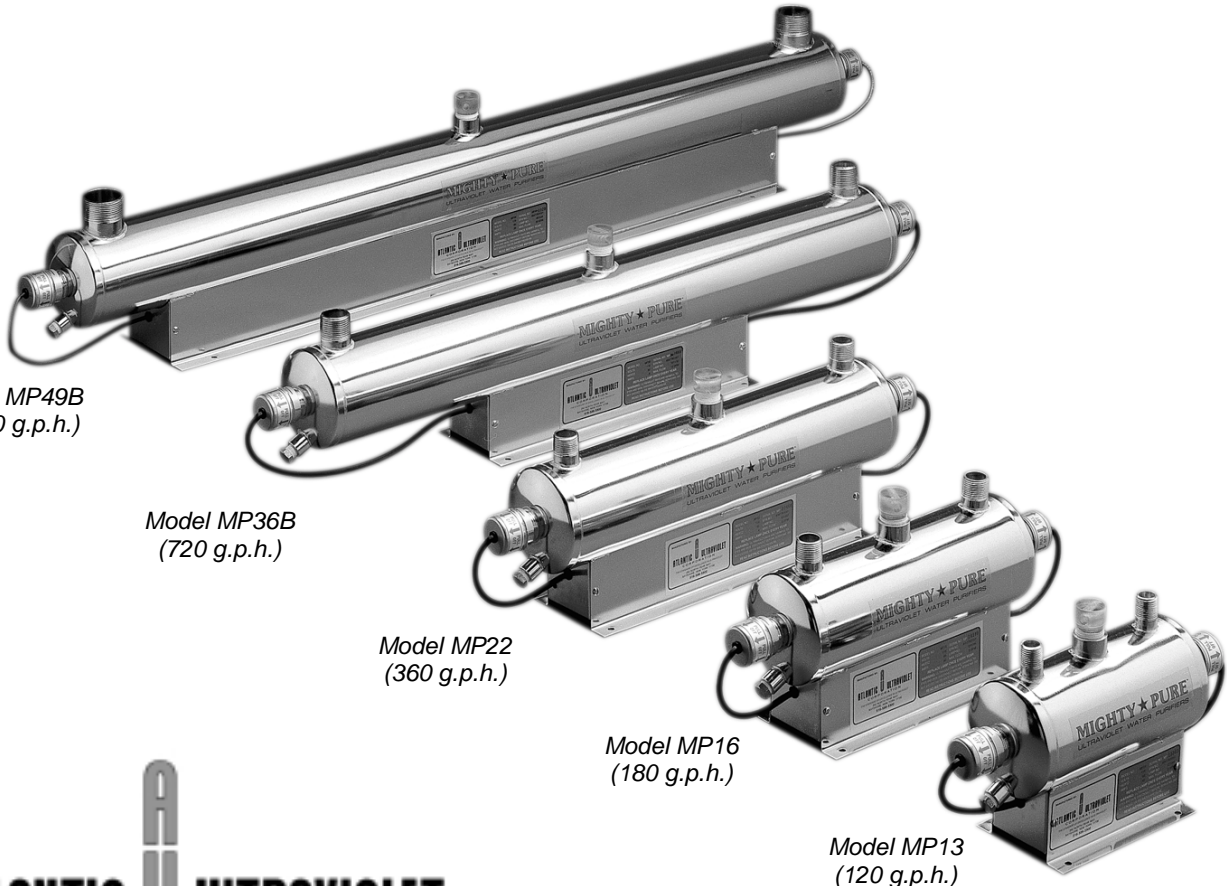


MIGHTY★PURE™

ULTRAVIOLET WATER PURIFIERS



*Model MP49B
(1,200 g.p.h.)*

*Model MP36B
(720 g.p.h.)*

*Model MP22
(360 g.p.h.)*

*Model MP16
(180 g.p.h.)*

*Model MP13
(120 g.p.h.)*

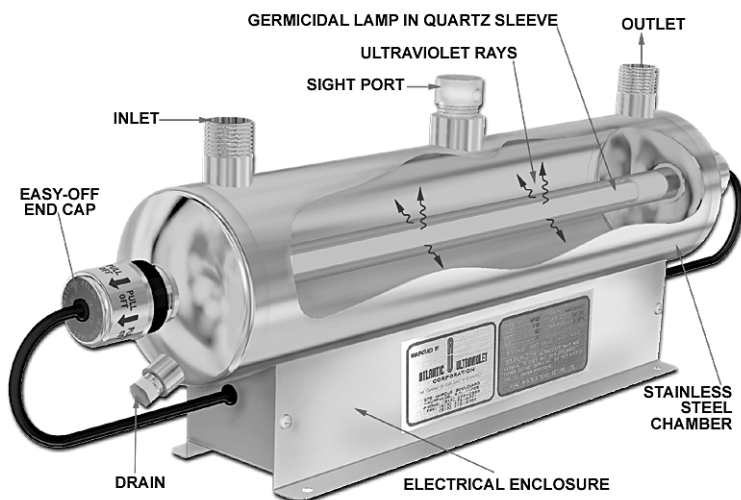
ATLANTIC  **ULTRAVIOLET**
CORPORATION

GERMICIDAL ULTRAVIOLET

- Ultraviolet water purification is a unique and rapid method of water disinfection without the use of heat or chemicals.
- **MIGHTYPURE™** Ultraviolet Purifiers utilize germicidal ultraviolet lamps that produce short wave radiation lethal to bacteria, viruses and other microorganisms present in water.
- Through the years ultraviolet technology has become well established as a method of choice for effective and economical water disinfection.
- **MIGHTYPURE™** Ultraviolet Purifiers are the ideal solution for an ever-growing range of users choosing their water treatment needs.

MIGHTY★PURE™ ULTRAVIOLET WATER PURIFIERS

PRINCIPLE OF OPERATION



- 1 The water enters the purifier and flows into the annular space between the quartz sleeve and the outside chamber wall.
- 2
- 3 The translucent sight port provides positive indication of germicidal lamp operation.
- 4 Water leaving the purifier is instantly ready for use.

