





Wall-mountable EO3™ system with stainless steel frame, ozone generator, air filtration, and oxygen concentrator.¹



# EO3TM

# ROBUST, COST-EFFECTIVE OZONE GENERATOR AND SYSTEM FOR DIVERSE INDUSTRIES, WITH OPTIONAL AIR FILTRATION SKID

The MKS E-Series ozone generator is the industry leader for stable, efficient ozone for sanitation applications. The EO3™ generator reliably produces high concentration ozone ranging from 6 to 10% by weight, while efficiently producing up to 3 ppd (57 g/hr) of ozone. The EO3 ozone generator uses flat plate ozone generation technology and an oxygen generation system. The standard system design is dual rated for 50/60 Hz operation and requires one single point power connection, enabling global operation.

The EO3 series is available as a stand alone generator as well as part of an ozone generating system. The EO3 System integrates the EO3 ozone generator with an oxygen concentrator, and air filtration system in a single ready-to-use skid, enabling customers to quickly integrate and use ozone in their sanitation process.

# Reactive Ga

#### Features & Benefits

#### **EO3™ Generator**

- Compact generator design encased in a 304 SS enclosure
- High concentration ozone (6 10% by weight)
- Flexible, advanced control system with dual interface for front panel operation
  - Easy-to-use local mode for at-tool data review
  - Remote mode controlled by industry standard 4 – 20 mA current loop
- Durable ceramic flat plate cell construction

- · Worldwide input power compatibility
- Reduced chemical usage for increased safety and chemical handling
- Reduced energy consumption for greater cost savings
- Low parent gas usage further lowers operating costs
- · Greater environmental compliance
- Superior quality
- Easy installation

#### Note:



## Features and Benefits (cont'd)

#### EO3™ System

 Fully integrated system eliminates need to source and assemble individual components, shortening time to market and learning curve.

#### System includes:

- EO3 Generator
- Stainless steel frame for wall mounting
- Oxygen concentrator
- Three pressure regulators for air into and oxygen out of the oxygen concentrator and for cooling water
- Multi-level supply air filtration for oil, particles, and hydrocarbon adsorption
- Cooling water low flow switch and automatic inlet on/off valve

### **Applications**

- Bottled Water
- · Soda, juice, and other bottled beverages
- · Beer and wine sanitation
- Food Processing produce, meat, and Ready-to-Eat (RTE) food
- Industrial Processes
- · Surface sanitation



Figure 1 — EO3 Generator

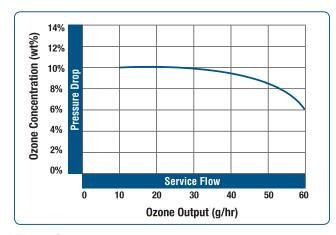


Figure 2—
Ozone Concentration vs. Output

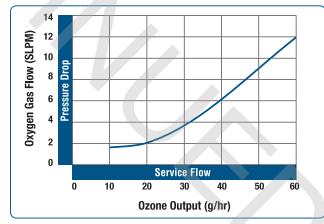


Figure 3 — Oxygen Gas Flow vs. Output



# **Specifications**

Performance Characteristics <sup>2</sup>	
Ozone Generator Ozone Output Ozone Concentration Gas Outlet Pressure	0.5 - 3lbs/day (10-57 g/hr) 10 - 6% 4 - 15 psig
Oxygen Concentrator Gas Output Parent Gas Drying Capability	25 scfh at 90% oxygen weight conc. Compressed Air -100°F dew point
Materials of Construction Frame Enclosure O <sub>2</sub> /O <sub>3</sub> Gas Tubing Air Tubing Water Tubing	304 Stainless Steel Brushed Stainless Steel PTFE/304 Stainless Steel Polypropylene Polypropylene
Installation and Utility Requirements Cooling Water Flow³ Cooling Water Inlet/Outlet Compressed Air Flow Compressed Air Inlet Ozone Gas Piping Inlet Electrical Power EO3 Generator Dimensions EO3 System Dimensions Approximate Shipping Weight	0.5 gpm (at 20-40 psig) at 50-85°F (at or above ambient dew point) 0.25" FNPT 5.5 cfm at 45 psig (11 scfm) 0.5" FNPT 0.25" MNPT 208 - 240VAC, 1-phase, 50/60 Hz, 3.5 Amps Full Load 18"W x 18"H x 13"D 18"W x 71"H x 15"D 200 lbs
Control Input/Output Inputs Room Ozone Alarm Remote Enable Remote Control Outputs Remote Ready Alarm	Dry Contact Close to Run Dry Contact Close to Run 4 - 20 mA 10-100% Output  Dry Contact Dry Contact Dry Contact Close Fault
Local Display Keyboard	Backlit Graphic LCD Display Sealed 16 Key Membrane

#### Notes

# **Ordering Information**

Ordering Code	Part Number	
EO3 Generator EO3 System (Generator and Air Filtration)	AX8803 AX8823	

For service and repairs on your EO3 generator, please review http://www.mksinst.com/service/servicehowtoorder.aspx.



<sup>&</sup>lt;sup>2</sup> Performance Characteristics based on a parent gas inlet pressure of 15 psi (consisting of >90% oxygen at a maximum dew point of -80°F) and 70°F (21°C) cooling water flowing at 0.5 gpm (1.9 l/m) for the EO3 generator.

<sup>&</sup>lt;sup>3</sup> Cooling water shall be potable quality or better. Minimum temperature to be greater than ambient dew point.





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