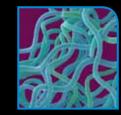
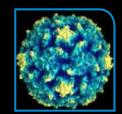
# 



Bacillus



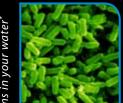
Cyanobacteria



Polio



Cryptosporidium



E. Coli



Shigella

These microorganisms may/may not exist in your household wate It is important that you have your water tested to identify microorganisms and/or contaminants, if any.



# SAFE

- No need to handle toxic or corrosive chemicals or by-products
- Microbiologically free water without the use of potentially dangerous chemicals
- UV imparts no change in taste, odor, pH or conductivity
- No trihalomethanes (THM's) formation

# SIMPLE

- Fast and simple installation with three connections (two water and one electrical).
- Maintenance involves annual lamp replacement (provided water quality parameters are met) with no need to turn off water flow.
- Automatic, unattended and user friendly operation.

# EFFICIENT

- Compact units with 304 or 316 (upon request) stainless steel reactor chamber, polished for laboratory and medical use, require minimum space.
- Microorganisms are inactivated within seconds; eliminates the need for long retention times or retention tanks.
- Very low power consumption; less than 40-watt bulb to effectively treat from 1 to 100 gallons per minute.
- High output low pressure mercury vapor lamps with high isolation pin.
- Little change in water temperature even after prolonged periods of no water flow.
- Open end high quality quartz sleeve and stainless steel gland units.

# **ECONOMICAL**

- No moving parts to wear out or break.
- Lower capital investment when compared to chlorine or ozone systems.







# **Residential and Commercial UV Sterilization**

- Eliminating microorganisms in your water\*

Your best choice in Ultraviolet Sterilization

**Polaris Scientific Ultraviolet systems** provide a sleek, compact design and economical ultraviolet water treatment for low flow and medium flow applications such as: light commercial reverse osmosis systems, water vending machines, food industry, laboratory, medical facility water, pharmaceutical, cosmetic processes, final electronic component rinsing and recirculation loops to name a few.

**Polaris Scientific Ultraviolet systems** produce little change in water temperature even after prolonged periods of no water flow, making them ideal for many application requirements.





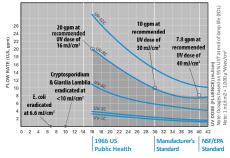
# Residential Ultraviolet Sterilization Systems

# POLARIS SCIENTIFIC UV - 1C

PARTS & A	CCESSORIES
-----------	------------

Electronic Balla	st	Quartz Sleev	е	Lamp							
EB-1024		Q\$10		GL10SE4P							
Additional Accessories Specific to Your UV System											
UV-NUT-1	UV-NUT-1			UV-PLUG							





GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
1	9,000	10W	110V/220V	LED	BUZZER	1	1/4" MNPT	STAINLESS 304	10.47"	2″	125 PSI	35°F · 104°F	254 nm	30 mJ/cm <sup>2</sup>

# POLARIS SCIENTIFIC UV - 2C



GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules	
2	9,000	14W	110V/220V	LED	BUZZER	1	1/4" MNPT	STAINLESS 304	13.74″	2.5″	125 PSI	35°F <sup>.</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>	

# Polaris Scientific UV-1 C/UV-2C

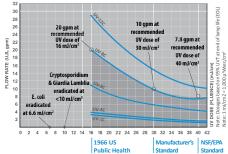
# Residential Ultraviolet Sterilization Systems

# **POLARIS SCIENTIFIC UV - 6C**

PARTS	&	ACC	ESS	O R	I E S
	-				

Electronic Ballast	Quartz Sleeve	Lamp
EB-2439	QS24	GL24SE4P
Additional Accesso	ries Specific to Yo	our UV System
UV-NUT-1/UV- NUT-2	UV-SEAL	UV-PLUG





GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
6	9,000	24W	110V/220V	LED	INDICATOR W/ ALARM	1	1/2" MNPT	STAINLESS 304	23.23″	2.5″	125 PSI	35°F <sup>.</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>

# POLARIS SCIENTIFIC UV - 8C



GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
8	9,000	32W	110V/220V	LED	INDICATOR W/ALARM	1	3/4" MNPT	STAINLESS 304	27.87″	2.5″	125 PSI	35°F <sup>.</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>

# Polaris Scientific UV-6C/UV-8C



# Residential & Commercial Ultraviolet Sterilization Systems

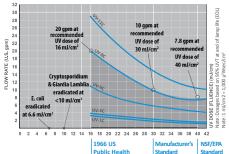
# **POLARIS SCIENTIFIC UV - 12C**

# **PARTS & ACCESSORIES**

UV-NUT-2

Electronic Balla	ıst	Quartz S	leeve	La		
EB-2439		QS3	9	GL39		
Addition	al Ac	cessories	Specific	to Your	UV Syst	em
UV-NUT-1/	U	V-SEAL	UV-I	PLUG	UV-39	SPRIN