INSTALLATION AND MAINTENANCE

The purifier is installed as close as possible to the point of use. Connection of the inlet and outlet to water supply and insertion of plug into a 3-wire grounded outlet is all that is required.

Ordinary maintenance consists of cleaning the quartz sleeve with the manual wiper once monthly or more frequently where conditions dictate. Lamp replacement is recommended every 10,000 hours of operation (approximately 14 months of continuous service).

MIGHTYPURE™ Water Purifiers are manufactured under patents owned
by the Atlantic Ultraviolet Corporation
Made in the USA. Form #25-0015.
Copyright MCMLXXII, MCMXCI, MCMXCVII, MCMXCIX

MIGHTY★PURE™ ULTRAVIOLET WATER PURIFIERS

GERMICIDAL LAMP DATA

Technical Specifications

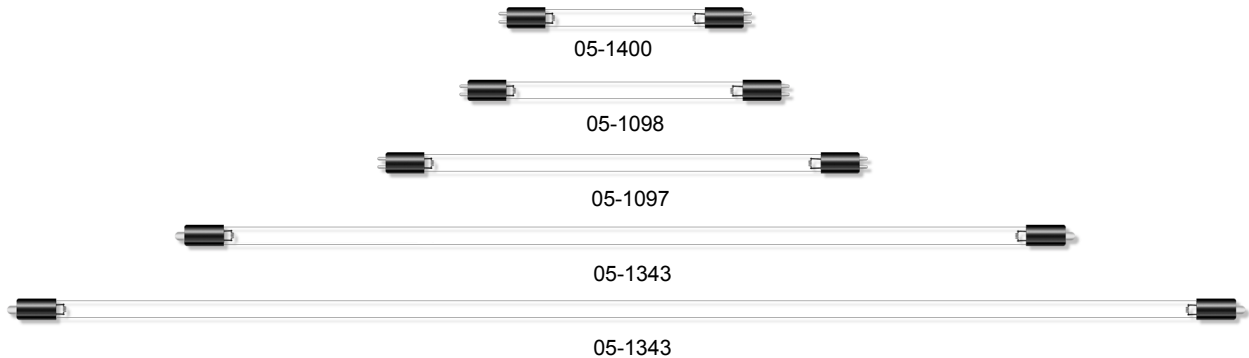
LAMP NUMBER	PURIFIER MODEL NO.	NOMINAL LAMP LENGTH	1 POWER CONSUPTION	2 ULTRAVIOLET OUTPUT	RATED EFFECTIVE LIFE
05-1400	MP13	8-15/16" (227 mm)	10 Watts	2.3 Watts	10,000 Hrs.
05-1098	MP16	11-7/8" (302 mm)	14 Watts	3.7 Watts	10,000 Hrs.
05-1097	MP22	17-3/4" (451 mm)	20 Watts	6.4 Watts	10,000 Hrs.
05-1343	MP36B	33-7/8" (860 mm)	39 Watts	13.8 Watts	10,000 Hrs.
05-1334	MP49B	45-7/8" (1165 mm)	50 Watts	19.3 Watts	10,000 Hrs.

