

# SwiftBeverage™ Series

Designed as a cost-effective, high performance system for maximum water confidence

The SwiftBeverage series offers maximum water disinfection performance, advanced control functionality and high flexibility for system configuration. It gives users peace of mind by providing a reliable, cost-effective and high performance system.



**Vertical:**

Food & Beverage, Pharma

**Application:**

Bioassay Validated Disinfection

**Flow range:**

106-832 (24-189) GPM (m<sup>3</sup>/hr)

## Features and Benefits

**Proven performance – full bioassay validation.**

186 mJ/cm<sup>2</sup> UV doses meets the stringent, internationally-recognized USEPA standard – having undergone comprehensive validation at a wide range of flow rates and UV transmittance levels.

**Assurance of NSF 61 compliance.** NSF/ANSI 61: Drinking Water System Components – Health Effects ensure the raw materials are safe and have been properly tested against radionuclides and other naturally occurring volatile organic compounds.

**Guaranteed performance and comprehensive warranty.**

Our systems include a Lifetime Performance Guarantee\* and comprehensive protection for your investment.



**Low operation and maintenance cost.** Low pressure high output Amalgam lamps save up to 62% power cost and request much lower maintenance.

**Compact footprint for installation flexibility.** Can handle maximum flow capacity in minimal space. Its compact design allows it to be installed in restrictive spaces, thereby lowering installation costs.

**Advanced Digital Control.** Robust and user friendly Microprocessor-based controller provides rich real time control information and various communication interfaces.

**Local service. Global support.** Our comprehensive network of certified service providers offers ongoing maintenance programs and fast response for service and spare parts.

\* Life Time Performance Warranty will only applicable with the use of genuine OEM replacement parts.

# SwiftBeverage™ Series

## UV Sensor

Highly accurate, DVGW-approved, photodiode sensor monitors UV output within the chamber. Mounted within the sensor port on the side wall for easy access.



## Amalgam Lamps

Utilizes high-output amalgam lamps. Each is located within its own protective quartz sleeve and supported by a removable, sleeve holder assembly. Designed for easy lamp replacement.

## UV Chamber

Type 316L stainless steel. Chamber configurations are available with multiple inlet/outlet diameters.

## Sleeve Wiping System

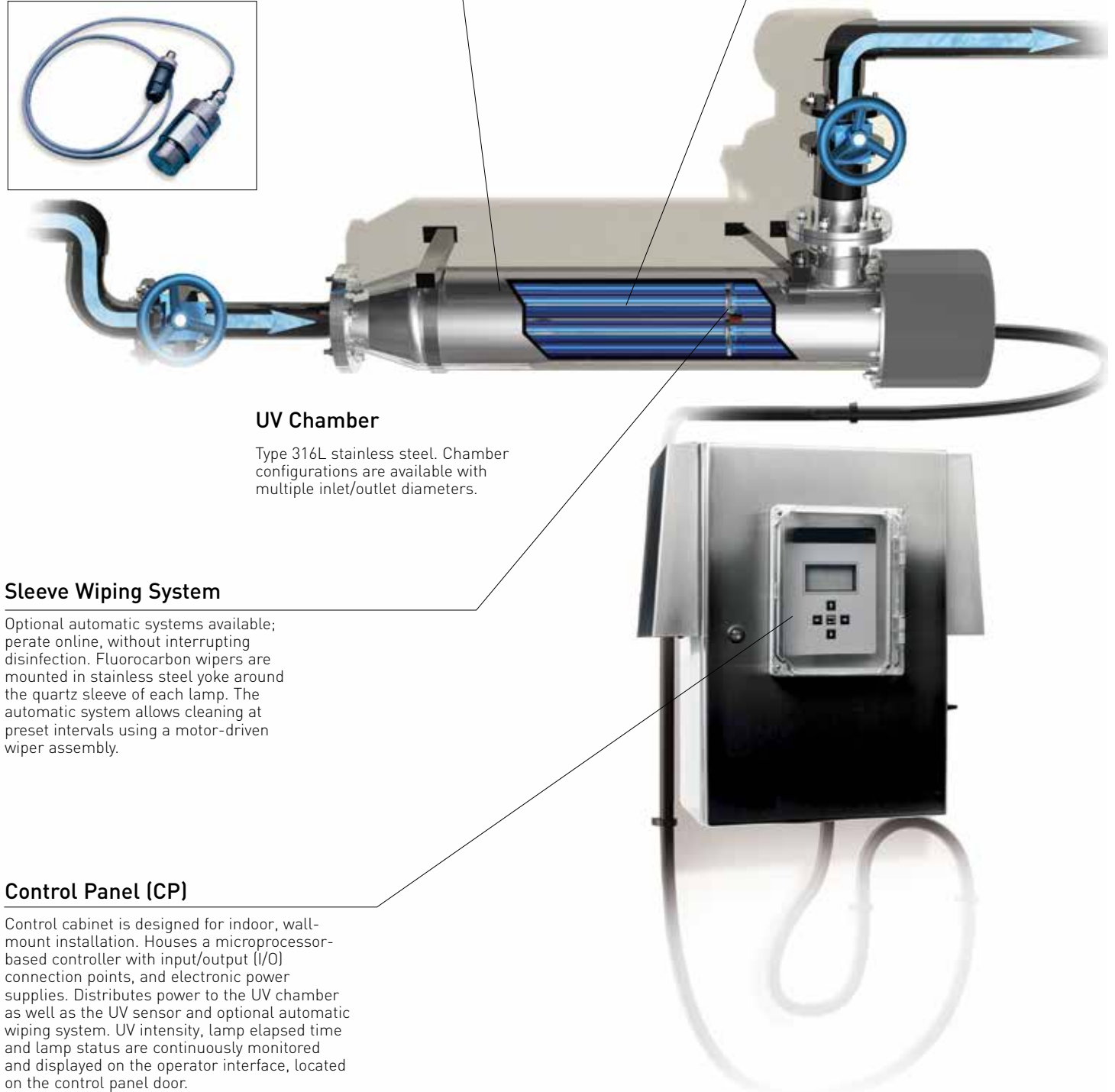
Optional automatic systems available; operate online, without interrupting disinfection. Fluorocarbon wipers are mounted in stainless steel yoke around the quartz sleeve of each lamp. The automatic system allows cleaning at preset intervals using a motor-driven wiper assembly.

