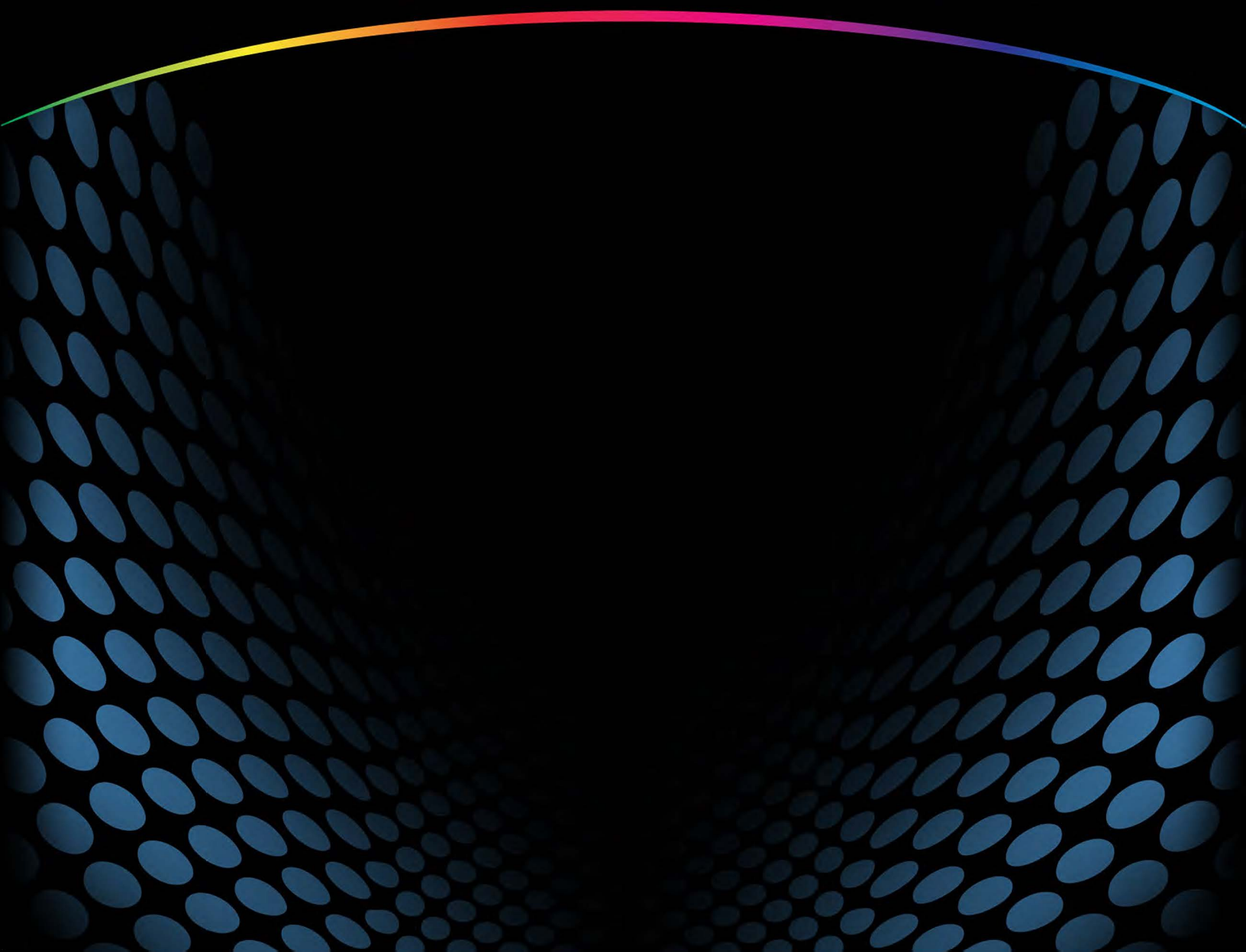




POLARISTM
SCIENTIFIC | UV



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.



