

## ENSURE™ OZONE GENERATOR SYSTEMS

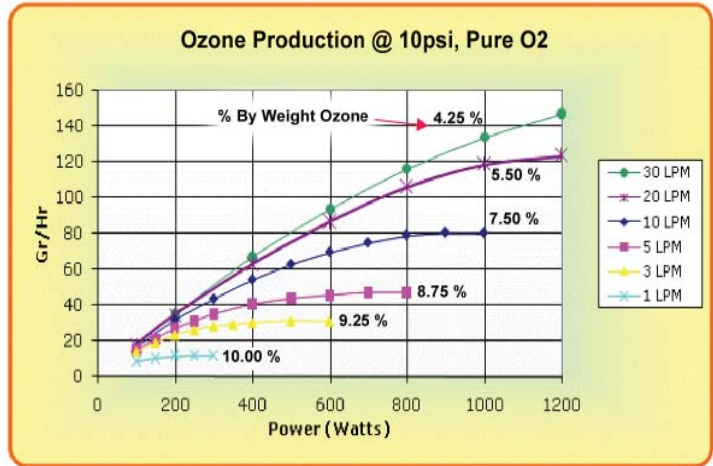
Models: ENSURE-120  
ENSURE-240

Guardian Manufacturing Inc., is committed to the highest quality in all of our **Ensure™** ozone products. Guardian is a registered ISO-9001:2000 company and we are listed to build UL-508A Specifications.

**Plasma Block®** technology is now the workhorse industry standard for ozone production. We can custom design a system to your specifications or supply one of our in-stock **Ensure™** systems.

Plasma Block® configurations for ORP, DOM & ambient ozone monitoring are available for all PLC models.

\*Ozone production will vary depending on oxygen feed gas flow rates.



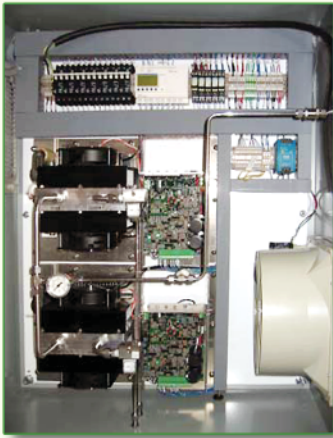
Ozone Output based on "Q" style Cooled Plasma Block®..

SPECIFICATIONS	Ensure-120D2 or 120Q1	Ensure-240Q2	Ensure-240CL2
System Control	Smart Relay or PLC	Smart Relay or PLC	PLC
Number of Generators	One (120Q1) or Two UL Listed	Two UL Listed	One UL Listed
Ozone Output g/hr*	120 g/hr (6.3 lbs/day)	240 g/hr (12 lbs/day)	250 g/hr (12.6 lbs/day)
Power Requirements	120/240V, 15-20A	240V, 20A	240V, 20A
Oxygen Feed Gas	5 to 24 LPM	10 to 50 LPM	10 to 50 LPM
UL Enclosure	NEMA12 Powder Coat	NEMA12 Powder Coat	NEMA12 Powder Coat
Cooling Water Requirements	N/A-Air Cooled	N/A-Air Cooled	2 gpm ~ 65° F
Operating Temperature	32 to 102 Degrees F	32 to 102 Degrees F	32 to 102 Degrees F
Operating Pressure Range	5 to 100 PSI	5 to 100 PSI	5 to 100 PSI
Dimensions	36"H x 39"W x 15"D	48"H x 36"W x 16"D	84"H x 46"W x 29"D
Weight	230 lbs	300 lbs	325 lbs

OPTIONS			
Programmable Logic Control	Standard - Included	Standard - Included	Standard - Included
Oxygen Feed Gas System	Flow, Concentration and Pressure Monitoring	Flow, Concentration and Pressure Monitoring	Flow, Concentration and Pressure Monitoring
Multiple Zone Output	2-16 Outputs	2-16 Outputs	2-16 Outputs
UL508	Yes	Yes	Yes
Sensor Display	ATI, Rosemount	ATI, Rosemount	ATI, Automation Direct
Sensor Signal Control	0 to 10 V, 0 to 20 mA	0 to 10 volt, 0 to 20 mA	0 to 10 volt, 0 to 20 mA
Backflow Device Optional	Yes	Yes	Yes
Vacuum Auto Shutdown	Yes	Yes	Yes
Rheostat Control	Yes - Door or Inside Mount	Yes - Door or Inside Mount	N/A
NEMA4X Wash Down	Yes	Yes	Yes
<b>Integrated Custom Systems</b>			
Ozone Injection Contact Skid, Pump Starter, Ozone Monitoring	Available	Available	Available
Remote Monitoring	Yes-PLC Version Only.	Yes-PLC Version Only.	Yes-PLC Version Only.

