



Ice Machine Disinfection System

IM-7100



INTRODUCTION

The Ice Machine Disinfection System integrates into water supplies to disinfect ice machines with adjustable ozonation levels. The system utilizes Biotek's patented technology to produce ozone, the strongest food grade disinfectant approved by the FDA. Ozone can eliminate 99.999% of bacteria, viruses, molds and chemicals with 50 times the efficiency of chlorine. When integrated with an ice machine under clean and extra clean settings, ice harvest is disinfected and free of microorganisms. With the anti-bacterial ice, the ice possesses residual disinfection properties to further inhibit microbial growth. In addition, the attached spray hose will allow convenient ice storage bin disinfection.

CLEAN & EXTRA CLEAN ICE USERS:

Ozone treated water to make ice for consumption and use in high quality products

- Restaurants, Bars, and Hotel Beverage Vendors
- Butchers & Meat/ Poultry Processors
- Bread, Cakes and Pastry Producers
- Hospitals and Clinics

ANTI-BACTERIAL ICE USERS:

Ozonated ice for storage of food products to maintain high level of hygiene and prolong freshness

- Fish and Seafood Industry
- Supermarkets and Food Retailers
- Caterers and Commercial Kitchens

FEATURES:

- Built-in flow switch and pressure switch
- No PLC required- plug and play
- Keep water / ice / distribution pipes / storage bins sanitized
- Replace chemical dosing systems, no chemical refills or regular purchases required

ADVANTAGES:

- Tap water is the only required input
- NOx-free ozone generation, only ozone and oxygen produced
- Instant and continuous flow of fully dissolved and pure ozonated water
- Powerful disinfection to eliminate pesticides, viruses, bacteria and chemicals
- Low voltage
- No noise
- Intelligent Consumable Parts Indicator

POWER SUPPLY:

- Power consumption: 90 watts
- AC input: 200~240V, 100~120V, 50/60Hz

INPUT SPECIFICATIONS:

- Input water: municipal water
- Input water Pressure: 42~100 psi (3.0~7.0 kg/cm²) *
- Input water Temperature: 41~86 °F (5~30 °C)
- Input water chlorine residual < 0.1ppm*
- * If the input water pressure is over 100 psi (7.0 kg/cm²), an exterior water regulator is required
- * If the chlorine residual is over 0.1 ppm, a pre-filter is required to remove excess chlorine

OUTPUT SPECIFICATIONS:

- Ozonated water output capacity: 11.4 ~ 15.1 gal/min (180 ~240 L/hr)*
- Ozonated water output pressure: 4.2~17 psi (0.3~1.2 kg/cm²)
- Ozonated water concentration: 0.5~1.5ppm
- * Output specifications are based on following test conditions:
 - Input water pressure: 50 psi (3.5 kg/cm²)
 - Input water temperature: 59 °F (15 °C)
 - Ambient temperature: 68 °F (20 °C)
 - Water quality:
 - Conductivity: ≤ 500 μs/cm
 - Chlorine residual: < 0.1 ppm
- * The test results based on operating the ozonated water generator for 30 minutes
- * Program: 5 programs available, based on production capacity

COMPATIBILITY:

- This system is designed to work only with ice machines that use a water inlet solenoid as the water inlet control.

APPEARANCE:

- Stainless steel enclosure
- Net Weight 47.5 lbs (21.5 kg)

WARRANTY:

- Limited warranty for 1 year or up to 3,000 operation hours (whichever comes first)

ACCESSORIES:

- Pre-filter only required for regions with low quality municipal water



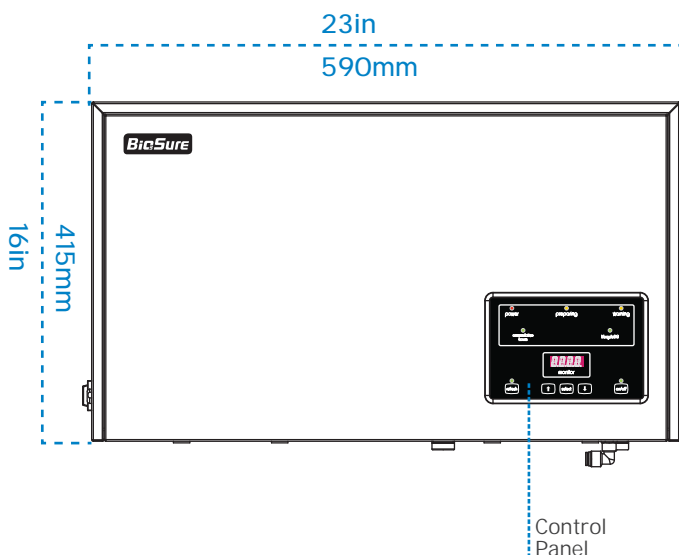
APPLICATIONS

The Ice Machine Disinfection System's pure and dissolved ozone is injected into the water supply to provide disinfecting properties to ice machines. The ozonated water will eliminate and prevent biofilm growth in the waterline as well as its surroundings. When integrated with ice machines, mold and microbial growth, therefore maintenance, is minimized on the machine and storage bins. The ice and water produced with ozone will completely sanitize and improve quality of beverages. The spray hose attachment will prevent biofilm growth on bins through a quick and easy ozonated water rinse. Therefore, the system will greatly improve any ice produced through better safety, without altering the taste and smell.