## Control Panel (CP)

Control cabinet is designed for indoor, wall-mount installation. Houses a microprocessor-based controller with input/output (I/O) connection points, and electronic power supplies. Distributes power to the UV chamber as well as the UV sensor and optional automatic wiping system. UV intensity, lamp elapsed time and lamp status are continuously monitored and displayed on the operator interface, located on the control panel door.

## Remote Monitoring & Control

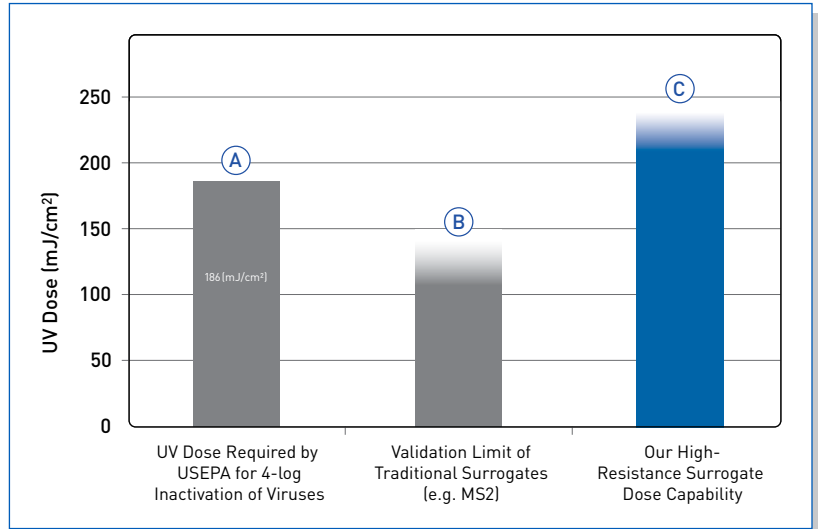
Robust microprocessor-based controller provides standard I/O signals for on/off control from a remote location. Programmable digital and analog I/O capabilities can generate unique alarms for individual applications, and send signals to operate valves and pumps. All units feature optional SCADA communication via Modbus, Modbus TCP/IP, EtherNet/IP and PROFINET.



## Industry-Leading Bioassay Validations

Validation testing to world standards ensures regulatory compliance regardless of location

- Validated in accordance with USEPA 2006 Guidance Manual
- Use of multiple surrogate organisms (T1, T7 and MS2) allows tailoring of UV dose to that of the target organism (e.g. *Cryptosporidium*)
- Intensity Setpoint or Calculated Dose control options
- Validations performed under worst-case hydraulics – with a 90° elbow at the inlet



## Validated Pasteurized Milk Ordinance (PMO) UV Solution for Dairy Industry

Configurable system solution to fully meet PMO requirements

- 3rd party validated UV disinfection system provides extra guarantee to disinfection performance
- Intuitive system provides at-a glance system status and allows remote operation
- High system stability and low maintenance requirement

