BioSure PROFESSIONAL

Electrolytic Ozone Application Guidebook

Modular Systems and Applications

Reduced maintenance
No feed gas preparation
Easy to install and operate
High performance and reliability
High purity ozone production up to 28wt%

OWS Series

G Series

Powered by BES

Turnkey Solutions for New Generation Ozone Professionals

Superior Benefits

Electrolytic Ozone Generation (EOG) is a novel technology which produces pure ozone from water instead of gaseous air or oxygen.

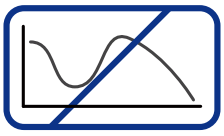
Introduced by BES Group since 1988, iEOG (Indirect Electrolytic Ozone Generation) is an unique process which includes a built-in pure water preparation system for EOG module in our systems to enable them are capable of working in almost any conditions as long as tap water resource and electricity supply are available.

iEOG is an effective and beneficial solution for small to medium commercial-scale applications without inherent disadvantages associated with conventional ozone processes that rely on air or oxygen preparation.

No feed gas preparation

Performance independent to air quality, humidity and flow.

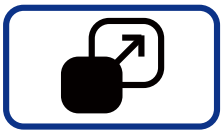
No Nitric Oxides (NOx) & Nitrous Acid



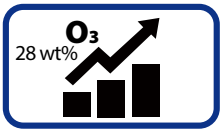
No significant fluctuations in output

Reduced equipment size and maintenance

Easy integration & operation



Standardized modular design, expandable ozone capacity



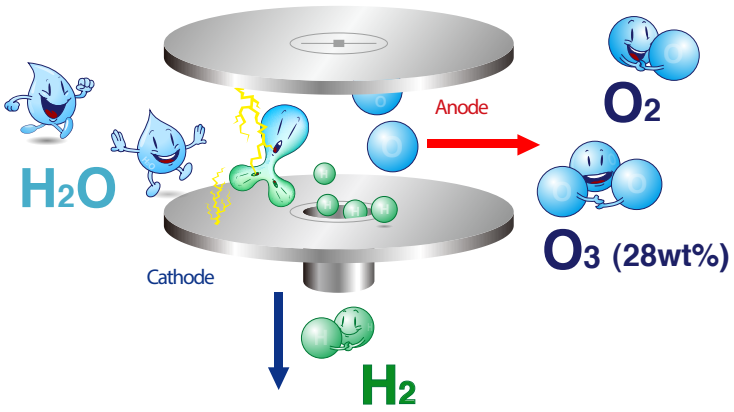
Pure ozone generated at high concentrations

Full time self-monitoring, real-time alarm & service codes

Technology Highlights

- PEM technology
- No ionic contamination
- Instant start-up performance
- Extreme high concentration output
- Solid and durable long working lifespan
- Easily integratable maintaining system integrity
- User friendly with cell controls and performance monitoring
- Modular and scalable intelligent design that is also extremely compact

In the process, the electrolytic cell splits water into its basic elements and then converts part of the liberated oxygen (O_2) into ozone (O_3).



Market & Applications

Pure and Ultrapure Water

Recirculation Water Loop Disinfection
- Electronics
- Cosmetics
- Pharmaceutical
- Biotechnology

Medical Water

Water & Waterline Disinfection
Waterline Biofilm Removal & Prevention

Cooling Towers

Replace Chemical Biocide
Legionella Control
Cost Savings

Water Features

Replace Chemical Biocides:
- Water Sanitation
- Legionella Control

Beverage & Breweries

Process Water Disinfection
Bottle Rinsing
Barrel Washing Wineries
Clean-in-Place (CIP) Integration

Agriculture & Greenhouse

Complete Chemical-Free Microbial Control
Growing Surface Sanitation
Mist and Drip System Integration

Food Processing & Food Safety

Replace or Reduce Chemical Sanitizer Usage
- Food Contact Sanitation
- Equipment & Tool Sanitation
- Tanks or Container Washing
- Walls and Floors
- Tray Washer Integration
- Well Water Treatment Integration

