electronic modules can be removed and replaced, simplifying troubleshooting, and reducing any possible down time.

### Surelite™ Electronic Ballasts

State-of-the-art electronic ballast specifically developed for the operation of ultraviolet lamps. Versatile ballast provides high lamp output; is lightweight, efficient, and operates cool for longer life.

### Manual Wiper System

Permits mechanical cleaning of the quartz sleeves without service interruption, or disassembly of the system.

### Automatic Wiper System (Optional)

Once programmed, permits unattended mechanical cleaning of the quartz sleeves.

### Sight Port

Translucent plug mounts to the disinfection chamber and provides positive indication of germicidal lamp operation.

### CRYSTAL CLEAR™ Quartz Sleeve

Fused, high quality quartz, protects and insulates the ultraviolet lamps to ensure high output over a range of operating temperatures.

### Remote Outputs

12v DC: Provides an output corresponding to the **MEGATRON® STATUS** and power for a low-voltage audio alarm, 50mA max.

### 4-20mA

Provides an output corresponding to the **ULTRAVIOLET INTENSITY**. Output must be displayed by a PLC, computer, or 4-20mA meter, which can interpret the signal.

### Dry Contacts

Provides SPDT output corresponding to **UV NORMAL** or **FAULT** status of the monitor. Contacts are rated at 50v 100mA max.

### Lamp Operation Indicators

Provide positive indication of each germicidal lamp's operation.

### Digital GUARDIAN™ Ultraviolet Monitor

Displays the intensity of germicidal ultraviolet energy within the disinfection chamber. Signals are provided by the Ultraviolet Sensor Probe.



### Elapsed Time Indicator

Non-resettable display of accumulated operating hours.