

Handbook for Professional Kitchen Operators & Consultants

Food Safety Sanitation Solutions

Chemical Free for Food Retail & Food Service



Centralized Disinfection System



Central Disinfection System CDS-1 (support 4 faucets)



Stationary Disinfection System SDS-2 (support 8 faucets) SDS-3 (support 12 faucets)

Compact Ozone Water System



Compact Sanitation System



Sensor Faucet (optional accessary of (SS)



Central Disinfection System

CDS (support 2 faucets)

BioSure provides a complete, easy to use system to integrate ozonated water in the water supply system perfectly. Ensures the most natural and stable ozonated water used in every food processing step.

The application of BioSure ozonated water in every step of kitchen helps to improve food hygiene, cut sanitation cost, and surpass HACCP standard.

PROUDLY CERTIFIED BY



CSS

















Enhance HACCP SOPs from BioSure

Phase I - Personal Hygiene, Washing **Hands & Safe Water**

- ▲ Enhance "Washing Hands" SOP.
- employees.
- ▲ Prevent contamination of food by pathogenic bacteria in water.

Phase II- Surface Sanitation / Washing Fruits and Vegetables

- ▲ Enhance "Sanitize Food Contact Surfaces" SOP.
- **▲** Ensure all food contact surfaces are effectively
- ⚠ Prevent food borne illness by contaminated
- ▲ Following support by enhanced "Washing" Hands" & "Sanitize Food Contact Surfaces"
- Wash under cold running water.
- ▲ Reduce risk of food borne illness by contaminated produce.

Phase III- Food Serving / Food Transportation/ Food Bar/ **Storage & Preparation**

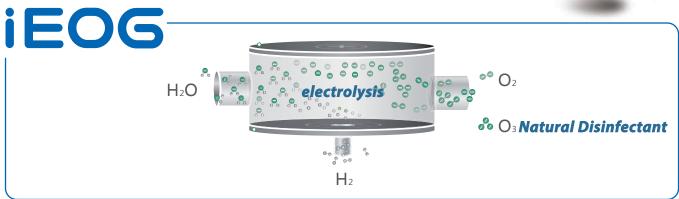
- ▲ Following support by enhanced "Washing Hands", "Sanitize Food Contact Surfaces" & "Washing Fruits and Vegetables" SOPs.
- ▲ Prevent cross-contamination during food serving or transporting, held on food bar, and storage and preparation.
- ▲ Avoid using chemicals causing residue when in use.

Technology

Global Patented iEOG (indirect Electrolytic Ozone Generator)

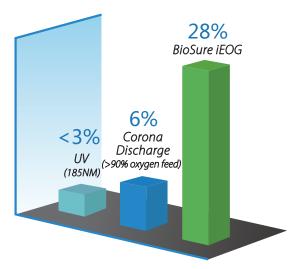
- ✓ Generates ozone from pure water, NOx free
- ✓ After reaction, ozone turns into oxygen, residual free.





INDUSTRY #1 PERFORMANCE

- ✓ Powered by iEOG* the world leading ozone technology
- Patented ATS (Anytime System) for real-time "Right on Spec" performance
- ✓ No need for an oxygen generator or dehumidifier
- ✓ Not affected by air quality and humidity
 - * IEOG (Indirect Electrolytic Ozone Generation) engages only water to produce concentrated ozone and oxygen without harmful or any other by-products



Ozone Generation Efficiency

INDUSTRY # 1 RELIABILITY

- ✓ Require no dry air or oxygen concentrator in the process
- Suitable for food processing environment
- ✓ Consistent and immediate on-demand ozone production for use
- ✓ Full time performance monitoring
- ✓ High standard international warranty service*.
 - * Two-year limited warranty. For more information, please contact your regional distributor

INDUSTRY #1 SAFETY DESIGN

- ▲ NOx-free during operation
 - High concentration ozone water be generated on demand, absolutely NOx free.
- Built-in off gas destructor
 - Released ozone is well managed below the periodic exposure levels established by OSHA

Food Safety & Sanitation

Without an integral sanitation management system, a well-equipped commercial kitchen not only could expose their customers to the danger of food poisoning, but also bring serious reputation loss to the owner.

Statistics show that in the United States, millions of people suffer from food poisoning every year, of which more than half came from bacterial contamination. These cases not only cost brand reputation, but also brings law suits and subsequent problems on compensation.