Rated Life (hours) Voltage @ 50/60HZ Visual Audible Warning Port Size Maximun Pressure Working Temp. Number of Water Width num Microjoules GPM Lamp Watts Length Wavelength Warnina Lamps Inlet/Outlet Chambe INDICATOR STAINLESS 3/4" MNPT 12 9,000 39W 110V/220V LED 1 36.81" 2.5″ 125 PSI 35°F · 104°F 254 nm 30 mJ/cm<sup>2</sup> W/ ALARM 304

### **POLARIS SCIENTIFIC UV - 24B** 150 140 120 (md<sup>6</sup> 100 90 80 70 60 50 40 30 20 10 Cryptosporidium & Giardia Lamblia **PARTS & ACCESSORIES** eradicated at UV dose o <10 mJ/cm 30 mJ UV dose of Electronic Ballast Quartz Sleeve Lamp 40 mJ/cn JV DOSE (FLUENCE) (mJ/cm) Vote: Dosages based on 95% UVT at E. coli EB-2439 QS39 GL39SE4P eradicated at 6.6 mJ/cm Vote : Dosages based on 95% Vote : 1 mJ/cm2 = 1,000 µ²M UV-24B Additional Accessories Specific to Your UV System UV-NUT-1/ UV-SEAL UV-PLUG UV-39SPRING UV-NUT-2 10 20 Manufacturer's NSF/EPA Standard Sta

GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Timer	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
24	9,000	39W	110V/220V	LED	INDICATOR W/ALARM	2	1" MNPT	STAINLESS 304	<b>~</b>	36.93"	3.5″	125 PSI	35°F- 104°F	254 nm	30 mJ/cm <sup>2</sup>

# Polaris Scientific UV-12C/UV-24B

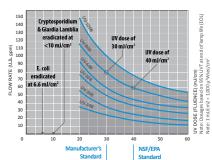
# Commercial Ultraviolet Sterilization Systems

# **POLARIS SCIENTIFIC UV - 36C**

# PARTS & ACCESSORIES

Electronic Balla	st	Quartz S	leeve	La		
EB-2439		QS3	9	GL39		
Additiond	al Ac	ccessories	Specific	to Your	UV Syst	em
UV-NUT-1/ UV-NUT-2	u	JV-SEAL	UV-I	PLUG	UV-39	SPRING





GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Timer	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
36	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	3	1.5″	STAINLESS 304	$\checkmark$	36.93"	5.5″	125 PSI	35°F <sup>.</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>

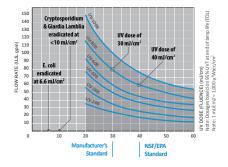
NOTE: Flanges available upon request.

# POLARIS SCIENTIFIC UV - 50B

# PARTS & ACCESSORIES

Electronic Balla	Quartz S	leeve	La					
EB-2439	QS3	9	GL39					
Additional Accessories Specific to Your UV System								
UV-NUT-1/ UV-NUT-2	U	IV-SEAL	UV-I	PLUG	UV-39	SPRING		





GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Timer	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
50	9,000	39W	110V/220V	LED	INDICATOR W/ALARM	4	1.5″	STAINLESS 304	~	36.93"	5.5″	125 PSI	35°F <sup>.</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>

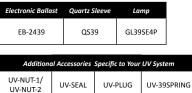
NOTE: Flanges available upon request.

# Polaris Scientific UV-368/UV-508

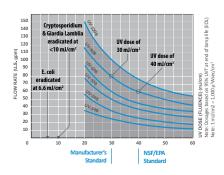
# Commercial Ultraviolet Sterilization Systems

**POLARIS SCIENTIFIC UV - 60B** 

# PARTS & ACCESSORIES







GPM	Rated Life (hours)	Lamp Watts	Voltage @ 50/60HZ	Visual Warning	Audible Warning	Number of Lamps	Port Size Inlet/Outlet	Water Chamber	Timer	Length	Width	Maximum Pressure	Working Temp.	Wavelength	Microjoules
60	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	5	2" or 2.5" FLANGE	STAINLESS 304	✓	36.93"	5.5″	125 PSI	35°F <sup>.</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>



GPM	(hours)	Lamp Watts	50/60HZ	Warning	Warning	Lamps	Inlet/Outlet	Chamber	Timer	Length	Width	Pressure	Temp.	Wavelength	Microjoules
80	9,000	39W	110V/220V	LED	INDICATOR W/ALARM	6	2" or 2.5" FLANGE	STAINLESS 304	✓	36.93″	6.26"	125 PSI	35°F <sup>-</sup> 104°F	254 nm	30 mJ/cm <sup>2</sup>

Polaris Scientific UV-608/UV-808



### 5-YEAR LIMITED WARRANTY FOR POLARIS ULTRAVIOLET UV CHAMBER

POLARIS Ultraviolet warrants the UV chamber on the POLARIS Ultraviolet product to be free from defects in material and workmanship for a period of five (5) years from the date of purchase. During this time, we will repair or replace, at its option, any defective POLARIS Ultraviolet chamber. Please return the defective potARIS Ultraviolet chamber. Please return the vour system from, who will return it to POLARIS Ultraviolet. We will either make the necessary repairs or, if it is determined that a replacement is required, we will provide a replacement part. We will then return the part to the dealer. This warranty does not include shipping and handling charges which will be collected from you by the dealer. Parts repaired or replaced under this five (5) year warranty will be covered under warranty to the end of the original five (5) year warranty period. This warranty is also subject to the conditions and limitations" below.