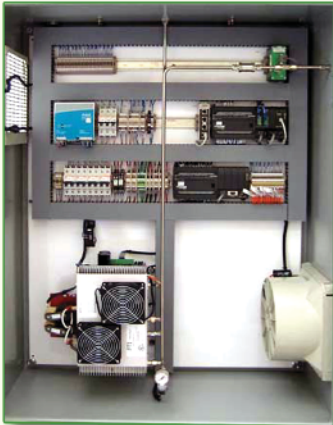
## Ensure™ OZONE GENERATOR SYSTEMS

Models Range from 120 to 240 grams/hr



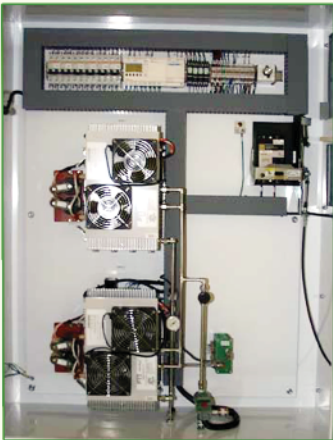
### Ensure-120D2

Air Cooled Plasma Block® up to 130 grams/hr, 2-16 Outlets.



### Ensure-120Q1

Air Cooled Plasma Block® up to 130 grams/hr, 2-16 Outlets. PLC, ORP, DOM



### Ensure-240Q2

Air Cooled Plasma Block® up to 240 grams/hr, 2-16 Outlets. Smart Relay Control A/C



Corporate Headquarters:  
2971-A Oxbow Circle  
Cocoa, FL 32926  
phone: 321-508-3392

Guardian Manufacturing Inc., is committed to the highest quality in all of our products. Guardian is a registered ISO-9001:2000 company. We are listed to build to UL-508A specifications. Plasma Block® technology is now the industry stand for ozone generating protocols. We can custom design to your specifications or supply one of our off-the-shelf systems. Guardian is also supporting OEM ozone companies in several markets.

#### Guardian Plasma Block® Technology Advantage:

- Ultra High 23K Hz frequency for Silent Operation
- On board Oxygen Monitoring Protection
- High Voltage Isolation
- Smart Relay/PLC Technology Control and Diagnostics
- No Glass Tube dielectrics to Fail
- Auto feed-gas startup and shutdown
- Internal Rheostat Control Capable
- PDM or Pulse Density Modulating 100 :1 turn down
- PID Linear Precise Control 0 to 10v or 4 to 20 mA
- 6 to 100 PSI Pressurized Corona Discharge Cell
- Swagelok® Stainless Steel Orbital Welded Tubing
- UL508A System
- Heavy-Duty Industrial Design.

#### Micro Channel™ Aluminum/Ceramic Cell

Our Plasma Block® generators are not constructed of stainless steel; Therefore, there is no ferric chromate contamination as found on other cell designs. Plasma Blocks feature Micro Channel™ Technology for precise ozone control over a wide range of operational set points.

#### No Exposed High Voltage

High voltage is safely contained within the plasma block™ chamber. Other ozone generator designs have high voltage points exposed which can potentially cause dangerous flash over and fire. This is not possible with the Plasma Block®.

#### Maintenance

The Plasma Block® cells are maintenance free. Cells can last for 10 years. Required maintenance is only performed on the oxygen feed gas system. Cell replacement only is less than 10 minutes with limited training and no special tools.

All Plasma Block® cells require the use of oxygen feed gas and are designed to the full efficiencies utilized by 90% to 95% oxygen.



[www.guardianmfg.com](http://www.guardianmfg.com)