

10g & 20g @ 5% Plasma Blo₃ck® (Air-Cooled)



Regular Chassis Configuration



Alternate Chassis Configuration

For added application information, see the **Plasma Block® Application Guide** manual.

Models available :

Refer to – Configuration Options Summary Sheet at the end of the catalog.

Fully automatic tuning for constant ozone output and installation simplicity

Service simplicity due to automatic fault diagnostics

Silent, Rugged, Reliable and Cost Effective

No exposed high-voltage safety hazards

10g and 20g models in same chassis

Available with PlasmaVIEW® software (optional).

Design Features:

- **10g, 5%, 2 lpm, 5 psi. 20g, 5%, 4 lpm, 5 psi.**
- Directly installable by UL 508a panel house.
- **Full-Auto** and **Semi-Auto** modes hold constant power over the entire pressure range of **5 - 100 psi**. From package to process, no setup or adjustments are required. Continuously tracks and automatically optimizes performance for changes in pressure, flow and line voltage.
- **Universal, world class product. Constant ozone output and cooling:** 100 – 240vac, 50/60hz, power factor .94-.99 across the entire working voltage and power range. Power supply is UL / CSA / CE approved. NO line voltage configuration jumpers – any voltage, any frequency; same unit.
- **Efficient**, compact, silent (25khz), safe, rugged, reliable, advanced – all the normal traits of a PTI product. Same precise linear control, with turn down to 1%, as with all Plasma Block® products.

- Maximum up-time , durable, commercial / industrial solution the ozone industry requires.
- Possible **cell flooding** is identified followed by shutdown and enunciation. No damage is caused to electronics, transformer and rarely the cell. Cell flushing and drying in the field is usually sufficient to restore full service.
- Extensive two tier fault enunciation **maximizes up-time** and simplifies service diagnostics. Latched fault indicators retain fault status until serviced.
- This Gen2 cell is a scaled down version of PTI's field proven 50g product which is virtually impervious to extremes in temperature, vibration and pressure. **Major savings are had due to its low energy use, low oxygen volume needs and competitive price.**
- The control electronics is accomplished via Plasma Technics® new DAT300 or 310 microcontroller based inverter board. This state of the art controller yields a simpler user interface and many new features intended to further increase up-time and **simplify installation** and troubleshooting.
- **Control connections** of the essential I/O functions are the **same** as all other Plasma Block® products.
- PDM, Voltage and Frequency potentiometers have their own jumper selection for onboard control if desired.
- Complex and thorough onboard electronic short circuit protection prevent nuisance circuit board failure due to accidental field wiring errors.
- Power and control connections are located at the rear of the product to enable integrators to construct 'plug & play' mounting.
- **Same mounting footprint and mounting hole centers** as the popular 50g Plasma Block®. The 10/20g chassis is a miniature version of the 50g unit. This means that the general location for control connections, gas in / out, cooling, etc., are the same.
- **Military grade conformal coating** eliminates problems associated with condensation and mold, and greatly retards damage caused by accidental ozone exposure.
- Like all other Plasma Block® products, the feed gas supply must be either PSA concentrator or bottle feed of at **least -60°F dew point, filtered, positive-pressure oxygen.**

Configuration options :

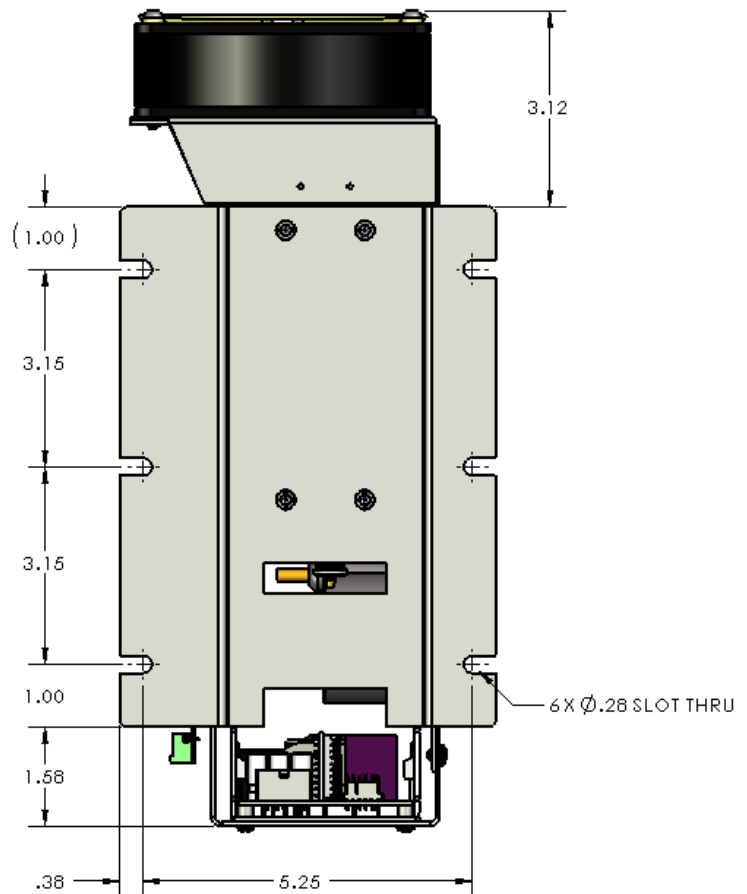
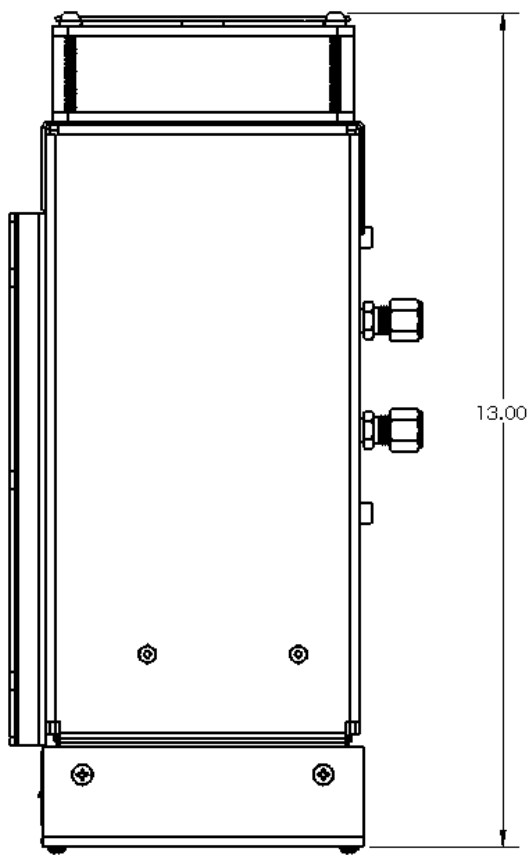
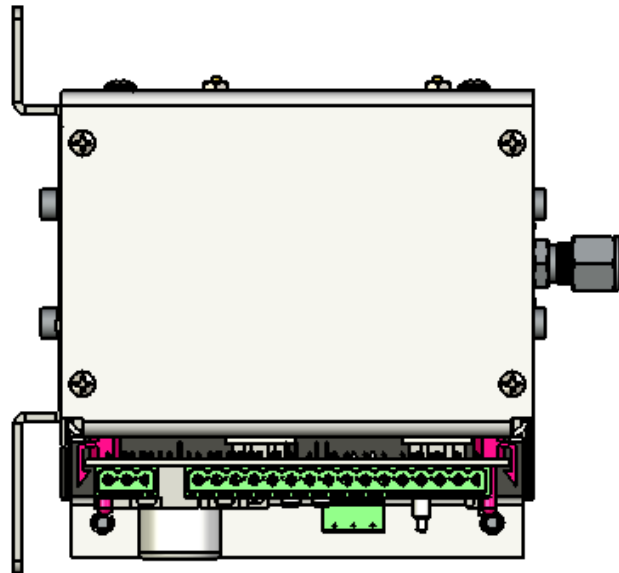
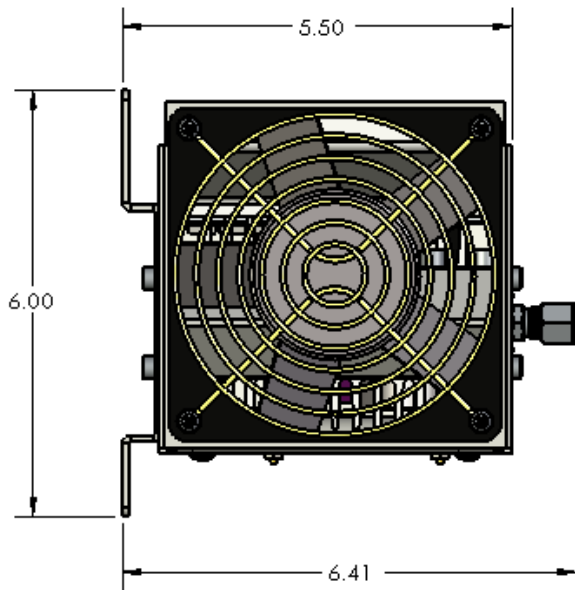
PTI will set up and tune units to the customer's desired specifications:

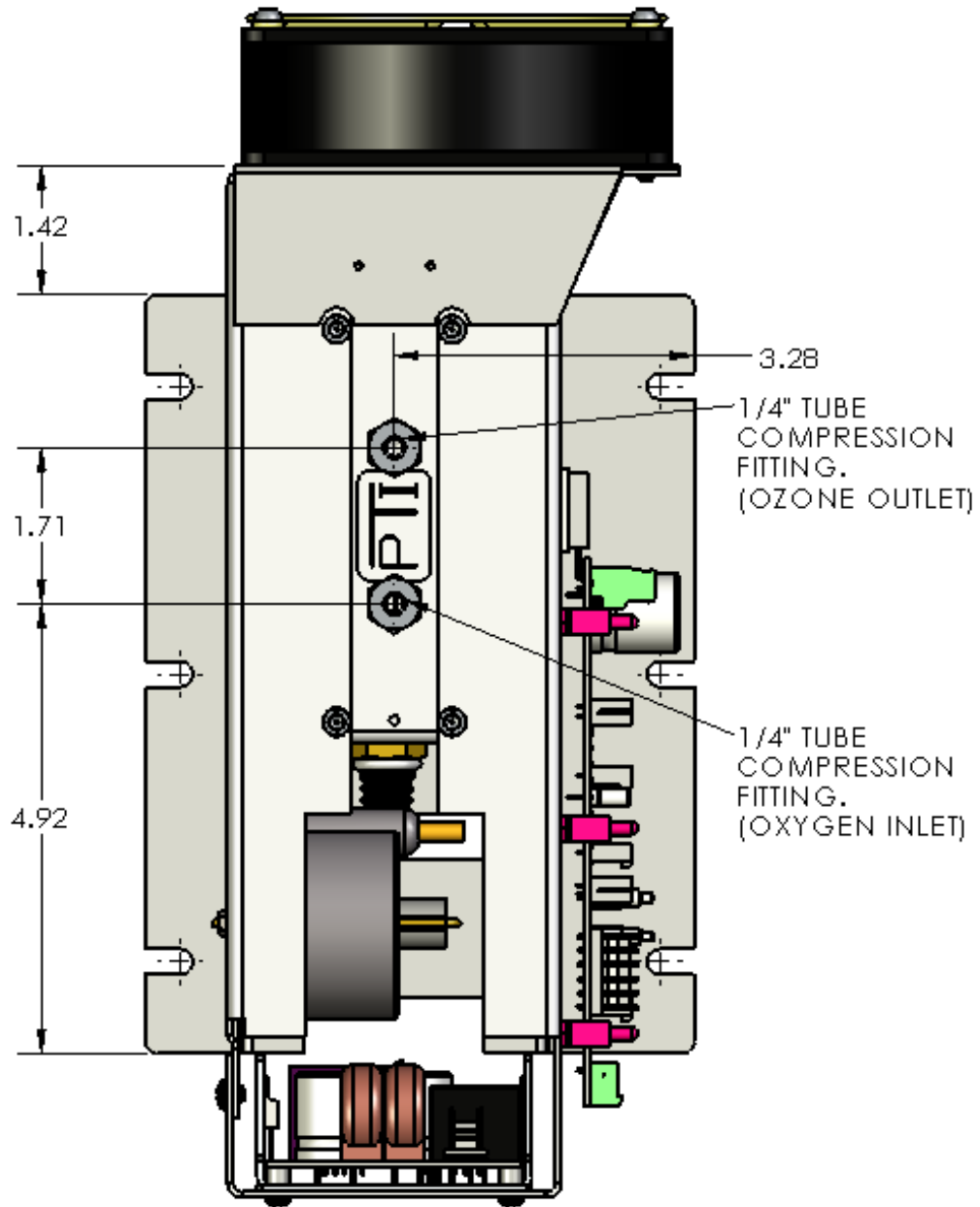
Oxygen pressure - (5 - 100 psi) [UL 5x rated]
 Oxygen flow liters/minute - (.1 - 10 Lpm) or equivalent SCFH
 Heat load btu/hr = 430 (10g) and 860 (20g)
 Chassis (standard or alternate)
 Inlet fittings (none, 1/4", other)
 Outlet fittings (none, 1/4", other)

Weight Lbs (Kg) :