### ONE-YEAR LIMITED PRO-RATED WARRANTY FOR STRUCTURAL, HARDWARE AND ELECTRICAL COMPONENTS

POLARIS Ultraviolet warrants the structural, hardware, and electrical components to be free from defects in material and workmanship for a period of one (1) year pro-rated from the date of purchase. During this time, we will repair or replace, at its option, any defective parts covered by the warranty. Defective part(s) should be returned to a POLARIS Ultraviolet dealer, who will return it to POLARIS Ultraviolet. We will either make the necessary repairs or, if it is determined that a replacement is required, we will provide a replacement part. We will then return the part to the dealer. This warranty does not include shipping and handling charges which will be collected from you by the dealer. Parts repaired or replaced under this one (1) year pro-rated warranty will be covered under warranty to the end of

the original one (1) year pro-rated warranty period. This warranty is also subject to the conditions and limitations outlined under the heading "General Conditions and Limitations" below.

ONE-YEAR LIMITED WARRANTY FOR LAMPS, SLEEVES AND UV SENSORS

POLARIS Ultraviolet warrants original lamps, sleeves and UV sensors to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. During this time we will repair or replace, at its option, any defective parts covered by the warranty. The warranty period for lamps and sleeves may be verified using date codes in addition to purchase receipts and POLARIS Ultraviolet's database of serial number sales date. We will advise you whether the defective item needs to be returned to the POLARIS Ultraviolet dealer you purchased the equipment from for failure analysis. Replacement lamps and sleeves provided under warranty will be sent to your POLARIS Ultraviolet dealer. If the UV sensor experiences a problem which POLARIS Ultraviolet confirms is covered by warranty, please return the sensor to a POLARIS Ultraviolet dealer you purchased the equipment from who will return it to us. We will either repair or replace the sensor and return the sensor to your dealer. This warranty on lamps, sleeves and sensors does not include shipping and handling charges which will be collected from you by the dealer. Parts replaced under this one (1) year warranty will be covered under warranty to the end of the original one (1) year warranty period. This warranty is also subject to the conditions and limitations outlined under the heading "General Conditions and Limitations" below.

### GENERAL CONDITIONS AND LIMITATIONS

None of the above warranties cover damage caused by improper use or maintenance, accidents, acts of God or minor scratches or imperfections that do not materially impair the operation of the product. The warranties also do not cover products that are not installed as outlined in the applicable Owner's Manual. POLARIS Ultraviolet System warranty will be deemed null and void if any of the product labels are removed, including the pressure sensitive hologram serial number. The limited warranties described above are the only warranties applicable to the POLARIS Ultraviolet products listed in the "Specific Warranty Coverage" section. These limited warranties outline the exclusive remedy for all claims whether based on contract, tort (including negligence), strict liability or otherwise. Disclaimer of warranties. Except as expressly warranted in writing by POLARIS Ultraviolet, the goods sold by POLARIS Ultraviolet are purchased by the buyer "as is." POLARIS Ultraviolet does not warrant that the goods are of merchantable quality or that they can be used for any particular purpose. Except as expressly warranted in writing by POLARIS Ultraviolet, POLARIS Ultraviolet makes no representation or warranty of any kind with respect to the products.

Limitation of liability. In no event shall POLARIS Ultraviolet be liable to the purchaser or any other entity for more than the invoice price received by POLARIS Ultraviolet for any nonconforming products. POLARIS Ultraviolet shall not be liable to the purchaser or any other entity for personal injury, property damage, or any direct, indirect, special, incidential, consequential, punitive, exemplary, or other damages of any kind, including without limitation the cost of procurement of substitute goods, the loss of profits, products, or production, or the interruption of business, however caused and on any theory of liability, and whether or not POLARIS Ultraviolet has been advised of the possibility of such damages. The essential purpose of this provision is to limit the liability of POLARIS Ultraviolet arising out of the sale of products to the purchaser whether for breach of contract, negligence, or otherwise. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy and notwithstanding the provisions of any other