As ozone technology continues to advance, BioSure is delivering excellent ozone sanitation and disinfection technology to commercial applications. With applications specialized for every type and stage of food service, solutions from BioSure can help improve food safety, cut sanitation costs and exceed regulatory standards.

Common sanitation methods in catering industry are:

- 1. Heat sanitation (Boiling)
- 2. Acid inhibition (water ionizer)
- 3. Conventional ozone (Corona Discharge)
- 4. Chlorine sanitation

Points 1 to 3 need a lot of energy and resource consumption; point 3 even needs additional spending on equipment purchasing and maintenance. Pint 4 not only adds additional chemical cost, the chemical residues left may also affect the flavor of food and threaten human health. Most of the sterilization methods above can be replaced with BioSure, which is a more user-friendly and cost-effective alternative.



Sanitation Efficiency & Applications

		Boiling	Chlorine	BioSure ozone	Corona Discharge	Water lonizer
	Bactericidal Effect	0	0	0	NA	NA
	Residual Free	0	Х	0	0	Х
	Harmful Byproducts Free	0	Х	0	X	Х
Efficiency	Convenience	Х	Х	0	0	0
	Immediate	Χ	0	0	X	0
	Energy Saving	Χ	0	0	0	0
	Water Saving	0	0	0	0	Х
	Hand Sanitation	Χ	0	0	poor	Unproven
	Food Wash	Х	with residual	0	poor	Unproven
Application .	Countertop Sanitation	Х	with residual	0	poor	Unproven
	Cutting Board & Knives	0	with residual	0	poor	Unproven
	Ice Machine	Χ	Х	0	Х	Х
	Beverage Lines	Χ	Х	0	Х	Х

SGS test results show Biolux ozonated water is an effective sanitizer (>99.999%) and efficient pesticide decomposition agent.

The product passed the testing process managed by Campden BRI on terminal sanitizer efficacy test.

BioSure Ozonated Water Efficiency Test					
	Test Item	0 Sec	5 Sec	15 Sec	Reduction(%)
	Staphylococcus aureus(CFU/ml)	5.4x10 ⁵	not detected	not detected	>99.999
Antimicrobial Eciency Test	Escherichia Coli(CFU/ml)	2.5x10 ⁵	6.1x10	< 10	>99.99
	Salmonella(CFU/ml)	1.7x10 ⁵	1.9x10	not detected	>99.999
	Pseudomonas aeruginosa(CFU/ml)	4.5x10 ⁵	not detected	not detected	>99.999
	Candida albicans(CFU/ml)	1.3x10 ⁵	not detected	not detected	>99.999
	MRSA(CFU/ml)	1.3x10 ⁵	not detected	not detected	>99.999
Residual Pesticide Decomposition Test	Mevinphos	0.642	0.0	100	100
	Permethrin	0.559	0.03	337	94

The above test results by SGS show the efficiency of BioSure's ozonated water with 5 second and 15 second exposure times for eliminating various microorganisms up to 99.999% and chemicals up to 100%. SGS is the world's leading inspection, verification, testing and certification company. SGS is recognized as the global benchmark for quality and integrity.

Soil Association, UK, allows the organic vegetable suppliers in UK to use the iEOG ozonated water to process all organic vegetables.



Installation Diagram & Applications

In Commercial Kitchen



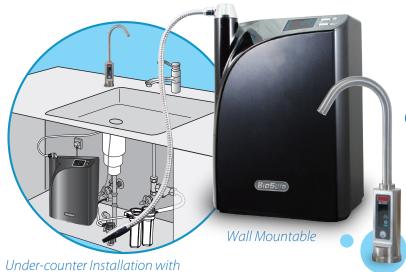
Other Areas in Commercial Kitchen



- ▲ Food preparation areas sanitation
- ✓ Vegetable washer integration disinfection / chemical degradation
- ▲ Salad preparation disinfection
- ▲ Garbage room deodorization
- ▲ Pastry room bacteria-free ice & water
- Sashimi section disinfection

- General surface wash & sanitation sanitation
- Buffet area bacteria-free ice
- Display areas bacteria-free ice & water
- ▲ Fish processing station disinfection
- → Hand wash stations disinfection





CSS

Compact Sanitation System

Applications

Motion-Sensor Faucet

- ✓ Salad preparation ✓ Hand wash stations
- ✓ Sashimi section
- ✓ General surface wash & sanitation
- ✓ Display areas
- ✓ Fish processing station