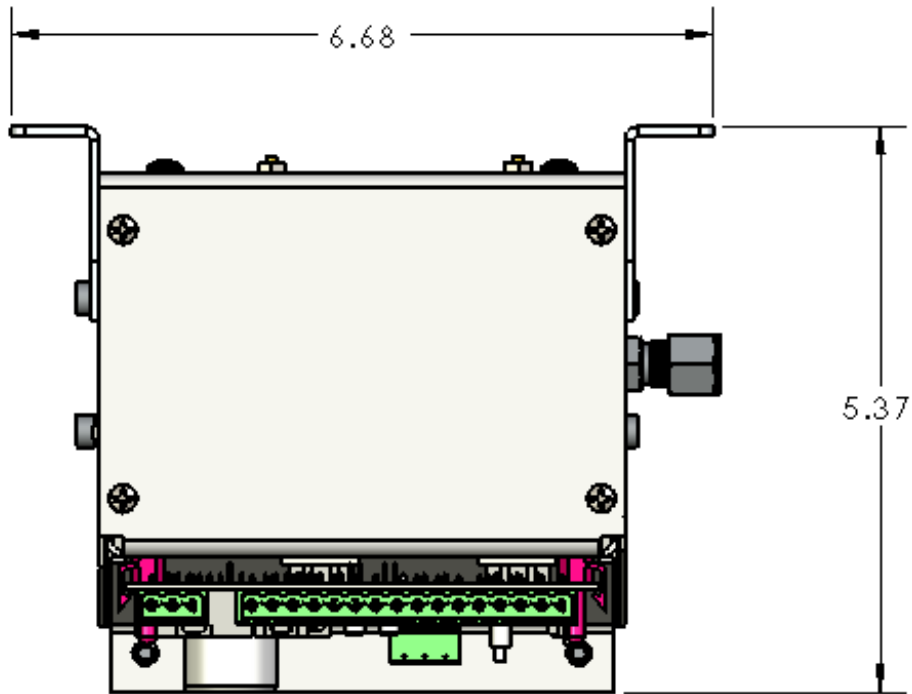
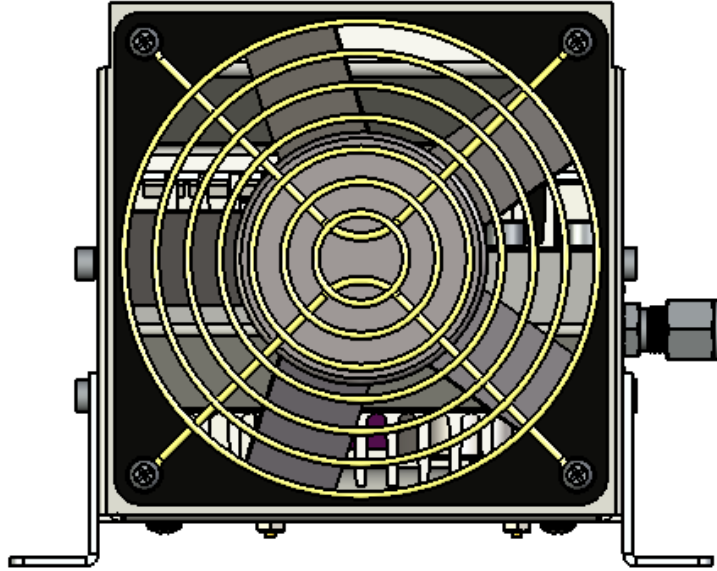
10g unit 8.45 (3.84)
 20g unit 8.75 (3.97)

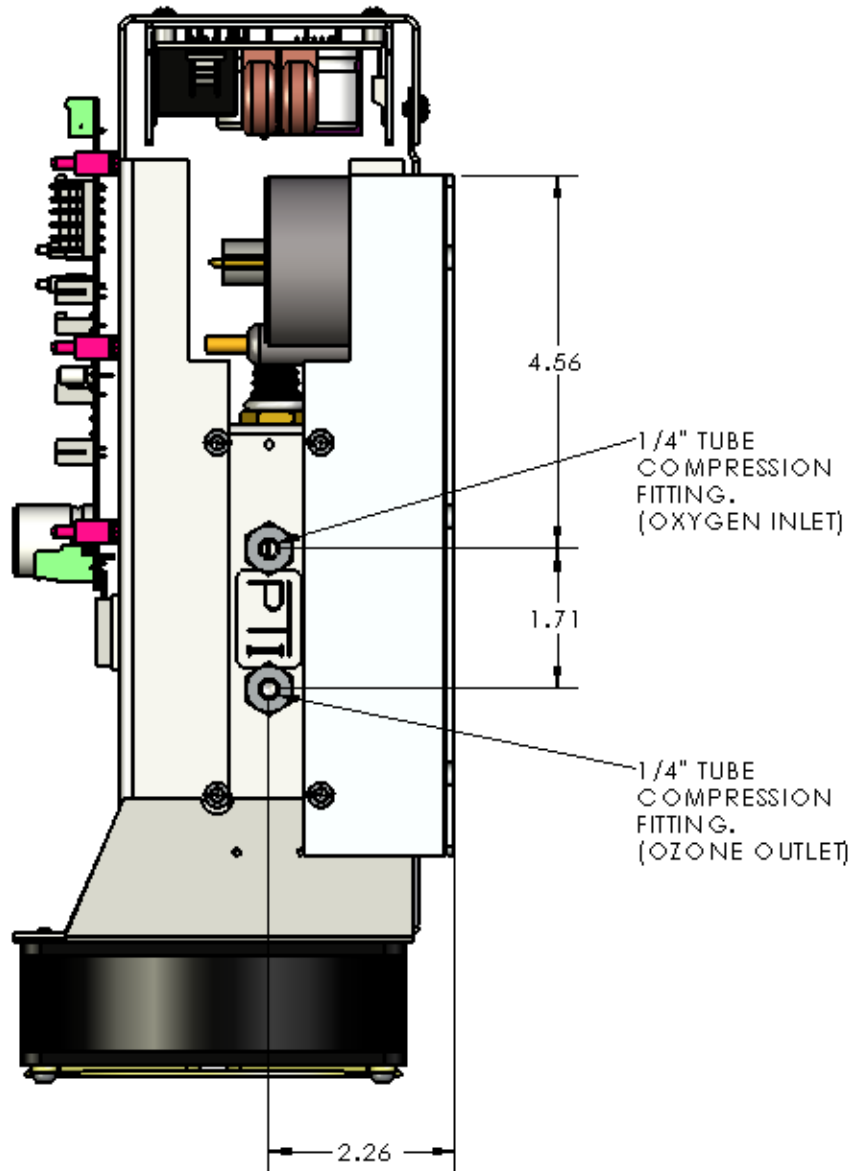
Installation Drawing Regular Mount : Inches