Commercial Laundry

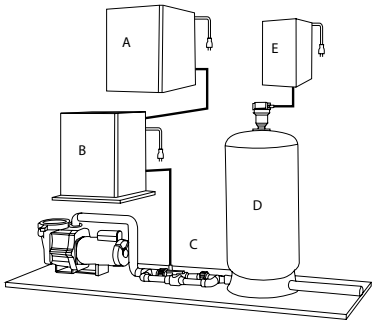
Clinics & Hospitals
- Rags & Mops

Senior Care & Welfare Institutes
- Linens

Laundromats
- Comtaminated Items

The Most Advanced, Yet the Easiest-to-Use

Corona Discharge



A. Feed gas preparation

B. Ozone generator

C. Injection module

D. Contact Vessel

E. Off-gas vent and destructor

Improved simplicity

Integrated Solution

Fully Integrated System

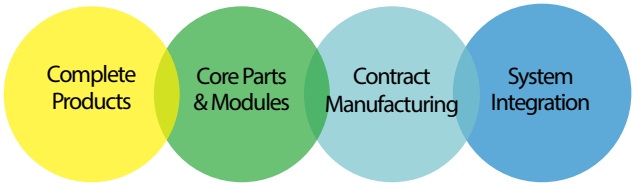
Specifications

Series		OWS Series		G Series		
Model Name		OWS-1	OWS-3	G3	G6	G9
Model Number		EOS8131-CD	EOS8132-SD	EOS8131-CL	EOS8132-CL	EOS8134-CL
System Type		Modular iEOG Ozonated Water System		Scalable iEOG Ozone Generator		
Output Property		Dissolved Ozone in Solution		28wt% Ozone Gas		
Ozone Production		1.2 g/h	3 g/h	3 g/h	6 g/h	9 g/h
				Equivalent to 15g, 30g, and 45g.O_3/h by O_2 feed Corona Discharge Ozone Generator		
Water Ozonation	Scale	Up to 30 g.O_3/h including self-produced		NA		
	Flow Rate	200 - 6000 LPH (0.88 - 26.42 GPM)				
	Pressure	≤ Input pressure (max. 5 kg/cm^2 or 71 psi)				
	Conc. Level (ppm)	Depend on the amount of ozone supplied, water flow and dissolution rate. Suggested given quotes to the dissolution rate in a result calculation are: - 85% for G-Series + OWS-Series or OWS-Series - 50-65% for G-Series applied with a venturi Note: This is a conservative minimum performance considerable for water temperature ranging 20 - 30°C (68 - 86 °F).				
iEOG Feed Water Requirements		5 - 30 °C (41 - 86 °F), Conductivity < 500 µs/cm, Chlorine < 0.1ppm, Flow rate ≥ 400 LPH (1.76 GPM), Pressure 2 - 7 kg/cm^2 (29 - 100 psi).				
Ambient Temp. & RH%		5 - 35 °C (41 - 95 °F) & < 90%				
Power Supply		100 - 120V, 50/60 Hz or 220 - 240V, 50/60 Hz				
Rated Power		900W	1150W	300W	600W	900W
Protection Class		IPX2				
Materials		Enclosure: Stainless Steel 304 Interior: Wet surface and ozone contact: Stainless Steel 304*, Titanium, PVDF, PTFE, Viton				
Dimensions (W x D x H)		550 x 310 x 680 (mm) 21.7 x 12.2 x 25.6 (in)	760 x 350 x 1034 (mm) 29.9 x 13.8 x 40.7 (in)	760 x 350 x 1034 (mm); 29.9 x 13.8 x 40.7 (in)		
Weight		50kg (110lbs)	80kg (243lbs)	60kg (132lb)	67kg (148lbs)	75kg (165lbs)
Connections	iEOG feed water inlet	3/8" compression connect				
	External supply inlet	3/8" compression connect				
	Water Inlet & Outlet	1 ½"		NA		
	Gas Outlet	NA		3/8" compression connect		
	Drain	3/8" push fit quick connect				
Control Method		Primary: Built-in flow switch Alternative/Optional: External timer switch or contact type on-off switch of similar.				

*Optional Stainless Steel 316(L) for certain parts is available upon request. Please contact BES Group for more information.

About Us

Since 1988, BES Group has been the global leader in electrolytic technology. Converting water to ultra pure ozone gas and hydrogen gas is our core technology. Series products include Food Safety & Sanitation, Healthy Environment, Clean Water, and Sanitation & Wellness.
All products and components are tested for high performance, safety, and reliability with required certifications from government agencies and leading 3rd party labs.



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ISO 9001 Certified

Technologies applied are protected by one or more of the following patents: US 8,308,914 B2, US 9,757,697 B2, US 9,248,208 B2

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