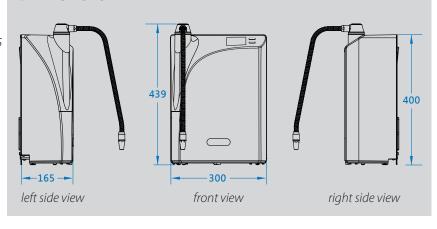












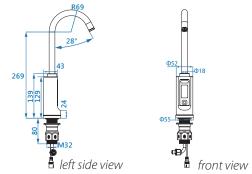
Campden BRI SGS

Specification

Model	CSS			
Ozonated Water Output				
	Boost	Disinfection		
Flow Rate	120 LPH (0.5 GPM)	300 LPH (1.3 GPM)		
Concentration	8.0~1.0 ppm	6~0.5 ppm		
Output Pressure	0.3 kg/cm2 (4.4 psi)			
Operating Requirements				
Power Supply	100~240V, 50/60 Hz			
IP Code	IPX2			
Input Water	Municipal Water Source			
Water Temperature	5 - 30 °C (41 - 86 °F)			
Input pressure	2.0-7.0 kg/cm ² (29 - 85 psi)			
Input pressure	3/8 "			
Room Temperature	5 - 35 ℃ (41 - 95 °F)			
Room Conditions	Well Ventilated Environment			

faucet

Dimension



Design Parameters			
Depth (D)	165 mm (6.5 in)		
Width (W)	300 mm (11.8 in)		
Height(H)	400 mm (15.7 in)		
Net Weight	7.5 kg (15.5 lb)		
Power Consumption	60W		
Material Casing	ABS		

Applications	Conc.
High Protein Products	4.0 ppm
General Terminal Santizing	3.7 ppm
General Direct Food Contact	2.0 ppm
General Surface Disinfection	1.0 ppm





Applications

- ✓ Food Preparation Areas
- ✓ Display areas
- ✓ Vegetable washer integration ✓ Fish processing station
- ✓ Salad preparation
- Hand wash stations
- ✓ Sashimi section
- ✓ General surface wash & sanitation













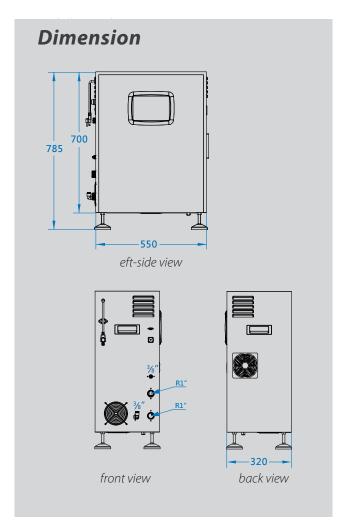


Campden Bri SGS

Specification

Model	CDS			
Ozonated Water Output				
# of Faucet Supply	2 pcs			
Flow Rate	100 - 4000 LPH (0.4-17.7 GPM)			
Concentration	4.0 ppm@100LPH 0.10 ppm@4000LPH			
Output Pressure	≤ Input water pressure (max. 3kg/cm² or 42.7 psi)			
Operating Requirements				
Power Supply	□ 100 ~ 120V , 50/60 Hz □ 200 ~ 240V , 50/60 Hz			
IP Code	IPX2			
Input Water Quality	Municipal Water Source			
Temperature	5 - 30 °C (41 - 86 °F)			
Pressure	2.0 - 4.0 kg/cm ² (29 - 57 psi)			
Pipe Diameter	1"			
Room Temperature	5 - 35 ℃ (41 - 95 °F)			
Room Conditions	Well Ventilated Environment			

Central Disinfection System



Design Parameters			
Depth (D)	320 mm (12.6 in)		
Width (W)	550 mm (21.7 in)		
Height(H)	785 mm (30.9 in)		
Net Weight	50 kg (110 lb)		
Power Consumption	700/900 W		
Material Casing	Stainless Steel (SUS304)		

Applications	Conc.	Flow Rate
High Protein Products	4.0 ppm	100 LPH (0.4 GPM)
General Terminal Santizing	3.7 ppm	120 LPH (0.53 GPM)
General Direct Food Contact	2.0 ppm	200 LPH (0.88 GPM)
General Surface Disinfection	1.0 ppm	380 LPH (1.67 GPM)
Water Disinfection	0.5 ppm	750 LPH (3.30 GPM)