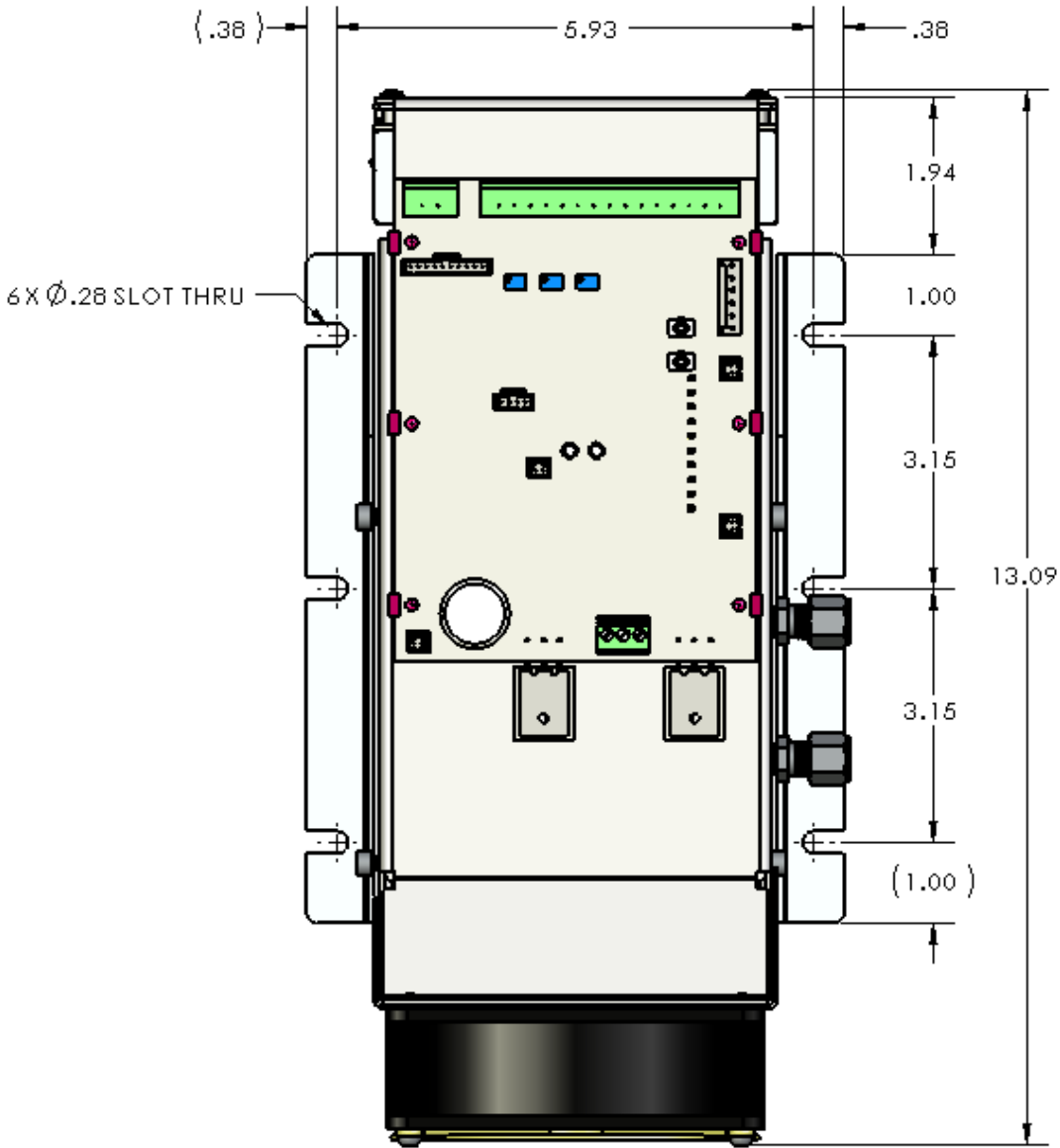




Installation Drawing Alternate Mount : Inches

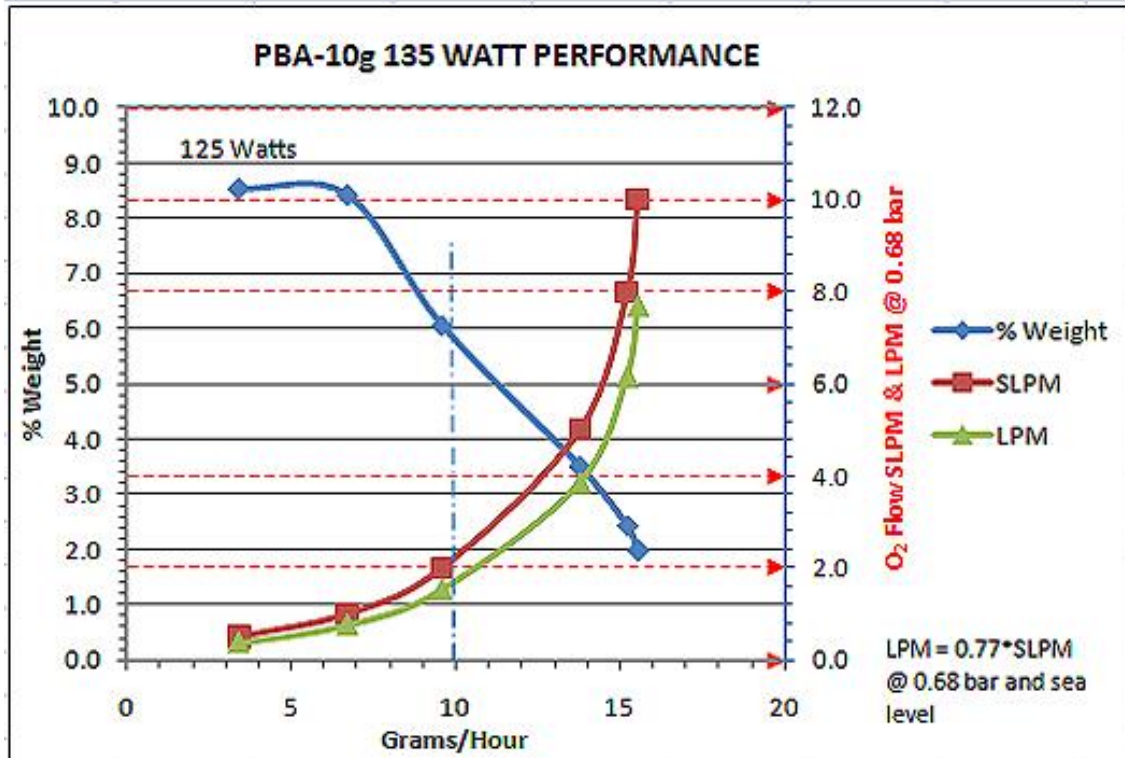