The lamps listed above have been especially developed and are recommended for use with MIGHTYPURE™ Water Purifiers.

1 Wattage is lamp watts only and does not include ballast loss.
2 Maximum rated output at 254 nanometers.

All *Ster-L-Ray*™ lamps used in MIGHTYPURE™ units are low pressure type, which afford the maximum efficiency in producing the required germicidal rays. In addition to the obvious advantages of high efficiency and low power requirements, there is no possibility of the unit overheating (as is the case with some other lamp types). Consequently, the need for additional equipment to combat overheating is eliminated.

GENUINE *STER-L-RAY*™ GERMICIDAL LAMPS



Ster-L-Ray™ germicidal lamps are shortwave, low pressure mercury vapor discharge tubes that produce ultraviolet wavelengths lethal to microorganisms.

Call for our *Ster-L-Ray*™ Germicidal Lamp Catalog

Ster-L-Ray™ germicidal lamps are manufactured by the Atlantic Ultraviolet Corporation.

Ster-L-Ray™ and the *Ster-L-Ray*™ logo are trademarks of the Atlantic Ultraviolet Corporation.

CAUTION: Overexposure to direct or reflected germicidal ultraviolet rays will cause painful eye irritation and reddening of the skin.

ULTRAVIOLET DOSAGE

Germicidal lamps provide effective protection against microorganisms. A small cross-section is shown below.

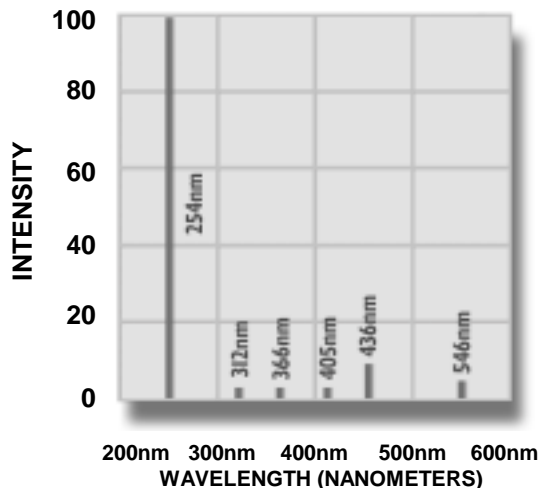
ORGANISM	ALTERNATE NAME	TYPE	DISEASE	$\mu\text{WSec}/\text{cm}^2$
<i>Bacillus subtilis</i> spores	<i>B. subtilis</i>	Bacteria	_____	22,000
Bacteriophage	Phage	Virus	_____	6,600
Coxsackie virus	_____	Virus	Intestinal infection	6,300
<i>Shigella</i> spores	_____	Bacteria	Bacterial Dysentery	4,200
<i>Escherichia coli</i>	<i>E. coli</i>	Bacteria	Food poisoning	6,600
Fecal coliform	_____	Bacteria	Intestinal infection	6,600
Hepatitis A virus	Infectious Hepatitis virus	Virus	Hepatitis of the liver	8,000
Influenza virus	Flu virus	Virus	Influenza	6,600
<i>Legionella pneumophila</i>	_____	Bacteria	Legionnaires' Disease	12,300
<i>Salmonella typhi</i>	_____	Bacteria	Typhoid Fever	7,000
<i>Staphylococcus aureus</i>	Staph	Bacteria	Food poisoning, Toxic Shock Syndrome, etc.	6,600
<i>Streptococcus</i> spores	Strep	Bacteria	Strep throat	3,800

The dosage necessary to inactivate a microorganism is a product of time and intensity.