For complete Terms & Conditions see reverse side





The products described in this document are hereby offered for sale to be established by Hydroft Quick Connect Fittings, Polaris Scientific Ultraviolet, Hydron Membranes, Aquatrol, Shok Blok, HydroGuard, Hydronix Water Technology, any of its subsidiaries and its authorized distributors. This offer and its acceptance by any customer (the "Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any item described in this document, when communicated to Hydroft Quick Connect Fittings, Polaris Scientific Ultraviolet, Hydronix Water Technology, its subsidiaries or an authorized distributor (the "Seller") verbally or in writing, shall constitute acceptance of this offer. Provided, however, that these terms and conditions shall not perate as a rejection of the Buyer's difference of this on the material and and the angentian gradient and the set of the bitmer of the subsidiaries or an a set of the softer. Buyer's that these terms and conditions shall not perate as a rejection of the Buyer's difference of this offer. Provided, however, that these terms and conditions hall not perate as a rejection of the Buyer's difference of this offer. Provided, more than a tradient and the set of the bitmer of the subsidiaries of the softence of this offer. Provided, a state and the set of the softence Buyer's offer unless such offer contains variances in the description, quantity, price, or delivery schedule of the items

1. Terms and Conditions of Sale. All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of the Seller's products are subject to and shall be and examples y doctations, proposal, onesy accurately accurate granters and and a first or the senes protocol and a final be-governed exclusively by the terms and conditions stated herein (the "Agreement"). The Buyer's acceptance of any offer to sell is limited to the terms and conditions in the Agreement. Any terms or conditions in addition to or inconsistent with those stated in the Agreement, proposed by the Buyer in any acceptance of an offer by the Seller, are hereby rejected. No such additional, different or inconsistent terms and conditions shall become part of the agreement between the Buyer and the Seller unless expressly accepted in writing by the Seller. The Seller's acceptance of any offer to purchase by the Buyer is expressly conditioned upon the Buyer's assent to all the terms and conditions in this Agreement, irrespective of any terms in addition to, or inconsistent with those contained in the Buyer's offer. Acceptance of the Seller's products shall in all events constitute such assent.

### 2. Documents

2. Documents. Unless provided otherwise in the Agreement, all catalog descriptions, illustrations, drawings and literature or independently submitted estimates of performance, weights and measurements or other specifications provided by the Seller are mere approximations and the Seller reserves the right to alter or amend them at any time. The Seller reserves the right to correct clerical or technical errors in the contract documents. The Buyer shall furnish with his order all necessary specifications and information. The Seller takes no responsibility for goods manufactured, priced or delivered not in accordance with the order or the specifications unless the Buyer's order and specifications are clear and correct.

### 3. Prices

Unless otherwise provided, all prices contained in our quotations and written acceptances are ex-works and do not include the cost of packing. All orders are accepted on the condition that all such prices are subject to revision by the Seller at any time before the goods are dispatched to take account of any price change. In the event that the Buyer does not place the entire order quoted by the Seller for the Buyer, the Seller reserves the right to revise its prices. The Seller also reserves the right to revise its prices if the Buyer modifies the specification or quantity of the goods or the delivery requirements after the order has been accepted by the Seller.

### 4. Advice.

All advice given in connection with the Seller's goods is provided without charge to the Buyer. ANY ADVICE AND ASSISTANCE GIVEN BY THE SELLER TO THE BUYER IS GIVEN AT THE BUYER'S RISK, AND THE SELLER SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE OR CLAIM ARISING THEREFROM.

### 5. Payment

(a) Unless otherwise provided in the Agreement, or explicitly agreed upon in writing by the Seller, payment is due in full 30 days from date of shipment of the items purchased herein under. (b) In the case of an installment contract, deliveries or parts, payment for each installment delivery or part shall be made under sub-clause (a) as if the same constituted a separate agreement. (c) Amounts not timely paid shall bear interest at the rate of 2-1/2% above the Seller's bank's prime rate from time to time in force. (d) In the event that the Buyer fails within one calendar month of the date for payment to effect any payment which may be due under the Agreement or any agreement with the Seller, or if the Buyer commits any breach of the Agreement, or if the Buyer becomes insolvent or commits any act of bankrupty or contemplation of liquidation, the Seller will be entitled, without prejudice to the Seller's other rights, to terminate the Agreement or any unfulfilled part thereof, or at the Seller's option to make partial deliver

### 6. Modifications and Cancellations.

This Agreement is not subject to oral modification or cancellation. A Buver's request for modification or cancellation will not be incorporated into the Agreement unless the request is accepted by the Seller in a writing that amends the Agreement. Acceptance of any such requested modification or cancellation shall be at the Seller's discretion and shall be upon such terms and conditions as the Seller may require.

### 7. Handling Charge.

Coords supplied in accordance with the Buyer's order may later be returned to the Seller at the Seller's discretion provided the return is pre-authorized in writing, and the merchandise is unused, in original packages, unaltered, clean and no older than 60 days from the date of shipment by the Seller. The Buyer will be required to pay to the Seller a handling charge of 25% of the purchase price of the returned goods. A copy of the original invoice for the merchandise must accompany all returns.