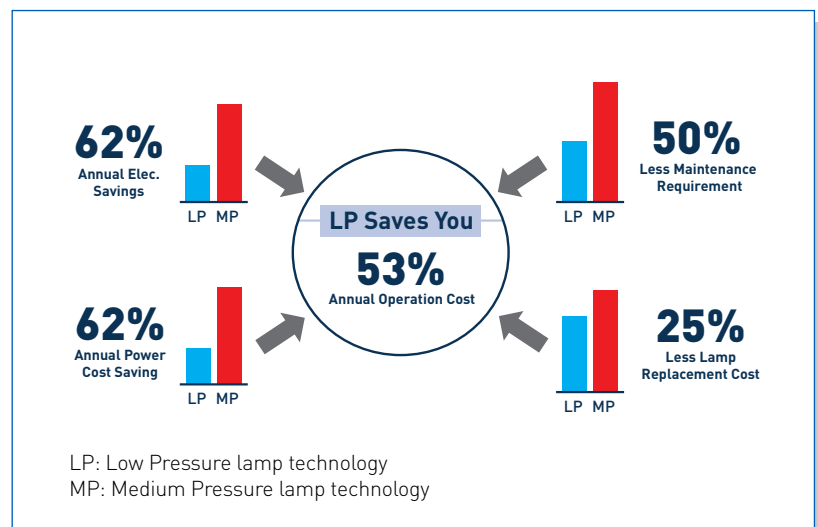


\* This product contains additional options. See Aquafine or an Authorized Distributor for details. Images shown for illustration purposes only.

## Cost efficient, High-Output Amalgam Lamps

Low Pressure Amalgam lamps provides you high performance, low energy consumption and low maintenance requirement

- Only need to replace lamps once a year - saves customer about 25% in lamp costs and reduces system downtime
- Saves customer up to 62% in electricity fees.
- Low request for lamp and chamber clean ups - saves customer labor fees and reduces system downtime
- Tolerate low flow or no flow - do not need additional cooling system



# SWIFTBEVERAGE™ SERIES // HIGH PERFORMANCE UV SYSTEMS

Model: SwiftBeverage	SBV300	SBV600	SBV1200	SBV1800
<b>MAXIMUM FLOW RATE</b>				
DISINFECTION @ 97%UVT (M <sup>3</sup> /HR)*	106-832 [24-189] GPM (M <sup>3</sup> /HR)**			
NUMBER OF LAMPS (LPHO)	3	6	12	18
<b>ELECTRICAL REQUIREMENTS</b>				
ELECTRICAL SUPPLY	208-240VAC SINGLE PHASE 2 W + GND, 60Hz L-L, 50HZ L-N			
OPERATING POWER (W)	810	1560	3060	4570
<b>CONTROLLER</b>				
UV SENSOR W/ 4-20mA	1 SENSOR STANDARD / 2ND REDUNDANT SENSOR OPTIONAL			
LAMP STATUS INDICATOR	STANDARD			
LAMP OUT ALERT DRY CONTACT	STANDARD			
DOSE PACING	STANDARD			
TEMP. SWITCH	STANDARD			
RUNNING TIME INDICATOR	STANDARD			
DEDICATED DIGITAL ALARM OUTPUTS	STANDARD			
REMOTE ON/OFF 24-240V AC/DC	STANDARD			
SCADA COMMUNICATION/MODBUS 485	STANDARD			
<b>CONTROL CABINET</b>				
CC SYSTEM RATING	NEMA 3R (NEMA 4X OPTIONAL)			
MATERIALS OF CONSTRUCTION	304 STAINLESS STEEL			
CC DIMENSIONS - H X W X D INCHES	24 X 16 X 10		24 X 24 X 10	48 X 36 X 10
<b>TREATMENT CHAMBER</b>				
MATERIALS OF CONSTRUCTION	316L STAINLESS STEEL			
INTERNAL SURFACE FINISH	Ra 32 [Ra 15 OPTIONAL]			
OPERATING TEMPERATURE °F (°C)	34°-104° [1°-40°]			
MAX. OPERATING PRESSURE PSI (BAR)	150 (10)			
INLET/OUTLET SANITARY FERRULE INCHES (mm)	6 (152)	8 (203)	12 (305)	16 (406)**
AUTOMATIC WIPER	OPTIONAL			
TC DIMENSIONS - H X W X D INCHES	16 x 15 x 83	20 x 21 x 81	26 x 25 x 83	32 x 30 x 83
<b>SHIPPING REFERENCES</b>				
DRY WEIGHT - POUNDS (KG)	500 (226.8)	600 (272.2)	1000 (453.6)	1364 (618.7)
DIMENSIONS (L x H x D)- Inches (mm)	87 x 49 x 36 (2210 x 1245 x 914)	87 x 49 x 36 (2210 x 1245 x 914)	90 x 42 x 36 (2286 x 1067 x 914)	87 x 49 x 47 (2210 x 1245 x 1194)

\* Validated Dose per USEPA UVDGM: 186 mJ/cm<sup>2</sup> after 12,000 hours of operation. \* ANSI FLANGE ONLY

\*\* Flow rate is application related. Please contact Aquafine for detailed sizing information

## Guaranteed Performance and Support Services

All of our systems come with a lifetime performance warranty. Global customer support is available from our Authorized Distributor Network and from our 24/7 Technical Service Group.

For questions regarding your application needs, please contact your local Authorized Distributor or Aquafine for more information.

To learn more about the brands and affiliates of Trojan Technologies, please visit [www.trojantechnologies.com](http://www.trojantechnologies.com)



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