# **SMART-WC GENERATOR**

#### STATE-OF-THE-ART OZONE GENERATION FOR A VARIETY OF APPLICATIONS.

The world's most reliable, water cooled ozone generator now operates with the OWS serviceale cell (SC) providing you with a lower total cost of ownership. All of our Self-Monitoring, Active Response Technology (SMART) generators are available with an optional UL rating. The HMI allows a simple visual inspection of ozone status. The front panel touchscreen HMI and color digital displays show production power, trend screens, cell pressure status, feed oxygen concentration or dewpoint (optionally), any fault indications, and an alarm log. SMART units come standard with auto-regulation of cell pressure, a pressure indicator, gas and water no flow switches, scaled gas flow indicator, a gas flow control valve, cabinet filter, and dry contacts to output generator status.

SMART series generators are available in a 208-240 VAC (50/60 Hz) configuration. They employ a main power switch as well as accepting input via local control or remote control by way of digital and analog signals to perform soft shutdowns (stopping ozone generation only) and hard shutdowns (stopping all operation). All SMART generators include an inverter, precise 10:1 linear turn down, and accept supply feed gas in a pressure range of 40-150 psi. Safeties include built-in ambient ozone monitor, temperature limiters, low gas flow trip, low gas pressure trip, optional water backflow trip, and inverter/power trip.



#### **Key Facts**

- 1.4-14 PPD/O<sub>3</sub>
- External Dewpoint (optional)
- · Color HMI Display/Control
- Linear Turndown
- 40-150 (1-10 bar) feed pressure
- Pressure Display
- Power Disconnect Switch

- UL Listed Generator (optional)
- Remote 4-20 mA direct, PID, or local "hand" control
- · Cabinet Temperature Monitor / Display / Alarm
- Ambient Ozone Monitor / Display / Alarm
- · Program Updates via USB stick, as required
- 208-240 Volt, 50/60 Hz
- Discrete Power Terminals

Ozone Water Systems is a global provider of turn-key ozone system design, installation, and service for all disinfection and advanced oxidation processes of thousands of pounds per day of ozone. Here are just a few markets that utilize our industry leading ozone systems:



Aquaculture



Water Treatment



Pharmaceutical



Food & Beverage



Cold Storage



## OZONE WATER SYSTEMS OZONE GENERATOR: SMART-WC

## **SPECIFICATIONS**

TYPE	CORONA DISCHARGE			
Cells	Modular multi-cell			
Cooling	Water cooled, 10-30 psi (1-2 bar), 50°-80°F (10°-27°C)			
Maximum Gas Pressure	150 psi (10 bar)			
Power Inverter	Modular, resonant mode, computer controlled, monitored, LED indicators			
Cabinet	Metallic enclosure with cabinet filter and cooling fan			
Operating Temperature	35°-100°F (1°-38°C)			
Power	208/240VAC single or three phase, 50-60 Hz			
Options	External dew point, external backflow system, cabinet cooler or refrigerator			

#### **CONTROLS**

TYPE	DESCRIPTION				
Analog Input, 4-20mA	Direct Control or Scale for ORP w/ PID or Scale for DO <sub>3</sub> w/ PID				
Modbus® Ethernet	RJ45 port on cabinet exterior				
Shutdown - Inputs	Hard: Ozone production stops, gas flow stops; Soft: Ozone production stops, gas flow continues.				
UFC/Ambient O <sub>3</sub> -Output	Fan Control: Ambient ozone detection triggers room Uniform Fire Code (UFC) exhaust fan; RAP Control: Ambient O <sub>3</sub> detection energizes Remote Alarm Panel (RAP) and triggers external alarm.				
Collective Fault - Output	SPDT indicates generator is powered and not faulted.				
Status - Output	A set of contacts changes state for each of: gas pressure in range, gas flow above minimum, water flow above minimum, and inverter is running.				

CON	FIGURATION DATA	A Single / Three Phase			Three Phase only			
MODEL		OWS-01	OWS-02	OWS-03	OWS-04	OWS-05	OWS-06	OWS-07
Air 2 wt%	Operating pressure - PSI	36	36	36	36	36	36	36
	O <sub>3</sub> Output - PPD	1.4	2.8	4.2	5.6	7.0	8.4	9.8
	Flow - SCFH	30	60	90	120	150	180	210
O <sub>2</sub> 7.5 wt%	Operating pressure - PSI	19	19	19	19	19	19	19
	O <sub>3</sub> Output - PPD	2	4	6	8	10	12	14
	Flow - SCFH	13	26	39	52	65	78	91
FLA @ 208-240V (fuse at 20A)		4.2A	7.6A/4.4A	10.2A/5.5A	7.2A	9.0A	10.7A	12.4A
Inlet/Outlet Tube Size		3/8" gas and water	3/8" gas and water	3/8" gas and water	3/8" gas and water	3/8" gas, 1/2" water	3/8" gas, 1/2" water	3/8" gas, 1/2" water
Dimensions (H" x W" x D")		36x36x14	36x36x14	36x36x14	36x36x18	78x36x20*	78x36x20*	78x36x20*
Mass - pounds		190	220	230	300	440	450	460
Water Flow Rate - GPM		0.4	0.75	1.12	1.5	1.9	2.25	2.75

\* includes floor-mount stand.



Quality. Pure & Simple.