### 8. Delivery.

(a) Any delivery dates quoted are approximate only and the Seller shall have no liability for any delays in delivery. (b) Unless provided otherwise, delivery of the goods shall be made when the Seller has notified the Buyer that the goods are ready for dispatch. Regardless of the method of delivery, delivery shall be made F.O.B. Seller's plant, where the risk of loss shall thereupon pass to the Buyer upon the Seller's delivery to a carrier. Notwithstanding that the Seller's picera exe-works, the Seller is prepared by special contract to procure carriage or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller shall be under no liability for damage in transit or freight and insurance on behalf of the Buyer and at Buyer's cost in which event the Seller's plant and the seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in the seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's plant at Buyer's cost in which event the Seller's loss or damage to the goods beyond the point at which the Seller contracts to deliver the same. (c) The Seller will not make drop shipments

### 9. Inspection and Rejection

(a) The following provisions shall apply in relation to all deliveries of goods: the Seller shall not be held liable for any claims of damage in (a) the tonormag bord below yor loss of goods, with teacher loss of spoods, the Setter and to be need noted to diny Genna to damage in transit, shortage of delivery or loss of goods, unless in the cases of spoods, die Setter and the state notice in writing is given to the carrier concerned and to the Seller within three (3) days of the receipt of the goods, followed by a complete claim in writing within fibre (5) days of receipt of the goods and in the case of loss of goods, a separate notice in writing is given to the carrier concerned claim in writing made within thirty (30) days of the date of consignment. The Buyer must inspect the goods on arrival from the Seller does not wish to inspect such goods. Any breach of these conditions in this provision shall serve as a waiver to any claim brought by the buyer. (b) Without prejudice to the Seller's other rights, should the Buyer fail for any reason to send the Seller forwarding instructions within innety (90) days after the date of the Seller's other rights, should the Buyer fail for any reason to send the Seller forwarding instructions within innety (90) days after the date of the Seller's notification that the goods are ready for dispatch or to accept delivery of the goods, the Seller shall be entitled at the Buyer's risk and expense to store the goods and/or to procure or effect storage of the goods selsewhere. Goods so stored shall be paid for as if they had been dispatched and/or accepted.

### 10. Special Tooling.

Where it is necessary for the Seller to manufacture or to purchase special tooling, including without limitation tools, dies, jigs, mandrills, fixtures, molds, and patterns, in order to execute a contract, the Buyer will be charged with all or a proportion of the cost of such special tools. Such special tooling shall be and remain the Seller's property notwithstanding payment of any charges made by the Buyer. In no event will the Buyer acquire any interest in apparatus belonging to the Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adopted for such manufacture and notwithstanding any charges paid by the Buyer therefore Unless otherwise agreed, the Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

### 11. Test and Performance.

(a) The Seller's goods are, where practicable, submitted to the Seller's standard test before delivery. If special tests are required, these shall be made at the Seller's premises unless otherwise agreed, and will be subject to an extra charge. (b) The Seller accepts no liability for failure to attain any performance figures quoted by the Seller unless the Seller's specifically has guaranteed them with an agreed sum as liquidation. damages and the Buver has suffered actual loss by reason of the failure to attain the figures guoted. (c) Any particulars of weights and 

### 12. Buver's Property.

Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished to the Seller by the Buyer, or any other items which become the Buyer's property, may be considered obsolete and may be destroyed by the Seller after two (2) consecutive years have elapsed without the Buyer placing an order for the items which are manufactured using such property. The Seller shall not be responsible for any loss or damage to such property while it is in the Seller's possession or control.

### 13. Taxes

Unless otherwise indicated, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the terms sold hereunder. If any such taxes must be paid by the Seller, or if the Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the item sold. The Buyer agrees to pay all such taxes or to reimburse the Seller therefore upon receipt of its invoice. If the Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, the Buyer shall promptly indemnify and hold the Seller harmless from and against any such tax, as well as

### any interest or penalties thereon which may be assessed if the items are held to be taxable

### 14. Warranty

EXCEPT AS EXPRESSLY WARRANTED IN WRITING BY THE SELLER. THE GOODS SOLD BY THE SELLER ARE PURCHASED BY THE BUYER "AS IS." THE EXCLED DO TAMENT AND A CONTRACT AND A SECOND A SECON RESPECT TO THE PRODUCTS