Applications

- ✓ Food Preparation Areas
- ✓ Display areas
- ✓ Vegetable washer integration ✓ Fish processing station
- ✓ Salad preparation
- Hand wash stations
- ✓ Sashimi section
- ✓ General surface wash & sanitation













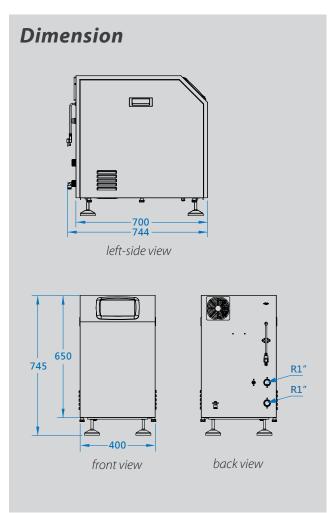
Campden Bri SGS

Specification

Model	CDS-1			
Ozonated Water Output				
# of Faucet Supply	4 pcs			
Flow Rate	100 - 4000 LPH (0.4-17.7 GPM)			
Concentration	7.0 ppm@100LPH 0.15 ppm@4000LPH			
Output Pressure	≤ Input water pressure (max. 3kg/cm² or 42.7 psi)			
Operating Requirements				
Power Supply	□ 100 ~ 120V , 50/60 Hz □ 200 ~ 240V , 50/60 Hz			
IP Code	IPX2			
Input Water Quality	Municipal Water Source			
Temperature	5 - 30 °C (41 - 86 °F)			
Pressure	2.0 - 4.0 kg/cm²(29 - 57 psi)			
Pipe Diameter	³/8" and 1"			
Room Temperature	5 - 35 °C (41 - 95 °F)			
Room Conditions	Well Ventilated Environment			

CDS-1

Central Disinfection System



Design Parameters			
Depth (D)	700 mm (27.6 in)		
Width (W)	400 mm (15.8 in)		
Height(H)	650 mm (25.6 in)		
Net Weight	85 kg (176 lb)		
Power Consumption	950 W		
Material Casing	Stainless Steel (SUS304)		

Applications	Conc.	Flow Rate
High Protein Products	4.0 ppm	180 LPH (0.79 GPM)
General Terminal Santizing	3.7 ppm	200 LPH (0.88 GPM)
General Direct Food Contact	2.0 ppm	380 LPH (1.67 GPM)
General Surface Disinfection	1.0 ppm	750 LPH (3.30 GPM)
Water Disinfection	0.5 ppm	1500 LPH (6.60 GPM)





SDS-2/SDS-3

Stationary Disinfection System

Applications

- ✓ Food Preparation Areas
- √ Vegetable washer integration
- ✓ Salad preparation
- ✓ Garbage room
- ✓ Sashimi section
- General surface wash & sanitation
- ✓ Display areas
- ✓ Fish processing station
- Hand wash stations











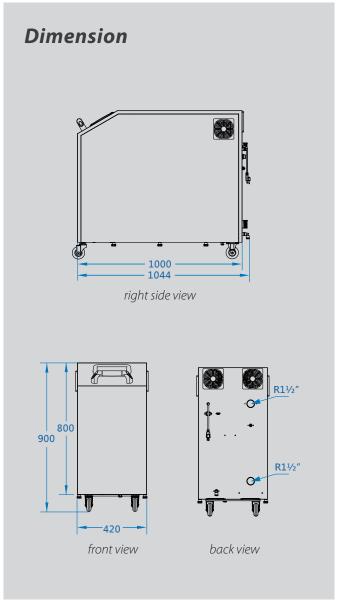




Campden BRI SGS

Specification

Model	SDS-2	SDS-3		
Ozo	nated Water Output			
# of Faucet Supply	8 pcs	12 pcs		
Flow Rate	100-5000 LPH (0.4-22.0 GPM)			
Concentration	≥14.0 ppm@100LPH ≥0.3 ppm@4000LPH ≥0.5 ppm@4000LPH			
Output Pressure	≤ Input water pressure (max. 3kg/cm²)			
Operating Requirements				
Power Supply	□ 100 ~ 120V , 50/60 Hz □ 200 ~ 240V , 50/60 Hz			
IP Code	P Code IPX2			
Input Water Municipal Water Source		ource		
Water Temperature	5 - 30 °C (41 - 86 °F)			
Input pressure	2.0-4.0 kg/cm ² (29 - 57 psi)			
Input pressure	1.5" and 3/8 "(2 water inlets required)			
Room Temperature	5 - 35 °C (41 - 95 °F)			
Room Conditions	Well Ventilated Environment			