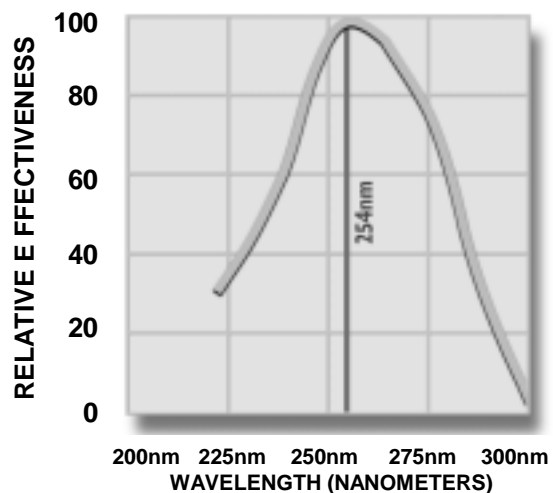
When used as directed to disinfect clear water, **MIGHTYPURE™** Water Purifiers provide an ultraviolet dosage in excess of 30,000 microwatt seconds per square centimeter ($\mu\text{WSec}/\text{cm}^2$).

OPERATING CHARACTERISTICS

Relative Spectral Energy Distribution (Typical)



Germicidal Effectiveness As Related to Wavelength



Approximately 95% of the ultraviolet energy emitted from *Ster-L-Ray™* germicidal lamps is at the mercury resonance line of 254 nanometers, the region of germicidal effectiveness most destructive to bacteria, mold and virus.

MIGHTY★PURE™ ULTRAVIOLET WATER PURIFIERS

– SPECIFICATIONS FOR STANDARD MODELS

MODEL	G.P.M.	G.P.H.	INLET and OUTLET SIZE ①	REPLACEMENT LAMP(S)	POWER CONSUMPTION ②	UNIT DIMENSIONS (INCHES)			SHIPPING DATA		
						Length	Width	Height	Gross Wt. (Lbs.)	Net Wt. (Lbs.)	Cu. In.
MP13	2	120	1/2" NPT	05-1400	14 Watts	13-1/2	4-5/16	8-3/8	12	9	12.5
MP16	3	180	3/4" NPT	05-1098	18 Watts	16-1/2	4-5/16	8-3/8	12	9	12.5
MP22	6	360	3/4" NPT	05-1097	24 Watts	22-1/2	4-5/16	8-3/8	14	11	17.9
MP36	12	720	1" NPT	05-1343	44 Watts	36-1/2	5-11/16	9-1/2	29	23	40.6
MP49B	20	1,200	1 1/2" NPT	05-1334	54 Watts	49-1/2	5-11/16	9-1/2	36	29	52.5

① All inlets and outlets are mail pipe threads.

② Total power consumption including ballast loss.

- Pressure drop at maximum recommended flow rate is less than 5 p.s.i.
- 120 Volt 60 Hz and 220 Volt 50 Hz units are standard.
- 12 and 24 Volt DC units also available.
- MIGHTYPURE™ is available for operation on public power supplied throughout the world.
- Consult factory with specific power requirements.

– ADVANTAGES OF THE MIGHTYPURE™ SYSTEM

- **EFFECTIVE** - Virtually all microorganisms are susceptible to MIGHTYPURE™ disinfection.
- **ECONOMICAL** - Hundreds of gallons can be purified for each penny operating cost.
- **SAFE** - No danger of overdosing, no addition of dangerous chemicals.
- **FAST** - Water is ready for use as soon as it leaves the purifier - no further contact time required.
- **EASY** - Simple installation and maintenance. Compact units require minimum space.
- **AUTOMATIC** - Continuous or intermittent disinfection without special attention or measurement.
- **NO CHEMICALS** - No chlorine taste or corrosion problems.
- **VERSATILE** - Capacities available from two to thousands of gallons per minute (g.p.m.).