(a) The Seller warrants that the items sold hereunder shall be free from defects in material or workmanship at the time of shipment by the Seller. The Seller warrants that if within 12 months of delivery of the goods to the Buyer the Buyer returns immediately to the Seller's premises any of the said goods which the Buyer believes to be defective, carrier paid, properly packed and clearly marked with the Buyer's full name any of the said goods which the Buyer believes to be defective, carrier paid, properly packed and clearly marked with the Buyer's full name and address and any other information such as serial numbers which may be necessary to enable the goods to be identified, together with a complete description of the alleged defect, they will be repaired or new goods will be supplied in exchange and the goods so repaired or such new goods will be delivered to the Buyer free of charge at the Seller's premises, provided, however, that the foregoing warranty shall be applicable only if upon demand by the Seller, the Buyer proves to the Seller's satisfaction: (i) that the defect was used us solely to defective workmanship; (ii) that no alterations or repairs have been made to the goods except with the Seller's written consent; (iii) that the defect was not caused by any act of the Buyer or its agents; and (iv) that the defect was not caused by any matter beyond the reasonable control of the Seller, including, without limitation, accident or normal wear and tex. (b) THIS WARRANTY DOES NOT APPLY UNLESS THE SELLER'S PRODUCTS ABE; (j) USED IN DOMESTIC PLUMBING APPLICATIONS; (j) INSTALED BY A LICENSED CONTRACTOR, PLUMBER OR QUALIFIED EQUIPMENT DESTINATION DEDTECTION APPLICATIONS; (j) INSTALED BY A LICENSED CONTRACTOR, PLUMBER OR QUALIFIED EQUIPMENT INIT: (1) 0320 IN BORESSIONLE, AND (III) INITIALED AND DEPARTED IN ACCOMMING WITH DUBLISHED HYDROFIT / HYDRONIX WATER INITIALIATION PROFESSIONLE, AND (III) INITIALED AND DEPARTED IN ACCOMDANCE WITH PUBLISHED HYDROFIT / HYDRONIX WATER TECHNOLOGY SPECIFICATIONS. (c) All costs and expenses, including freight charges, customs duties, and insurance incurred in returning the goods to the Seller's premises in accordance with this provision shall be paid by the Buyer. The benefit of this warranty shall not be assignable by the Buyer. (d) THIS WARRANTY DOES NOT EXTEND TO ANY GOODS NOT MÁNUEACTURED BY THE SELLER EVEN THOUGH SUPPLIED BY THE UP UIE BUYEL (U) HIS YMARANTI DUES NOT EXTERNI I ANT GUODS NOT MANORCUMED BT THE SECLER VOIT HOUGH SUFFICIE DI THE SECLER NOR DOEST I EXTEND TO ANY SECON-TANDO RE RECONDITIONED GOODS NOR DOEST I EXTEND TO COMPONENTS MUNIFACTURED BY THE SECLER BUT INSTALLED, ATTACHED OR WELDED BY THE BUYER OR HIS CUSTOMER ON EQUIPMENT NOT MANUFACTURED BY THE SELLER. GOODS NOT MANUFACTURED BY THE SELLER CARRY ONLY THE WARRANTY (IF ANY) OF THEIR MAKERS AND THE BUYER IS ENTITLED TO THE BENEFIT THEREOF ONLY ONE OF THE SELECT KANNING AND THE POWER TO TRANSFER IT. (E) THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER; THE SELER MAKES NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESSED OR IMPLIED. OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING, ARE HEREBY DISCLAIMED. (f) NOTWITHSTANDING THE FOREGOING, THERE ARE NO WARRANTIES WHATSOEVER ON ITEMS BUILT OR ACQUIRED WHOLLY OR PARTIALLY TO THE BUYER'S DESIGNS OR SPECIFICATIONS.

### 15. Limited Remedy

THE SELLER'S LIABLE ITY ARISING FROM OR IN ANY WAY CONNECTED WITH THE ITEMS SOLD OR THIS AGREEMENT SHALL RELIMITED EXCLUSIVELY TO SEPAR OR REPLACEMENT OF THE TEMS SOLD. IN NO EVENT SHALL THE SELLER BE LIABLE THE BUYER OR ANY THRD PARTY FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS INCIDENTAL, CONSEQUENTIAL OB SPECIAL DAMAGES OF ANY KIND OR NATURE WHAISOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARSING FROM OR IN ANY WAY CONNECTED WITH THIS ASGLEMENT OR ANY ITEMS SOLD, WHETHER ALLEGED TO ARSIE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY. IN NO EVENT SHALL THE SELLER BE LIABLE TO THE BUYER OR ANY OTHER ENTITY FOR MORE THAN THE INVOLCE PRICE RECEIVED BY THE SELLER FOR ANY NON-CONFORMING PRODUCTS. THE SELLER SHALL NOT BE LIABLET TO THE BUYER DA ANY OTHER ENTITY FOR PRESONAL INJURY, PROPERTY DAMAGE, OR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY, SPECIAL, OR OTHER DAMAGES OF ANY KIND, INCLUDING WITHOUT LIMITATION THE COST OF PROCUREMENT OF SUBSTITUTE GOODS, THE LOSS OF PROFITS, PRODUCTSO, OR PRODUCTION, OR THE INTERPUTION OF BUSINESS, HOWEVER CAUSED. THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR ANY OTHER ENTITY ON ANY THEORY OF LIABLITY INCLUDING WITHOUT LIMITATION BEACH OF CONTRACT OR EXPRESS OR IMPLIED WARRANTY, TORT, NEGLIGENCE, ENTITIED TO MAND AD STEPT CHABILITY INCLUDING WITHOUT LIMITATION BEACH OF CONTRACT OR EXPRESS OR IMPLIED WARRANTY, TORT, NEGLIGENCE, ENTITIED TO ANY THEORY OF LIABLITY AND WERTHER DAMAGES. FAILURE TO WARN, OR STRICT LIABILITY, AND WHETHER OR NOT THE SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE ESSENTIAL PURPOSE OF THIS PROVISION IS TO LIMIT THE LIABILITY OF THE SELLER ARISING OUT OF THE SALE OF PRODUCTS TO THE BUYER WHETHER FOR BREACH OF CONTRACT, NEGLIGENCE, OR ANY OTHER THEORY OF LIABILITY. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY AND NOTWITHSTANDING THE PROVISIONS OF ANY OTHER A GREEMENT BETWEEN THE SELLER AND THE BUYER.

