ULTRAVIOLET DISINFECTION

Industrial UV Disinfection - Flows (<50 gpm)

IL “HT” SERIES

IL-HT SERIES

PRODUCT OVERVIEW

The **“HT”** Series is a high purity line of ultraviolet water systems manufactured in the United States. They are designed to treat flows ranging up to 50 gallons per minute (189 lpm).

The systems are constructed from high grade 316L stainless steel and are electropolished to ensure high purity and longevity.

Systems are powered, monitored and controlled via the “HT” remote Fiberglass NEMA 4x enclosure. The HT Controller houses the electronic ballasts. Each ballast has a corresponding countdown lamp replacement timer and a UV lamp status indicator. This indicator is Green for On and Red for Off. In the event of Off, an audible alarm will sound. Dry contacts are provided for remote monitoring.

While these systems are used primarily for disinfecting process water, they can also be configured and sized for Total Oxidizable Carbon reduction (TOC) and Ozone destruction (OD).

STANDARD FEATURES

- 316L electropolished stainless steel
- Two (2) removable heads
- Adjustable mounting legs
- Monitor port
- NPT fittings
- 120-277 Volt
- Remote “HT” fiberglass enclosure
- On/Off switch
- Lamp status (Green, Red, Audible)
- Countdown lamp timer
- Dry contacts for lamp out
- UV lamps made in USA
- 254 nm or 185 nm lamps
- GE Type 214 quartz sleeve
- Treats lower transmission water
- Machined aluminum compression nuts
- Manufactured in USA

MADE IN THE USA

GLASCO UV

UV LAMP SYSTEMS

Systems use special UV lamps to target and disable harmful waterborne disease causing microorganisms (pathogens), destroy ozone and reduce total oxidizable carbon in water supplies.

Over 100 years ago, scientists found that when pathogens were exposed to UV light, their reproduction was limited. The light resided in the UVC range of the spectrum. Specifically, they discovered that light in the 254 nanometer (nm) range was the most effective.

When pathogens are exposed to UV light, their cells become damaged and this inhibits reproduction. UV light damages the cell's DNA and RNA and once damaged, they are unable to replicate and therefore, rendered harmless.

UV lamps in the 254 nm range are also used to destroy ozone in water. The UV energy turns the ozone into water. UV lamps in the 185 nm range are used to reduce organics in the water. 185 nm lamps create hydroxyl free radicals, which help oxidize the organics into CO2 and H2O.

The amount of damage is a result of the intensity of the UV light multiplied by the time the water is exposed to the light (time x intensity). The dosage, referred to as microwatts, is often expressed as mJ/cm2. Doses > 30,000 microwatt dose (30 mJ) are accepted for water disinfection. Doses of >100 mJ are used for Ozone Destruct and TOC Reduction.

APPLICATIONS

- **Food and Beverage**
- **Pharmaceutical**
- **Hospitals**
- **Laboratories**
- **Post DI/RO**
- **Process water**
- **Potable water**
- **Research & Development**

OPTIONS

- **Sanitary fittings**
- **Flanges (US and DN)**
- **UV monitoring with 4-20mA**
- **High heat shutoff**
- **PLC controls**
- **Stainless steel enclosures**
- **Window kit**
- **Manual quartz cleaning**
- **Explosion proof**
- **Stainless steel light traps**
- **Skid mounting**

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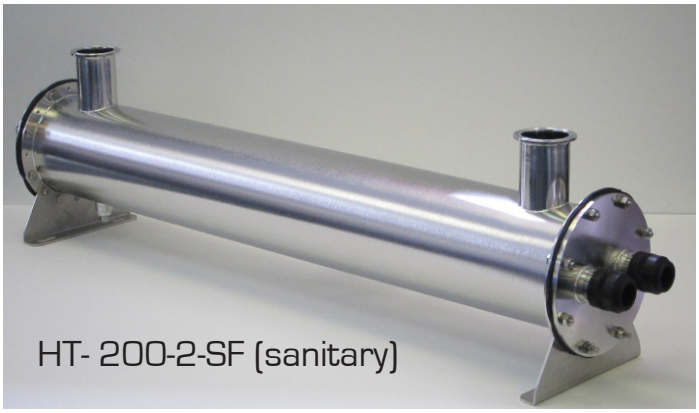
HT-200-2


HT- 200-2-SF (sanitary)


HT-200-1


HT-300-2+

The HT Series is highly customizable. The end user has the ability to select the type and size of the connections (NPT, flanged or sanitary) and has the ability to customize the electronics. As a UL-508 panel shop, we have the ability to customize the system with options like UV monitoring, PLC controls and high heat monitoring.