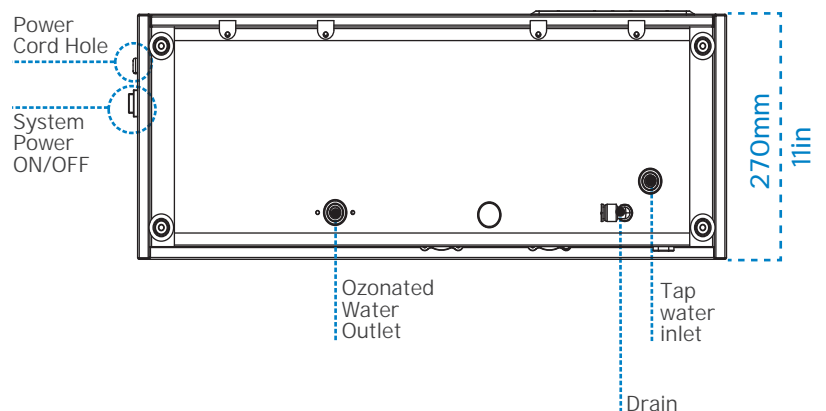


DIMENSIONS DIAGRAM

FRONT VIEW



BOTTOM VIEW





Ice Machine Disinfection System

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TYPES OF ICE PRODUCTION

CLEAN ICE

Ice Production Capacity (24hr)		Program	Mode	Estimated Dissolved Ozone in Ice (ppm)	Surface Disinfection Spec
lb	kg				
≤ 360	≤ 800	SET 1	C1	0.05	0.5ppm ± 0.3@200L/hr
360-680	800-1500	SET 2	C1	0.05	0.5ppm ± 0.3@200L/hr
680-1360	1500-3000	SET 4	C1	0.05	0.5ppm ± 0.3@200L/hr
1360-2040	3000-4500	SET 1	C2	0.05	0.5ppm ± 0.3@200L/hr
2040-2700	4500-6000	SET 4	C2	0.05	0.5ppm ± 0.3@200L/hr

*Based on Ice Production Capacity, select Program and Mode accordingly for desired Dissolved Ozone in Ice Concentration

EXTRA CLEAN ICE (FOR LOW QUALITY WATER SUPPLY)

Ice Production Capacity (24hr)		Program	Mode	Estimated Dissolved Ozone in Ice (ppm)	Surface Disinfection Spec
lb	kg				
≤ 360	≤ 800	SET 1	C2	0.1	1.0ppm ± 0.3@200L/hr
360-680	800-1500	SET 2	C2	0.1	1.0ppm ± 0.3@200L/hr
680-1360	1500-3000	SET 4	C2	0.1	1.0ppm ± 0.3@200L/hr
1360-2040	3000-4500	SET 5	C2	0.1	1.0ppm ± 0.3@200L/hr
2040-2700	4500-6000	SET 4	C2	0.1	1.0ppm ± 0.3@200L/hr

ANTI-BAC ICE (CLEAN ICE WITH ANTIBACTERIAL PERFORMANCE FOR HIGH LEVEL OF HYGIENE TO PROLONG FRESHNESS)

Ice Production Capacity (24hr)		Program	Mode	Estimated Dissolved Ozone in Ice (ppm)	Surface Disinfection Spec
lb	kg				
≤ 360	≤ 800	SET 1	C3	0.5	1.5ppm ± 0.3@200L/hr
360-680	800-1500	SET 2	C3	0.5	1.5ppm ± 0.3@200L/hr
680-1360	1500-3000	SET 3	C3	0.5	1.5ppm ± 0.3@200L/hr
1360-2040	3000-4500	SET 4	C3	0.5	1.5ppm ± 0.3@200L/hr
2040-2700	4500-6000	SET 5	C3	0.5	1.5ppm ± 0.3@200L/hr

