



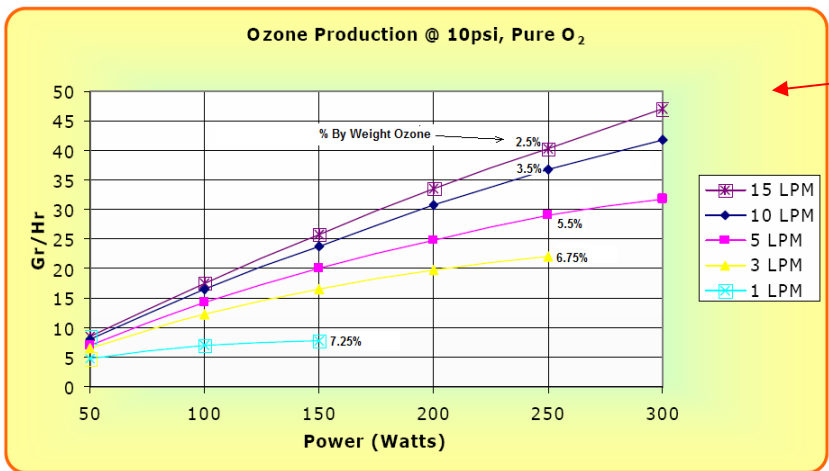
PB10, PB30 & PB60 grams/hr

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



PB Models 10 to 60 grams/hr

Plasma Block® Corona Discharge Generators

PB30S1 Single Air Cooled Plasma Block® up to 40 grams/hr

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"

PB60S2 Two Single Air Cooled Plasma Block® up to 72 grams/hr

Plasma Block® Technology Advantage

- Integrated Guardian Engineering
- Ultra High 23K Hertz for Silent Operation
- Onboard Oxygen Monitoring Protection
- High Voltage is Safely Contained
- Efficient Air Cooled Reaction Chambers
- No Glass Tube dielectrics to Fail
- Auto feed-gas startup and shutdown
- PLC Integrated Control Option w/full Alarm History
- PDM or Pulse Density Modulating 100 :1 turn down
- PID Linear Precise Control 0 to 10v or 4 to 20 mA
- Useful Pressure Range 6 psi to 100 psi
- Factory Support and Service
- Swagelok® Stainless Steel Orbital Welded Tubing
- Ⓛ UL Classified Generator
- Heavy Industrial Bullet Proof Design



PB60CS2 with PLC Plasma Block® up to 72 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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