The standard “HT” System Controller (HTSC) is ideal for industrial environments. In some cases, clients would rather have a stainless steel or painted steel electrical enclosure. The “HT-**+**” allows the end user to design the system to meet their needs.

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HT System Controller (HTSC)

The HTSC provides regulated power to the mercury vapor UV lamp via a multi-voltage electronic ballast.

A resettable count-down timer is provided to remind operators when to change lamp and service system.

Individual lamp status - Green LED (lamp on) - Red LED (lamp off). System has audible lamp out alarms and the ability to provide dry contacts for lamp out.

The HTSC is a remote modified NEMA 4x fiberglass enclosure with On/Off switch.

SYSTEM SIZING for Disinfection, TOC reduction and Ozone destruction

Unit Name	GPM	LPM	INLET / OUTLET	WATTS	UNIT DIM LxWxH	ELECTRICAL DIMENSIONS
HT-100	7	26	3/4”	15	18”x6”x7” 457x152x178 mm	10”x6.5”x3.5” 252x162x90 mm
HT-150	10	38	3/4”	30	18”x6”x7” 457x152x178 mm	10”x6.5”x3.5” 252x162x90 mm
HT-200-1	15	57	3/4”	44	36”x6”x7” 914x152x179 mm	10”x6.5”x3.5” 252x162x90 m
HT-300-1	20	76	3/4” - 1”	85	36”x6”x7” 914x152x179 mm	10”x6.5”x3.5” 252x162x90 mm
HT-200-2	30	114	1.5”	88	36”x6”x10” 914x178x254 mm	12”x9.5”x3.5” 302x232x90 mm
HT-300-2	50	190	2”	170	36”x6”x10” 914x178x254 mm	12”x9.5”x3.5” 302x232x90 mm

Unit Name	GPM TOC	LPM	INLET / OUTLET	WATTS	UNIT DIM LxWxH	ELECTRICAL DIMENSIONS
HT-100-TOC	1.7	6	3/4”	15	18”x6”x7” 457x152x178 mm	10”x6.5”x3.5” 252x162x90 mm
HT-150-TOC	3.5	12	3/4”	30	18”x6”x7” 457x152x178 mm	10”x6.5”x3.5” 252x162x90 mm
HT-200-1-TOC	5	19	3/4”	44	36”x6”x7” 914x152x179 mm	10”x6.5”x3.5” 252x162x90 m
HT-300-1-TOC	7	26	3/4” - 1”	85	36”x6”x7” 914x152x179 mm	10”x6.5”x3.5” 252x162x90 mm
HT-200-2-TOC	10	38	1.5”	88	36”x6”x10” 914x178x254 mm	12”x9.5”x3.5” 302x232x90 mm
HT-300-2-TOC	15	57	2”	170	36”x6”x10” 914x178x254 mm	12”x9.5”x3.5” 302x232x90 mm

Unit Name	GPM OD	LPM	INLET / OUTLET	WATTS	UNIT DIM LxWxH	ELECTRICAL DIMENSIONS
HT-100-OD	1.7	6	3/4”	15	18”x6”x7” 457x152x178 mm	10”x6.5”x3.5” 252x162x90 mm
HT-150-OD	3.5	12	3/4”	30	18”x6”x7” 457x152x178 mm	10”x6.5”x3.5” 252x162x90 mm
HT-200-1-OD	5	19	3/4”	44	36”x6”x7” 914x152x179 mm	10”x6.5”x3.5” 252x162x90 m
HT-300-1-OD	7	26	3/4” - 1”	85	36”x6”x7” 914x152x179 mm	10”x6.5”x3.5” 252x162x90 mm
HT-200-2-OD	10	38	1.5”	88	36”x6”x10” 914x178x254 mm	12”x9.5”x3.5” 302x232x90 mm
HT-300-2-OD	15	57	2”	170	36”x6”x10” 914x178x254 mm	12”x9.5”x3.5” 302x232x90 mm

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UV disinfection assumes 90% UVT. Dosage will be higher if the UV transmission is higher than 90%.

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