(For larger capacity please refer to our Sanitron™ and Megatron™ Ultraviolet Water Disinfection catalogs)



375 Marcus Boulevard • Hauppauge, NY 11788 • Tel: 631.273.0500 • Fax: 631.273.0771 • www.atlanticuv.com • e-mail: info@atlanticuv.com

Atlantic Ultraviolet lamps and equipment are manufactured in the USA.

The information and recommendations contained in this publication are based upon data collected by the Atlantic Ultraviolet Corporation and are believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Specifications and information are subject to change without notice. Document No. 25-0015/6-00 • ©2000 by Atlantic Ultraviolet Corporation

SPECIAL FEATURES OF MIGHTYPURE™ WATER PURIFIERS

STAINLESS STEEL CONSTRUCTION

Chamber, head and clamp are electropolished and passivated stainless steel for an attractive finish and dependable service.

QUICK LAMP CHANGE

Exclusive Easy-Off Retainer Cap™ enables effortless lamp replacement without shut down of water pressure or drainage of tank. No tools required.

DRAIN PLUG

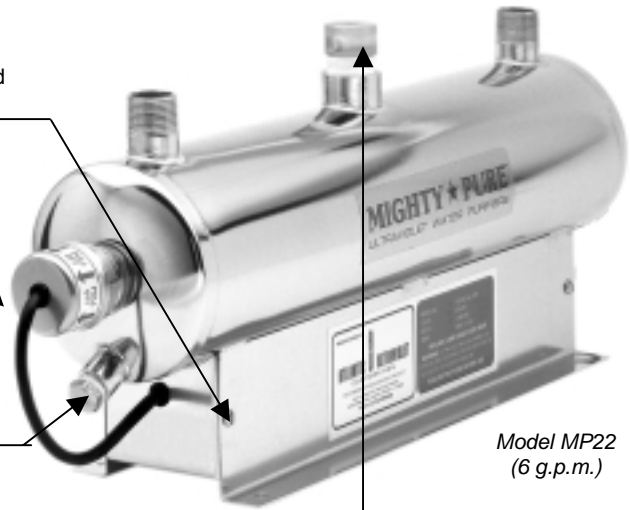
Convenient, in-place drainage of purifier chamber.

FUSED QUARTZ SLEEVE

Insures optimum lamp output at normal potable water temperatures. (See interior detail page 2).

SIGHT PORT PLUG

Visible glow provides positive indication of germicidal lamp operation.



Model MP22
(6 g.p.m.)

OPTIONAL ACCESSORIES

Monitoring Options (Select Guardian™ or Sentry™)



*Guardian™ Ultraviolet Monitor

Analog meter indication of germicidal lamp energy within the disinfection chamber. Controls Solenoid Valve and Audio Alarm.



Sentry™ Safety Sensor

Basic monitoring of electrical operation. Indicates alarm condition and operates Solenoid Valve and Audio Alarm.

*Audio Alarm

Activated by the Guardian™ or Sentry™, alerts user to any malfunction detected.



Elapsed Time Indicator

Real-time, non-resettable display of accumulated operating hours.



*Solenoid Valves

Operates with the Guardian™ or Sentry™, and prevents flow during detected malfunctions. Available in nylon or brass.



*Time Delay Mechanism

Provides a 2-minute warm-up period for lamp to achieve full germicidal output.



*Flow Control Valves

Limits water flow to rated capacities. Available in brass, PVC and stainless steel.



Wall Mounting Kit

Stainless steel, quick, easy and professional finish. Pre-drilled and ready to assemble. Optimizes free air circulation to cool ballast housing.



These options may be obtained at purchase time or added at a later date. For further details, refer to Atlantic Ultraviolet's *Optional Accessories* sheet, Document Number 98-1057 or visit our website at www.atlanticuv.com.

Distributors: Clean Water Systems & Stores Inc 831-462-8500
www.cleanwaterstore.com

Atlantic Ultraviolet lamps and equipment are manufactured in the USA.

The information and recommendations contained in this publication are based upon data collected by the Atlantic Ultraviolet Corporation and are believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Specifications and information are subject to change without notice. Document No. 25-0015/6-00 • ©2000 by Atlantic Ultraviolet Corporation