



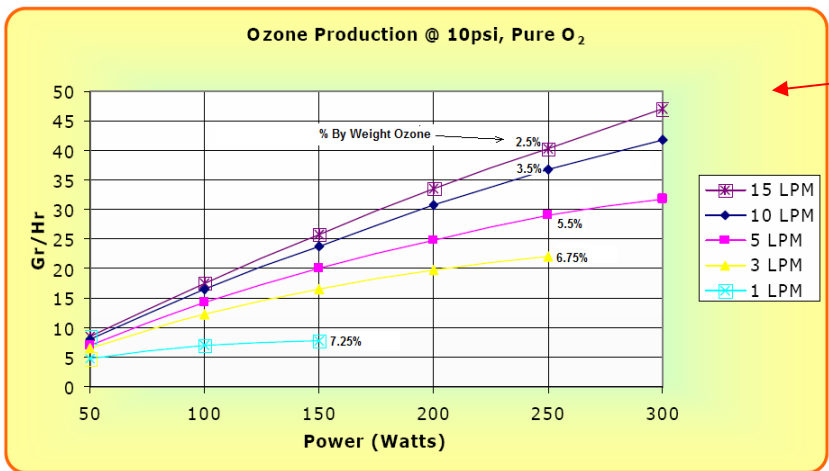
PB10, PB30 & PB60 grams/hr

Plasma Block® Corona Discharge Technology

Guardian manufactures standard and custom configurations in numerous ozone markets. Our engineering team is ready to provide the best solution. Air Cooled Systems up to 600 grams/hr



Specifications	PB10S1 & PB30S1	PB60D1	PB60CS2
System Control	Guardian Smart Relay	Guardian Smart Relay	PLC
Number of Generators	One UL Classified	One UL Classified	One-Two UL Classified
Ozone Output g/hr*	10 to 36 g/hr (1.9 lbs/day)	72 g/hr (3.8 lbs/day)	36-72 g/hr (3.8 lbs/day)
Power Requirements	120 volt, 10A	120 volt, 20A	120 volt, 20A
Oxygen Feed Gas	1 to 10 LPM	3 to 15 LPM	3 to 15 LPM
UL Enclosure	NEMA12 Powder Coat	NEMA12 Powder Coat	NEMA12 Powder Coat
Cooling Water Requirements	None-Air Cooled	None-Air Cooled	None-Air Cooled
Operating Pressure Range	5 to 100 psi	5 to 100 psi	5 to 100 psi
Dimensions	26"H x 20"W x 14"D	26"H x 20.25"W x 13.5"D	36"H x 30"W x 14"D
Weight	65 to 73 lbs	180lbs.	218 lbs.
OPTIONS	PB10S1 & PB30S1	PB60D1	PB60CS2
Programmable Logic Control	N/A	N/A	Included
Oxygen Feed Gas System	Flow, Concentration and Pressure Monitoring		
Multiple Zone Output	3	3	6
UL508	Yes	Yes	Yes
Sensor Display	Rosemount, ATI	Rosemount, ATI	Automation Direct
Sensor Signal Control	0 to 10 volt, 0 to 20 mA	0 to 10 volt, 0 to 20 mA	0 to 10 volt, 0 to 20 mA
Backflow Device	Optional External	Optional External	Optional External
Vacuum Auto Shutdown	Yes	Yes	Yes
Rheostat Control	Yes Door Mount or Inside	Yes Door Mount or Inside	N/A
NEMA4X Wash Down	Yes	Yes	Yes
Integrated Custom Systems	Ozone Injection Contact Skid, Pump Starter, Ambient Ozone Monitoring		
Operating Conditions 32 to 102 Degrees F			



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

Curve Based on Single Air Cooled Cell Plasma Block® configurations for ORP, DOM & ambient ozone monitoring are available for all PLC models.

Optional Water Cooled Cells Available Guardian has larger enclosures for system to 100 lbs/day O₃.

Custom Enclosures and Software

Guardian Manufacturing Inc.
2971 Oxbow Circle, Suite A
Cocoa, FL 32926

www.guardianmfg.com

321-631-4580 ext. 304

321-631-4517 fax



Ethernet or Internet monitoring is available on all PLC models.

REMOTE MONITORING TECHNOLOGY



GUARDIAN
Manufacturing



PB Models 10 to 60 grams/hr

Plasma Block® Corona Discharge Generators

PB10S13 Air Cooled Plasma Block® up to 15 grams/hr, 3 outlets

Guardian is committed to the highest quality in all of our products. Guardian is a registered ISO-9001:2000 company. We are listed to build UL-508A. Plasma Block® technology is becoming the most sought after ozone generating protocol. We can design to your specifications or supply one of our off-the-shelf systems. Guardian is supporting OEM ozone companies in several markets.

Guardian-----"We are changing everything"

PB30S11 Air Cooled Plasma Block® up to 40 grams/hr, 1 outlet

Plasma Block® Technology Advantage

- Integrated Guardian Engineering
- Ultra High 23K Hertz for Silent Operation
- Onboard Oxygen Monitoring Protection
- High Voltage is Safely Contained
- Smart Relay Technology Control and Diagnostics
- No Glass Tube dielectrics to Fail
- Auto feed-gas startup and shutdown
- Internal Rheostat Control
- PDM or Pulse Density Modulating 100 :1 turn down
- PID Linear Precise Control 0 to 10v or 4 to 20 mA
- 5 to 100 PSI Pressurized Corona Discharge Cell
- Factory Support and Service
- Swagelok® Stainless Steel Orbital Welded Tubing
- Ⓛ UL508A System
- Heavy Industrial Bullet Proof Design

PB30S11 with Integral Backflow Prevention up to 40 grams/hr

Micro Channel™ Aluminum/Ceramic Cell

No stainless steel; Therefore, no ferric chromate contamination
Micro Channel™ Technology for precise ozone control

No Exposed High Voltage

High voltage is safely contained in the plasma block™ chamber. Other designs have high voltage exposed which can 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 requires 15 minutes with limited training and no special tools.

PB60D1 Dual Air Cooled Plasma Block® up to 72 grams/hr

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

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