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 ppm (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 ($\mu\text{W}\cdot\text{s}/\text{cm}^2$), even at the end-of-lamp life (EOL), which is more than sufficient to destroy most waterborne microorganisms, such as bacteria, yeasts, algae, etc.

Polaris Scientific UV™ Sterilization Systems utilize a natural quartz sleeve to protect the lamp and allow the maximum amount of UV rays to penetrate and disinfect the water.

Polaris Scientific UV™ Sterilization Systems germicidal lamps are specially designed UV radiation lamps which produce a rated wave length of 254nm.

Polaris Scientific UV™ Sterilization Systems are your best choice in UV sterilization. With its durable construction, high quality quartz sleeve and performance lamps, *you can't go wrong.*

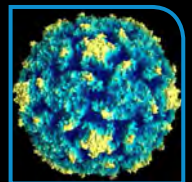
*Eliminating microorganisms in your water**



Bacillus



Cyanobacteria



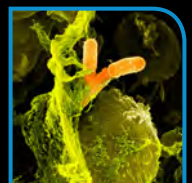
Polio



Cryptosporidium



E. Coli



Shigella

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

FEATURES

- ✓ Audible ballast with LED lamp out indicator.
- ✓ High output low pressure mercury vapor lamps with high isolation pin design.
- ✓ Open end quartz sleeve and stainless steel gland units.
- ✓ Operating temperature and sealing efficiency.
- ✓ Limited 5-year warranty on stainless steel housing.
- ✓ Limited 1-year warranty on electronics.

POLARIS™

SCIENTIFIC | UV

Polaris Scientific Ultraviolet Systems have a sleek, compact design and provide cost effective ultraviolet water sterilization for low to medium flow applications. Polaris Scientific UV's are perfect for residential and light commercial reverse osmosis systems, water vending machines, food industry, laboratory, 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.



Ultraviolet Sterilization **Simplified**

POLARIS SCIENTIFIC UVA-1C

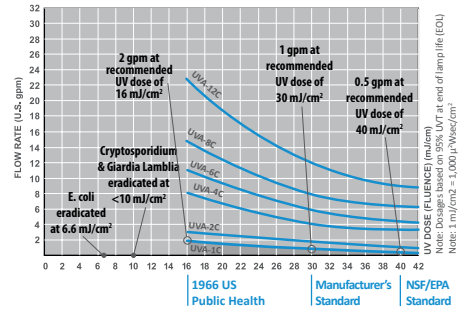
PARTS & ACCESSORIES

Electronic Ballast	Quartz Sleeve	Lamp
BEB-1024	QS10	GL10PP

Additional Accessories Specific to Your UV System		
UV-NUT-1	UV-SEAL	UV-WASHER



UVA-1C



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/cm²

POLARIS SCIENTIFIC UVA-2C

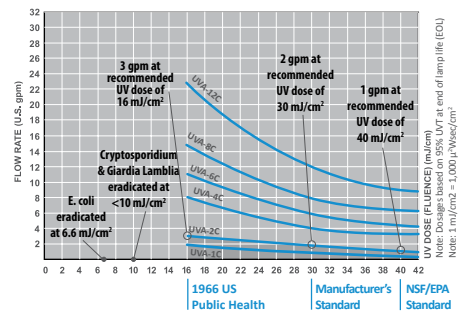
PARTS & ACCESSORIES

Electronic Ballast	Quartz Sleeve	Lamp
BEB-1024	QS14	GL14PP

Additional Accessories Specific to Your UV System		
UV-NUT-1	UV-SEAL	UV-WASHER



UVA-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- 104°F	254 nm	30 mJ/cm²