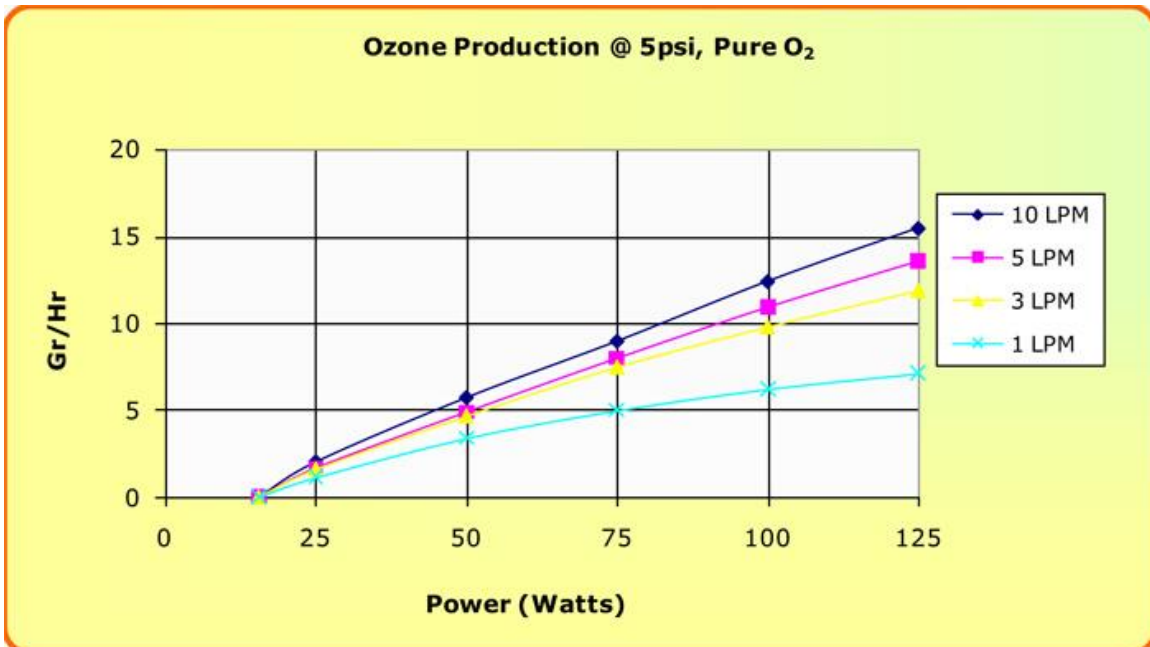
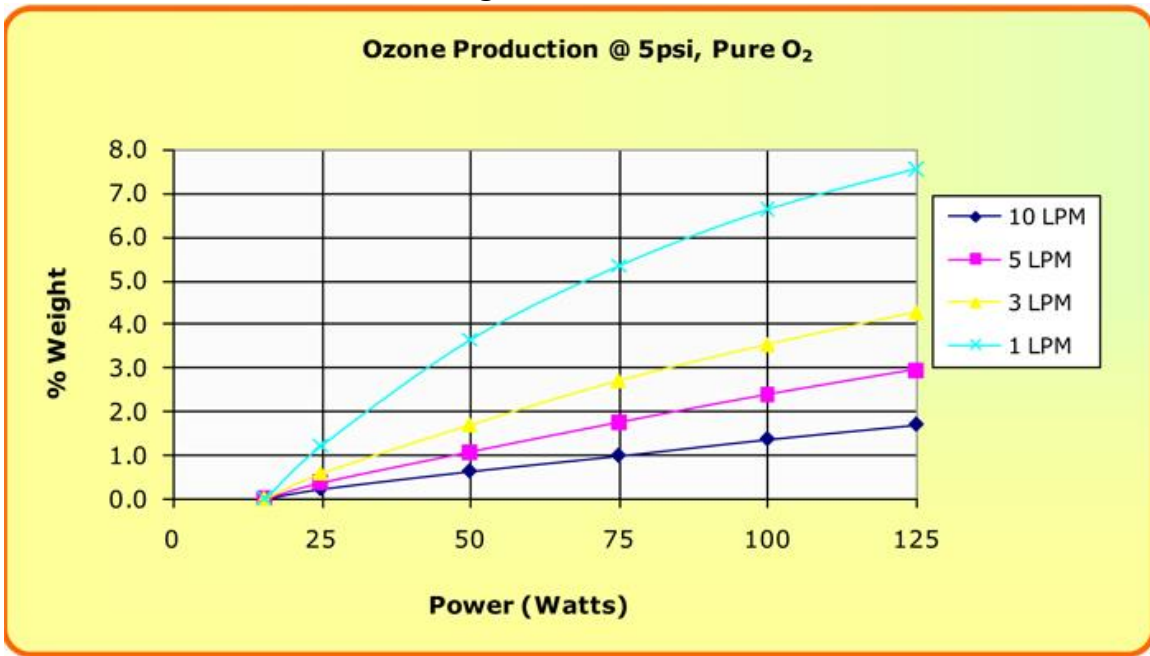


Output Performance:

10g Plasma Block®



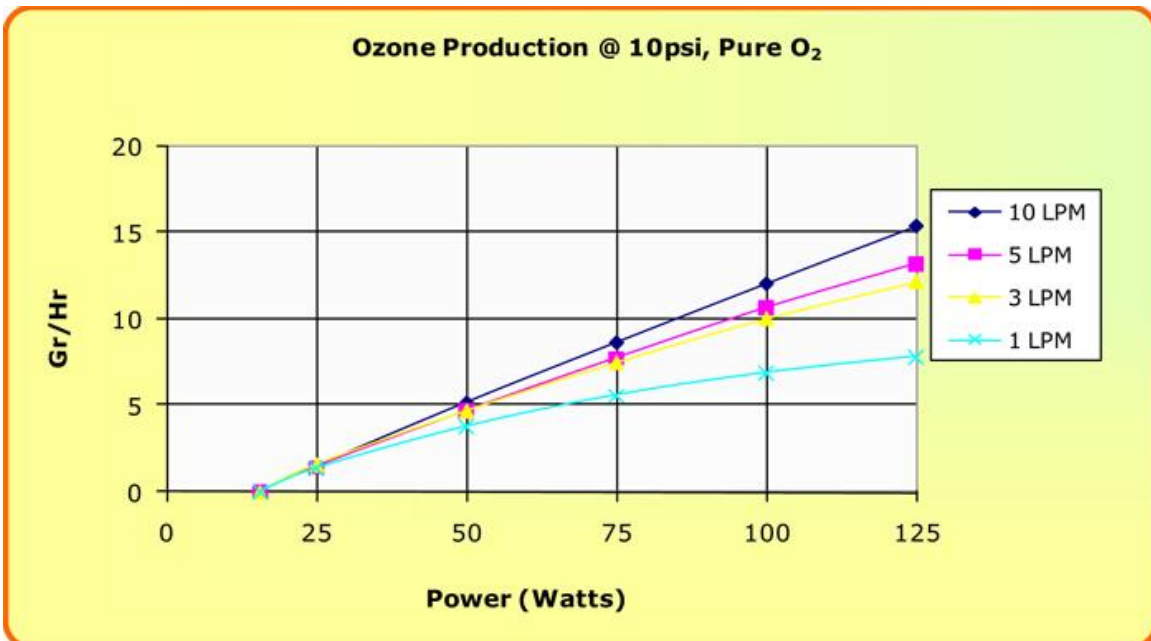
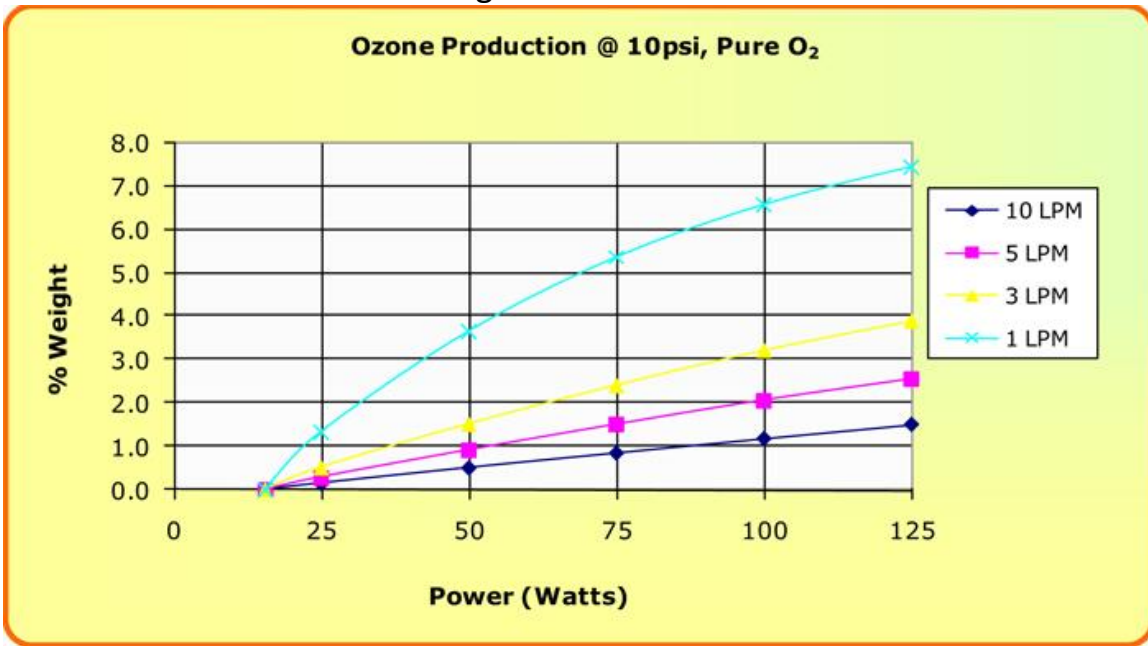
10g Plasma Block®



Normal factory POWER setpoint: 125 watts at FULL PDM (10vdc or 20ma)

Published production-ozone output level (10gr/hr) based on 5% concentration.
 Tests conducted at 72°F, 700' MSL. All pressure readings in psig. Ozone in g/nm³.
 Flow measured in LPM via **uncorrected** Rotameter at inlet port. Ozone at 0 psi from side stream.
 Fan and power supply burden of 17 watts is included in above chart.
Curves includes 15.5 watt power supply and dc fan quiescent load..