### 16. Indemnity for Infringement of Intellectual Property Rights.

(a) The Buyer shall defend and indemnify the Seller against all actions, claims, demands, penalties and costs by third parties in tort, or for infringement, or alleged infringement, of patents, trademarks, copyrights, trade dress, trade secret or other rights of any third party resulting from the goods manufactured in accordance with the Buyer's specifications or based on any information provided by the Buyer. The Buyer will defend any action against the Seller for tile, patent, trademark, copyright infringement, or other claimed by a third party at the Buyer's specifications or based on a patent to be a specification of the sp who extern any external of game the section targe patchic question for the patchic question of the section of t this contract infringes the Intellectual Property Rights of a third party. The Seller's obligation to defend and indemnify the Buyer is contingent on the Buyer notifying the Seller within 10 days after sole control over the defense of any allegations or actions, including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, the Seller may, at its sole expense and option, procure for the Buyer the right to continue using said item, replace or modify said item so as to make it non-infringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, the Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in combination or use in a system of any item sold hereunder. The foregoing in this provision shall constitute the Seller's sole and exclusive liability and the Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights

### 17. Lien

In addition to any right of lien to which the Seller may by law be entitled, the Seller shall have a general lien on all goods of the Buyer in the Seller's possession (although such goods or some of them may have been paid for) for the unpaid price of any other goods sold and delivered to the Buyer by the Seller under the same or other contracts.

### 18. Waiver

The Seller's rights shall not be affected or restricted by any indulgence or forbearance granted to the Buyer. No waiver by the Seller of any breach shall operate as a waiver of any later breach.

### 19. Force Maieure

The Seller shall be excused from performing any of its obligations under this Agreement which are prevented or delayed by any occurrence not within the reasonable control of the Seller, including but not limited to, accidents, acts of God, destruction or damage to the goods or the Seller's manufacturing plant, delays or failures in delivery of carriers or suppliers, shortages of materials, strikes or other labor matters, floods, earthquakes, fire, riots, explosions, or any regulations, rules, ordinances or orders of any governmental authority, federal, state or local whether such cause exists at the date of the order or not.

# 20. Buyer's Representation of Solvency

The Buyer hereby represents that as of the signing of this Agreement it was not insolvent within the meaning of the Uniform Commercial Code or any Bankruptcy Laws.

### 21. Assignment and Delegation

The rights and obligations of the parties under this Agreement may not be assigned or delegated, except on the express written consent of the other party to the assignment or delegation

### 22. Integration

The rights and obligations of the parties and the terms and conditions set forth herein, together with any amendments, modifications and any different terms and conditions sepressly accepted by the Selfer in writing, shall constitute a complete and exclusive statement of the terms of this Agreement. This Agreement supersedes not only all prior agreements, but also oral agreements made contemporaneously with the execution of this Agreement. All such materials may not be used to supplement, explain, or contradict the terms of this Agreement.

### 23. Severability

The rectanging of the rectangi by any legislation to which it is subject, then the exclusion, restriction or limitation on the condition or part thereof in question shall be so prohibited or rendered void or unenforceable and the validity or enforceability of any other part of these provisions shall not thereby be affected.