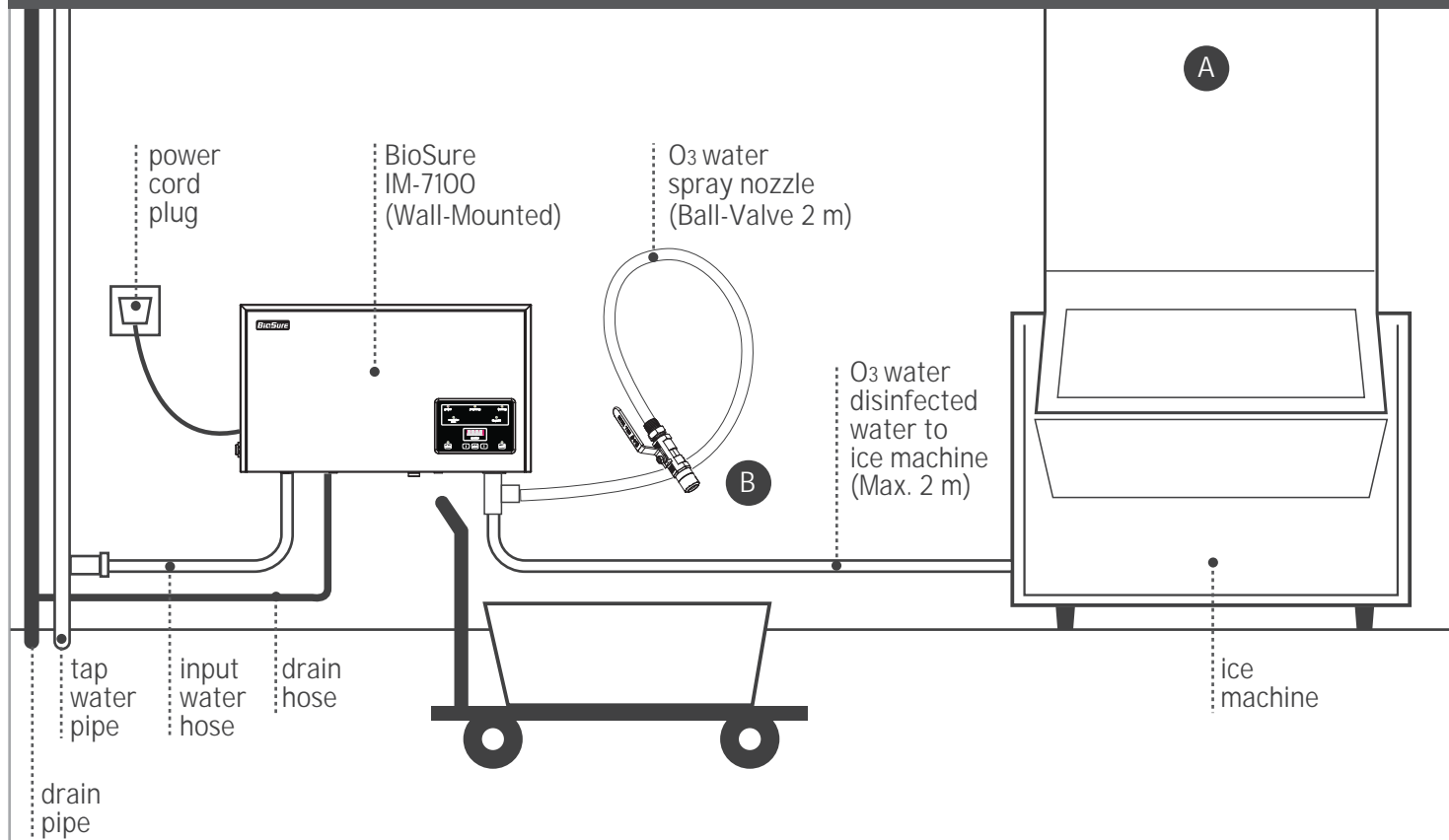
Product compatibility:

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SPARE PARTS LIFETIME

IM-7100	Daily use time estimated	Replacement Period
Reverse Osmosis	8 hours	1.5 year
Deionizer Resin	8 hours	1.5 year
Ozone Generator	8 hours	1.5 year
Off-gas Destruct Unit	8 hours	1.5 year
Safety Valve	8 hours	1.5 year
Mixing-water Check Valve	8 hours	1.5 year
Input-water solenoid Valve	8 hours	1 year
Drain-water solenoid valve	8 hours	1.5 year
AC drain attachment	8 hours	1 year

SETUP



A ICE MACHINE SANITATION
Only BioSure's IM-7100 can provide continuous ice machine sanitation, including the water, distribution systems, and machine itself.

B ICE STORAGE BIN DISINFECTION
Attached spray hose extends to cover ice storage bin disinfection at anytime without residuals to significantly reduce hygiene risks.

SETUP INPUT/OUTPUT

- Power cord 2m (6.5 ft)
- Input water hose 2m (6.5 ft)
- Drain hose 3m (9.8 ft)
- Outlet hose (to ice machine) 2m (6.5 ft)
- Spray nozzle hose 2m (6.5 ft)