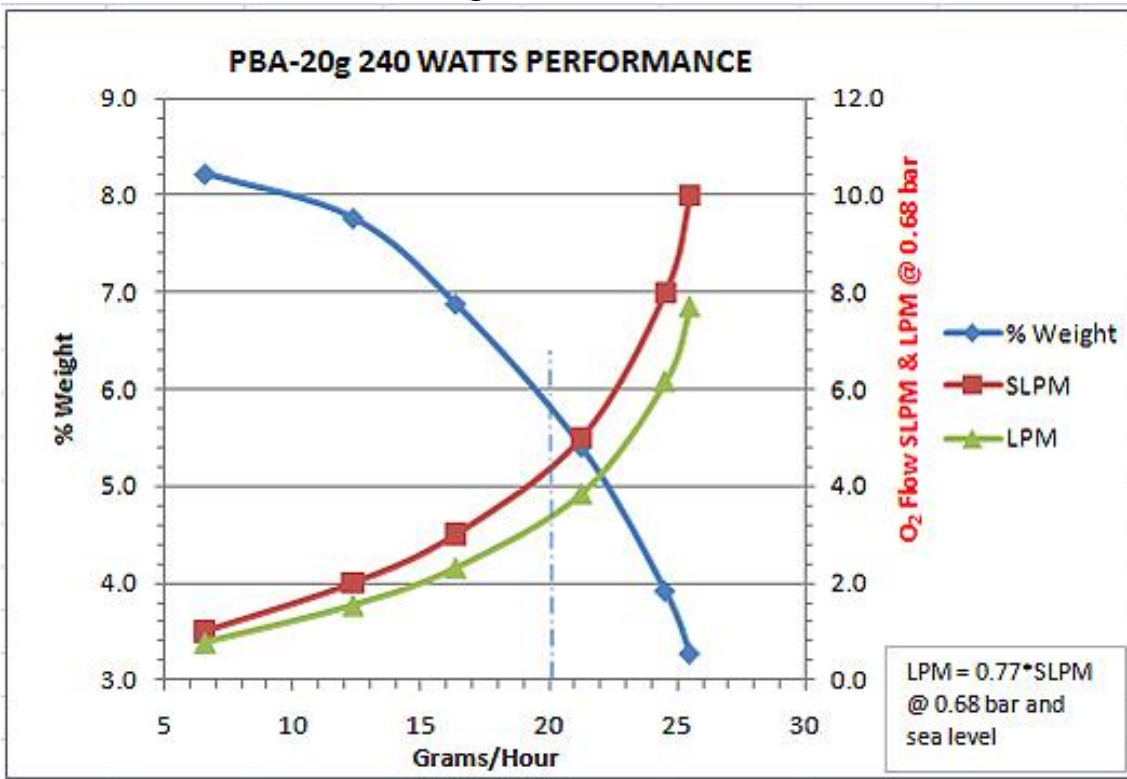
10g Plasma Block®



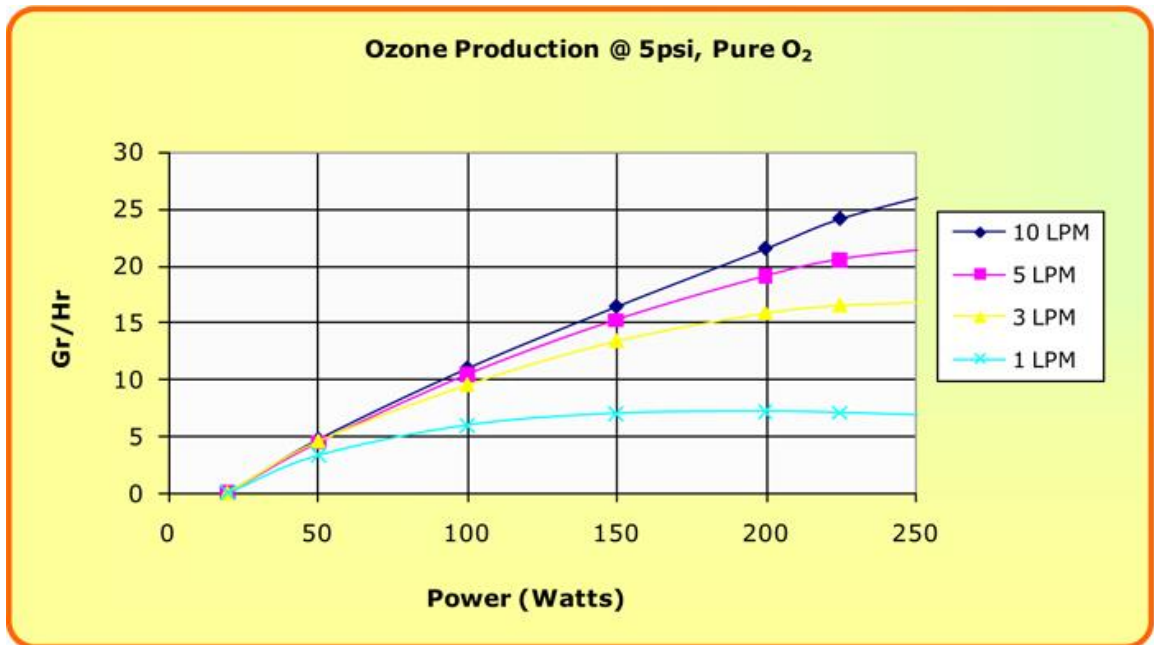
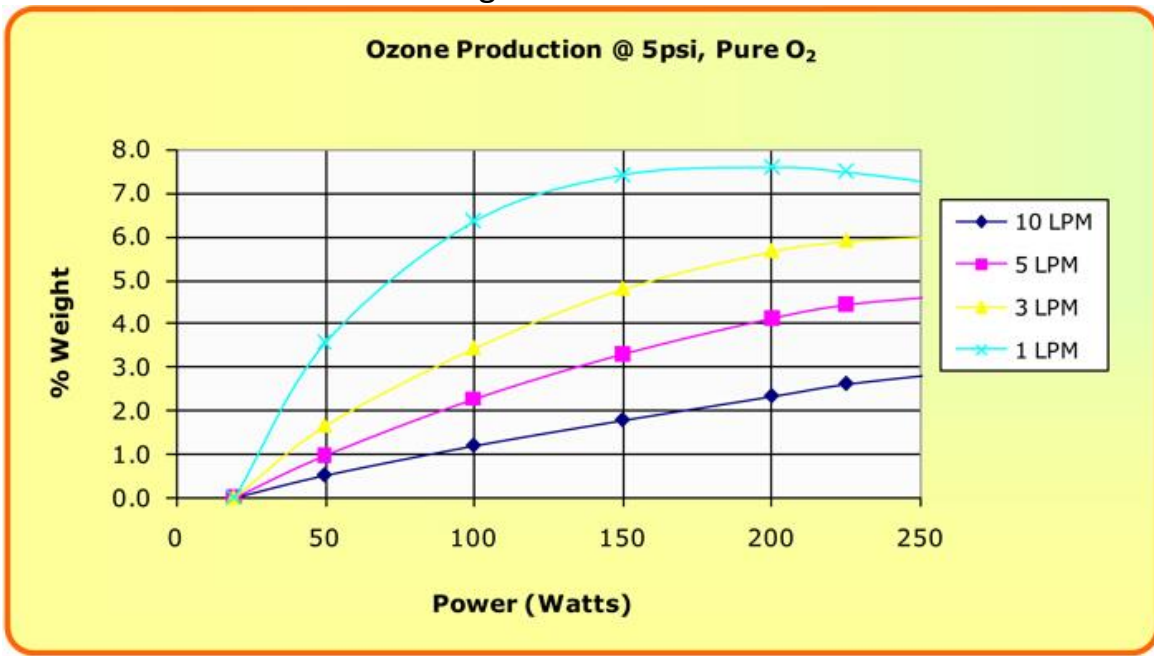
Normal factory POWER setpoint: 125 watts at FULL PDM (10vdc or 20ma)

Published production-ozone output level (10gr/hr) based on 5% concentration.
 Tests conducted at 72°F, 700' MSL. All pressure readings in psig. Ozone in g/nm³.
 Flow measured in LPM via **uncorrected** Rotameter at inlet port. Ozone at 0 psi from side stream.
 Fan and power supply burden of 17 watts is included in above chart.
Curves includes 15.5 watt power supply and dc fan quiescent load.