Design Parameters								
Model	SDS-2	SDS-3						
Depth (D)	1000 mm (39.4 in)							
Width (W)	420 mm (16.5 in)							
Height (H)	900 mm (35.4 in)							
Net Weight	140 kg (286 lb)	150 Kg (330lb)						
Power Consumption	1050 W	1150W						
Material Casing	Stainless Steel(SUS304)							

Food Safety & Sanitation Ozone Specialist

Model		C:	SS	CDS	CDS-1	SDS-2	SDS-3	
Appearance					0230			
Ozonated Water Output	Flow Rate	120 LPH (0.5 GPM)	300 LPH (1.3 GPM)	100~4000 LPH (0.4~17.7 GPM)		100~5000 LPH (0.4~22.0 GPM)		
	Concentration	8.0~1.0 ppm	6.0~0.5 ppm	4 ppm@100LPH 0.10 ppm@4000LPH	7.0 ppm@100LPH 0.15 ppm@4000LPH	≥14.0 ppm@100LPH ≥0.3 ppm@5000LPH	≥20.0 ppm@100LPH ≥0.5 ppm@5000LPH	
	Output Pressure	0.3 kg/cm² (4.4 psi)		≤ Input water pressure (max. 3kg/cm² or 42.7 psi)				
Operating Requirements	Power Supply	100 ~ 240V, 50/60 Hz		□ 100 ~ 120V, 50/60 Hz □ 200~240V, 50/60 Hz				
	IP Code	IPX2						
	Input Water Quality	Municipal Water Source						
	Temperature	5~30 °C (41~86 °F)						
	Pressure	2.0~7.0 kg/cr	n² (29~85 psi)	2.0~4.0 kg/cm²(29 ~ 57 psi)				
	Pipe Diameter	3/	8		1"			
	Room Temperature	5~35 °C (41~95 °F)						
	Room Ventilation	Min. 5 air changes per hour						
Design Parameters	Depth (D)	165 mm (6.5 in)		320 mm (12.6 in)	700 mm (27.6 in)	1000 mm	(39.4 in)	
	Width (W)	300 mm (11.8 in)		550 mm (21.7 in)	400 mm (15.8 in)	420 mm	(16.5 in)	
	Height (H)	400 mm (15.7 in)		785 mm (30.9 in)	650 mm (25.6 in)	900 mm	(35.4 in)	
	Net Weight	7.5 kg (15.5 lbs)		50 kg (110 lbs)	85 kg (176 lbs)	140 kg (286 lbs)	150 kg (330 lbs)	
	Power Consumption	60W		900W @100/120 VAc; 700W @200/240 VAc 950W @100/120 VAc; 750W @220/240 VAc 1050W @100/120 VAc; 850W @220/240 VAc 1150W @100/120 VAc; 950W @220/240 VAc			1150W @100/120 VAc ; 950W @220/240 VAc	
	Material Casing	ABS		Stainless Steel (SUS304)				
Application	Concentration	Flow Rate						
High Protein Products	4.0 ppm			100 LPH (0.4 GPM)	180 LPH (0.79 GPM)	360 LPH (1.58 GPM)	540 LPH (2.38 GPM)	
Terminal Sanitation	3.7 ppm	8.0~1.0 ppm @120 LPH (0.5 GPM) and/or 6.0~0.5 ppm @300 LPH (1.3 GPM)		120 LPH (0.53 GPM)	200 LPH (0.88 GPM)	400 LPH (1.76 GPM)	600 LPH (2.64 GPM)	
Direct Food Contact	2.0 ppm			200 LPH (0.88 GPM)	380 LPH (1.67 GPM)	740 LPH (3.26 GPM)	1120 LPH (4.93 GPM)	
Surface Disinfectiont	1.0 ppm			380 LPH (1.67 GPM)	750 LPH (3.30 GPM)	1500 LPH (6.60 GPM)	2250 LPH (9.90 GPM)	
Water Disinfection	0.5 nnm		Α	750 LPH (3.30 GPM)	1500 LPH (6.60 GPM)	3000 LPH (13.2 GPM)	5000 LPH (17.6 GPM)	
Ice Machine Disinfection				Multipel ice makers available. Check ice makers' flow rate requirements.				







Leangbukta 40, 1392 Vettre, Norge post@ozone.no tel: +47 66 69 90 90