POLARIS SCIENTIFIC UVA-4C

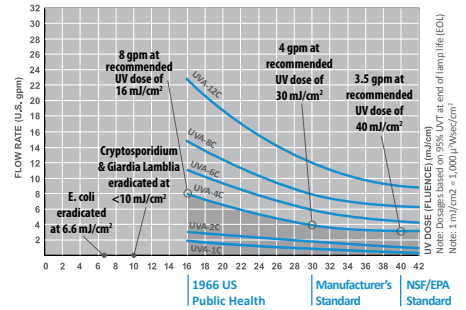
PARTS & ACCESSORIES

Electronic Ballast	Quartz Sleeve	Lamp
BEB-1024	QS17	GL17PP

Additional Accessories Specific to Your UV System		
UV-NUT-1	UV-SEAL	UV-WASHER



UVA-4C



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.	Wave-length	Microjoules
4	9,000	17W	110V/220V	LED	BUZZER	1	1/2" MNPT	STAINLESS 304	15.50"	2.5"	125 PSI	35°F- 104°F	254 nm	30 mJ/cm²

POLARIS SCIENTIFIC UVA-6C

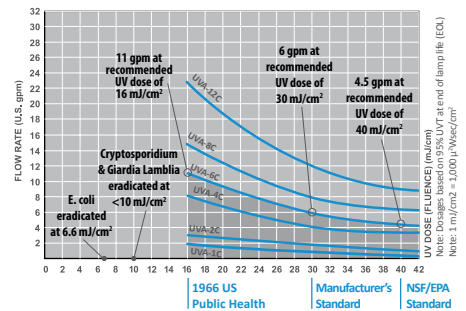
PARTS & ACCESSORIES

Electronic Ballast	Quartz Sleeve	Lamp
BEB-2439	QS24	GL24PP

Additional Accessories Specific to Your UV System			
UV-NUT-1 / UV-NUT-2	UV-SEAL	UV-WASHER	UV-PLUG



UVA-6C



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- 104°F	254 nm	30 mJ/cm²

POLARIS SCIENTIFIC UVA-8C

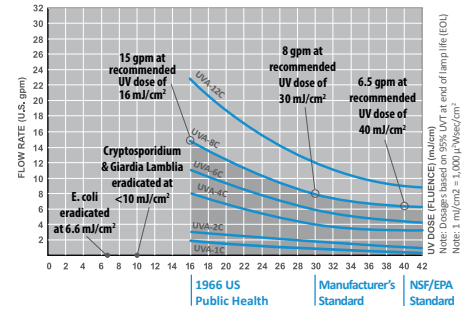
PARTS & ACCESSORIES

Electronic Ballast	Quartz Sleeve	Lamp
BEB-2439	QS32	GL32PP

Additional Accessories Specific to Your UV System		
UV-NUT-1 / UV-NUT-2	UV-32SPRING	UV-SEAL
UV-WASHER	UV-PLUG	



UVA-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- 104°F	254 nm	30 mJ/cm ²

POLARIS SCIENTIFIC UVA-12C

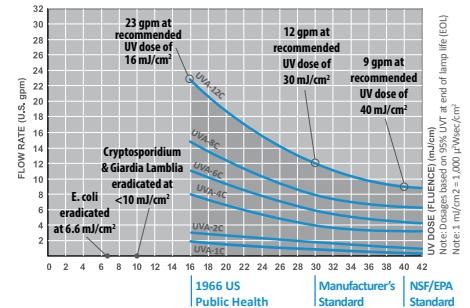
PARTS & ACCESSORIES

Electronic Ballast	Quartz Sleeve	Lamp
BEB-2439	QS39	GL39PP

Additional Accessories Specific to Your UV System		
UV-NUT-1 / UV-NUT-2	UV-39SPRING	UV-SEAL
UV-WASHER	UV-PLUG	



UVA-12C



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
12	9,000	39W	110V/220V	LED	INDICATOR W/ ALARM	1	3/4" MNPT	STAINLESS 304	36.81"	2.5"	125 PSI	35°F- 104°F	254 nm	30 mJ/cm ²