20g Plasma Block®



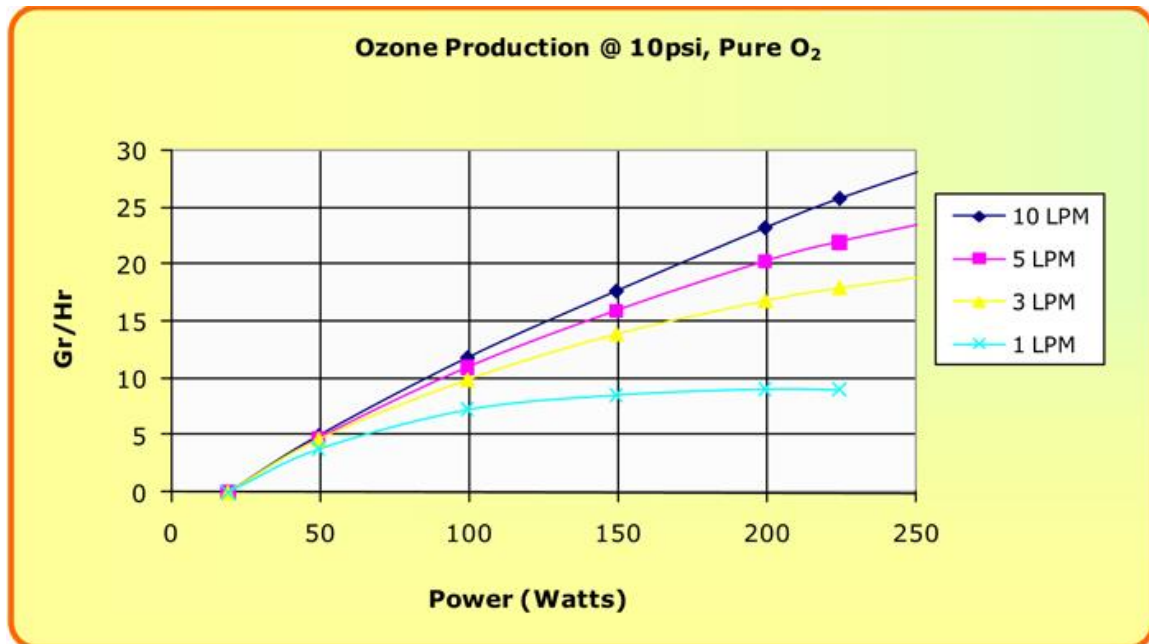
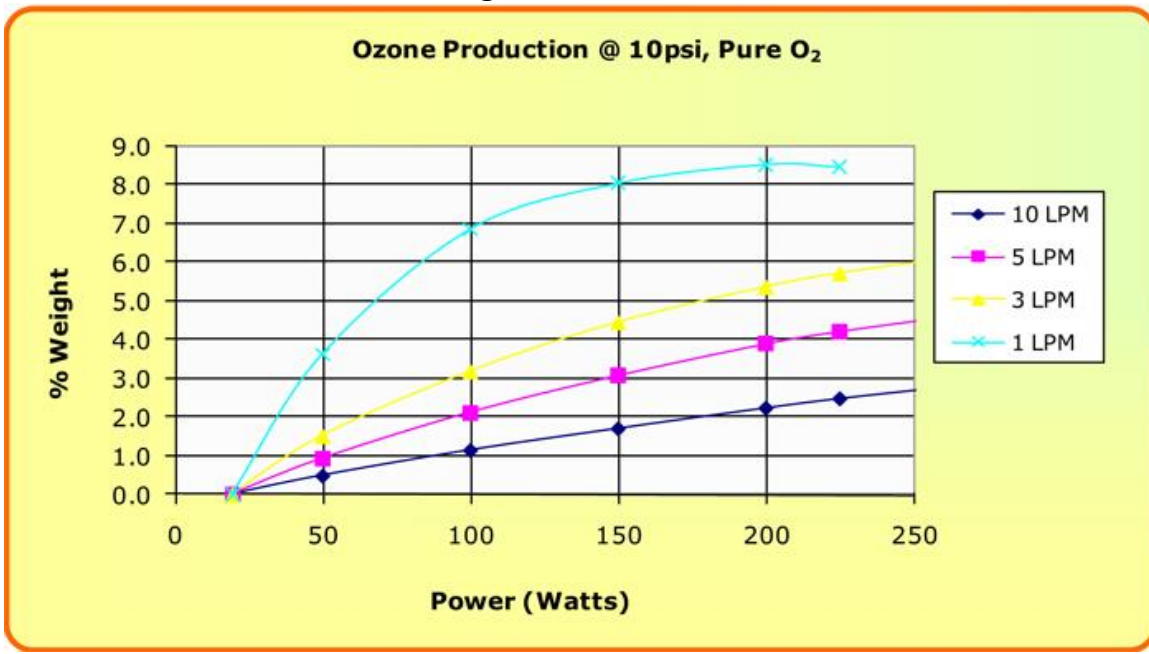
20g Plasma Block®



Normal factory POWER setpoint: 250 watts at FULL PDM (10vdc or 20ma)

Published production-ozone output level (20gr/hr) based on 5% concentration.
 Tests conducted at 72°F, 700' MSL. All pressure readings in psig. Ozone in g/nm³.
 Flow measured in **LPM** via **uncorrected** Rotameter at inlet port. Ozone at 0 psi from sidestream.
 Fan and power supply burden of 20 watts is included in above chart.
Curves includes 19.5 watt power supply and dc fan quiescent load.

20g Plasma Block®

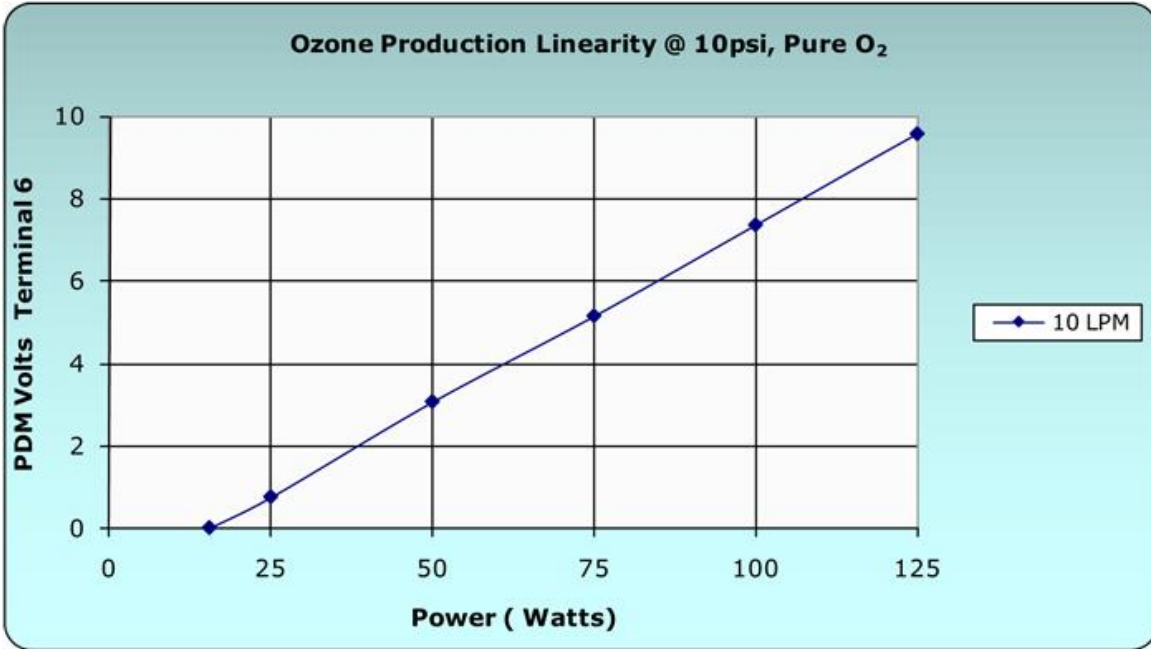


Normal factory POWER setpoint: 250 watts at FULL PDM (10vdc or 20ma)

Published production-ozone output level (20gr/hr) based on 5% concentration.
 Tests conducted at 72°F, 700' MSL. All pressure readings in psig. Ozone in g/nm³.
 Flow measured in **LPM** via **uncorrected** Rotameter at inlet port. Ozone at 0 psi from sidestream.
 Fan and power supply burden of 20 watts is included in above chart.
Curves includes 19.5 watt power supply and dc fan quiescent load.

Ozone Linearity vs PDM Command Signal

10g



20g

