



## PB30 & PB60 grams/hr

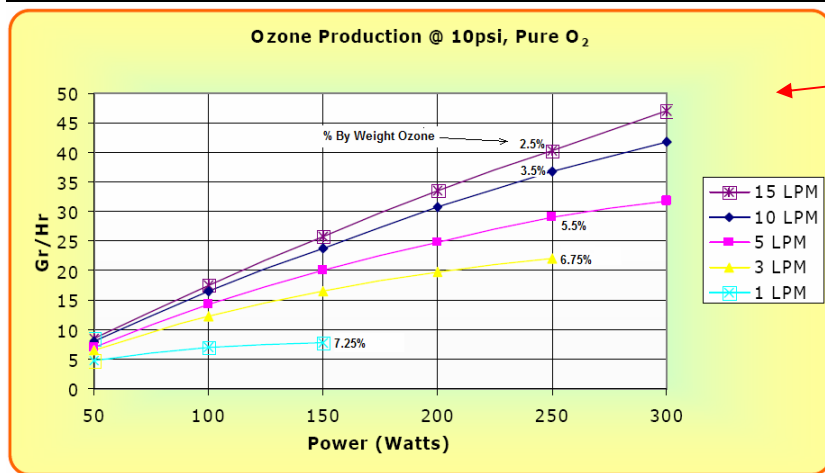
Plasma Block™ Corona Discharge Technology

Guardian manufactures standard and custom configurations in numerous ozone markets. Our engineering team is ready to provide the best solution for your application requirements.



Specifications	PB30S1	PB60D1	PB60CS2
System Control	Manual or Dry Contact	Manual or Dry Contact	PLC
Number of Generators	One	One	One or Two
Ozone Output g/hr*	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	3 to 10 LPM	3 to 18 LPM	3 to 18 LPM
UL Enclosure	NEMA 12 Powder Coat	NEMA 12 Powder Coat	NEMA 12 Powder Coat
Cooling Water Requirements	None-Air Cooled	None-Air Cooled	None-Air Cooled
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	73 lbs	180lbs.	218 lbs.
OPTIONS	PB30S1	PB60D1	PB60CS2
Programmable Logic Control	N/A	N/A	Included
Oxygen Feed Gas System	AirSep, Sequel or equal	AirSep, Sequel or equal	AirSep, Sequel or equal
Display Configuration Screen	N/A	N/A	Included
Remote Monitoring RMT	N/A	N/A	Optional
Sensor Display	N/A	N/A	Optional
Sensor Signal Control	Optional	Optional	Included
Backflow Device	Optional External	Optional External	Optional External
Power Supply for Sensors	N/A	N/A	Included
Variable O <sub>3</sub> 1% to 100%	Optional PDM	Optional PDM	Included
Stainless Steel UL Enclosure	Optional	Optional	Optional
Custom UL Enclosures	Optional	Optional	Optional

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 water cooled cells above 10 lbs/day O<sub>3</sub>.

Custom Enclosures and Software

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

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

321-631-4580 ext. 304

321-631-4517 fax



Ethernet or Internet monitoring is available on all PLC models.



**GUARDIAN**  
Manufacturing



### **PB Models to > 60 grams/hr**

#### **Plasma Block™ Corona Discharge Generators**

**PB30S1 Single Air Cooled Plasma Block™ up to 36 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/h**

#### **Plasma Block™ Technology Advantage**

- Integrated Guardian Engineering
- Ultra High 23K Hertz for Silent Operation
- Air Cooling up to 12 lbs/day
- 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
- Leak Free *Swagelok*® Stainless Steel Tubing
- Two year Limited Warranty
- 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 required 15 minutes with no special training or 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

#### **Guardian Manufacturing Inc**

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