### 24. Governing Law/Limitation on Actions

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Specifi	Specifications															
Part Number	GPM (LPM)	Rated Life (hrs)	Lamp Watts	Voltage at 50/60HZ	Visual Warning	Audible Warning	# of Lamps	Port Size I/O	Water Chamber	Timer	Length	Width	Max. Pressure	Working Temp.	Wavelength	Microjoules
UV- 1C	1 (3.8)	9,000	10W	110V/220V	LED	BUZZER	1	1/4" MNPT (.635 cm)	STAINLESS 304		10.47" (26.594 cm)	2" (5.080 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C - 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-2C	2 (7.57)	9,000	14W	110V/220V	LED	BUZZER	1	1/4" MNPT (.635 cm)	STAINLESS 304		13.74" (34.900 cm)	2.5" (6.350 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-6C	6 (22.71)	9,000	24W	110V/220V	LED	INDICATOR W/ ALARM	1	1/2" MNPT (1.270 cm)	STAINLESS 304		23.23" (59.004 cm)	2.5" (6.350 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-8C	8 (30.28)	9,000	32W	110V/220V	LED	INDICATOR W/ ALARM	1	3/4" MNPT (1.905 cm)	STAINLESS 304		27.87" (70.79 cm)	2.5" (6.350 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-12C	12 (45.42)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	1	3/4" MNPT (1.905 cm)	STAINLESS 304		36.81" (93.497 cm)	2.5" (6.350 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-24B	24 (90.85)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	2	1" MNPT (2.540 cm)	STAINLESS 304	$\checkmark$	36.93" (93.802 cm)	3.5" (8.890 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-36B	36 (136.27)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	3	1.5" MNPT (3.810 cm)	STAINLESS 304	$\checkmark$	36.93" (93.802 cm)	5.5" (13.970 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-50B	50 (189.27)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	4	1.5" MNPT (3.810 cm)	STAINLESS 304	$\checkmark$	36.93" (93.802 cm)	5.5" (13.970 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-60B	60 (227.12)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	5	2" or 2.5" (5.080 or 6.350 cm) FLANGE	STAINLESS 304	$\checkmark$	36.93" (93.802 cm)	5.5" (13.970 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-80B	80 (302.83)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	6	2" or 2.5" (5.080 or 6.350 cm) FLANGE	STAINLESS 304	$\checkmark$	36.93" (93.802 cm)	6.26" (15.900 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>
UV-100B	100 (378.54)	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	8	2" or 2.5" (5.080 or 6.350 cm) FLANGE	STAINLESS 304	$\checkmark$	36.93" (93.802 cm)	8.62" (21.895 cm)	125 PSI 8.788 kgF/cm <sup>2</sup>	35°F - 104°F (1.67°C · 40°C)	254 nm	30 mJ/cm <sup>2</sup>

Parts (	Parts & Accessories												
Part Number	Lamp	Quartz Sleeve	Electronic Ballast		Additional Accessories Specific to Your UV System								
UV- 1C	GL10SE4P	Q\$10	EB-1024	UV-NUT-1	-	-	UV-SEAL	UV-PLUG					
UV-2C	GL14SE4P	QS14	EB-1024	UV-NUT-1	-	-	UV-SEAL	UV-PLUG					
UV-6C	GL24SE4P	Q524	EB-2439	UV-NUT-1/UV-NUT-2	-	-	UV-SEAL	UV-PLUG					
UV-8C	GL32SE4P	Q532	EB-2439	UV-NUT-1/UV-NUT-2	UV-32 SPRING	-	UV-SEAL	UV-PLUG					
UV-12C	GL39SE4P	Q539	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	-	UV-SEAL	UV-PLUG					
UV-24B	GL39SE4P	QS39	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	UV-TIMER	UV-SEAL	UV-PLUG					
UV-36B	GL39SE4P	Q539	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	UV-TIMER	UV-SEAL	UV-PLUG					
UV-50B	GL39SE4P	Q539	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	UV-TIMER	UV-SEAL	UV-PLUG					
UV-60B	GL39SE4P	Q539	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	UV-TIMER	UV-SEAL	UV-PLUG					
UV-80B	GL39SE4P	Q539	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	UV-TIMER	UV-SEAL	UV-PLUG					
UV-100B	GL39SE4P	Q\$39	EB-2439	UV-NUT-1/UV-NUT-2	UV-39 SPRING	UV-TIMER	UV-SEAL	UV-PLUG					

## **Water Quality**

Water quality plays a major role in the transmission of germicidal ultraviolet rays. It is recommended that the water does not exceed the following maximum concentration levels.

# **Maximum Concentration Levels**

Iron	< 0.3 ppm (0.3 mg/L)
Hardness	< 7 gpg (120 mg/L)
Turbidity	< 1 NTU
Manganese	< 0.05 ppm (0.05 mg/L)
Tannins	< 0.1 ppm (0.1 mg/L)
UV Transmittance	> 75%

Effectively treating water with higher concentration levels than listed above can be accomplished, but may require added measures to improve water quality to treatable levels.

## **UV Dose**

The units generate a UV dosage of at least 30,000 microwatt-seconds per square centimeter (µW-s/cm<sup>2</sup>), even at the end-of-lamp life (EOL), which is more than sufficient to destroy most waterborne microorganisms, such as bacteria, yeasts, algae, etc.

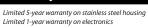
UV disinfection is affected by many factors and the following should be looked at prior to the installation of the UV system; UV Transmission (transmittance) deals with the effectiveness in which the 2537 Angstrom units (254 nanometers) wavelength of the ultraviolet light is transmitted through the water. The higher the transparency of the water, the more effective the UV system becomes. This optical clarity is evaluated by performing a test which passes through a 1 cm depth.

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The basic design of the units has taken into account a typical transmission at the desired wavelength. In practical terms this means that a system designed to flow at 24 gallons per minute, at a typical transmissibility could actually have a higher flow rate in liquids with a higher transmissibility. As a general guideline, the following are some typical UV transmission rates (UVT):

City water supplies	85-98%
Deionized or RO water	95-98%
Surface waters (lakes, rivers, etc)	70-90%
Ground water (wells)	90-95%
Other liquids	1-99%







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