

OZONE GENERATOR

GM 6 - 48 2.0

Primozone[®]
REDEFINING OZONE TECHNOLOGY



SMALL. COMPACT.



MODULAR

Design to fit your requirements

COST-EFFECTIVE ENERGY SAVER

LOW CAPEX LOW OPEX

HIGH PRESSURE & HIGH CONCENTRATION

Ozone gas up to 3 bar(g) / 43.5 psig.
Capacity up to 2900 g/h of ozone
(0.5 to 150 lbs/day)
150-300 g/m³, 10-20 % by weight



PREMIUM.

THE PRIMEOZONE GENERATOR.

Primozone GM6-48 2.0 high-performance ozone generators are based on Primozone's patented technology to enable reliable ozone production while providing impressively low energy consumption and life-cycle cost.

20% BY WEIGHT.

Primozone ozone generators produce ozone at a higher concentration than most other commercially available high-capacity ozone generators, delivering ozone at a concentration of up to $300 \text{ g O}_3/\text{m}^3 \text{ O}_2$ – that's equivalent to 20 % by weight, with an absolute gas pressure of 3 bar(g) / 43.5 psig.

TRUSTED.

The combination of high ozone concentration and high gas pressure produced in Primozone generators results in greatly improved efficiency when dissolving ozone gas in water. Tests at the Norwegian Institute of Technology have measured 98 % dissolution in under 3 minutes, proving that Primozone generators are very efficient for water treatment, and cost effective as well. The high gas pressure makes it possible to use alternative injection systems and place the generators at greater distances from a reaction tank, thus increasing flexibility.



EASY TO OPERATE

No need for specialists for operation or control.



RETHINKING REDUNDANCY (UNIQUE; BUILT-IN)

Running backup. Primozone's unique built-in solution.



SAFE, QUIET, RELIABLE

<55 dB; easy to maintain.



MODULAR

Independent ozone reactors and power supplies.



UPS

Battery backup in case of power failure.



COMPACT DESIGN

Small footprint and easy retrofitting.



LESS ENERGY, LOWER OPEX

Significant savings in energy use and cost compared to traditional ozone solutions.



EXCLUSIVE. INTELLIGENT.

Whatever size ozone generator you need, choosing Primozone means you don't need to compromise on features. All Primozone ozone generators are based on the same redefining ozone technology that delivers world-class ozone production.

The GM series offers ozone generators in 10 standard sizes, and the modular design makes it possible to combine these generators to fit your ozone needs, from small to large demand. Regardless of the capacity needed, Primozone has a suitable solution.

Your application and specific ozone needs determine which standard-size Primozone generators are best for the task. Primozone ozone capacity ranges from 4 g to 2.9 kg O₃/h (0.3 to 153 lbs/day) with a 150–300 g/m³ ozone concentration.

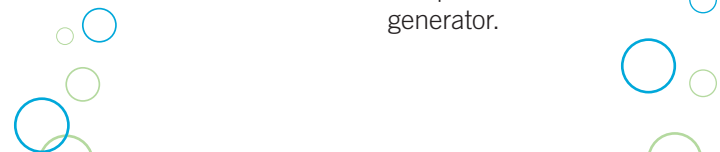
The GM6-48 series ranges from 20 g to 2.9 kg ozone /h (0.5 to 150 lbs/day). A combination of two or more generators can offer capacity up to 60 kg O₃/h (3,200 lbs/day). Existing systems can be easily upgraded with additional ozone generators to cover future needs.

The Primozone ozone generators produce ozone at the exact levels needed at any given time. When ozone production varies according to redox (ORP) value or flow, the oxygen and energy consumption for the complete system adjusts accordingly, making the complete solution energy efficient. It is possible to upgrade the control panel with a back-up battery function (UPS).

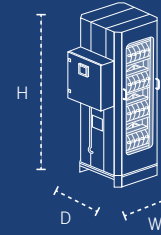
Each generator has an integrated control system to provide safety, monitoring, and control. The system delivers information in real time about ozone levels, gas pressure and gas flow. The ozone generator is equipped with a user-friendly interface for easy operation. The built-in control system will automatically log and handle any production disturbances, such as interruption of the oxygen supply.

The Primozone ozone generator is a complete, plug-and-play system that's easy to install and operate. The modular design makes the generator reliable and very easy to maintain. Most Primozone systems are up and running within 24 hours after delivery.

The small footprint of the Primozone ozone generator offers a great advantage compared to conventional ozone generators. Space requirements can be as low as 20 % compared to those for a standard generator.



TECHNICAL SPECIFICATIONS



GM	OZONE CONCENTRATION		MAX OZONE PRODUCTION		MAX OXYGEN CONSUMPTION			MAX POWER (kW)	WIDTH x DEPTH x HEIGHT	WEIGHT
	g/m ³	%	g/hour	lbs/day	m ³ /h*	l/min*	SCFH**			
GM6	150	10%	360	19	2.4	41	92	3.6	793 x 420 x 602 mm 31.2 x 16.5 x 23.7"	85 kg 187 lbs
	200	13%	300	16	1.5	25	57			
	250	17%	240	13	0.95	16	36			
	300	20%	160	8.6	0.59	9.8	22			
GM12	150	10%	720	38	4.9	81	180	7.2	728 x 424 x 1193 mm 28.7 x 16.7 x 47"	230 kg 507 lbs
	200	13%	600	32	3.0	50	110			
	250	17%	480	25	1.9	32	72			
	300	20%	320	17	1.2	20	45			
GM18	150	10%	1100	57	7.3	120	280	10.8	728 x 424 x 1569 mm 28.7 x 16.7 x 61.8"	280 kg 617 lbs
	200	13%	900	48	4.5	75	170			
	250	17%	720	38	2.9	48	110			
	300	20%	490	26	1.8	29	67			
GM24	150	10%	1400	76	9.7	160	370	14.4	992 x 855 x 1634 mm 39 x 34 x 64.3"	470 kg 1 036 lbs
	200	13%	1200	63	6.0	100	230			
	250	17%	960	51	3.8	63	140			
	300	20%	650	34	2.4	39	89			
GM36	150	10%	2200	110	15	240	550	21.6	992 x 855 x 1634 mm 39 x 34 x 64.3"	570 kg 1 256 lbs
	200	13%	1800	95	9.0	150	340			
	250	17%	1400	76	5.7	95	220			
	300	20%	970	51	3.5	59	130			
GM48	150	10%	2900	150	19	320	740	28.8	992 x 855 x 2010 mm 39 x 34 x 79.1"	710 kg 1 565 lbs
	200	13%	2400	130	12	200	460			
	250	17%	1900	100	7.6	130	290			
	300	20%	1300	69	4.7	78	180			

The above figures can vary ±10% and apply under the cooling conditions recommended by Primozone.

*These values assume gas properties are standardized at 0 °C and atmospheric pressure.
**These values assume gas properties are standardized at 68 °F and atmospheric pressure.

DETAILED SPECIFICATIONS

	GM6 2.0	GM12 2.0	GM18 2.0
Dimensions			
Height	602 mm / 23.7"	1193 mm / 47.0"	1569 mm / 61.8"
Width	793 mm / 31.2"	728 mm / 28.7"	728 mm / 28.7"
Depth	420 mm / 16.5"	424 mm / 16.7"	424 mm / 16.7"
Weight	85 kg / 187 lbs	230 kg / 507 lbs	280 kg / 617 lbs
Ozone Output			
Max ozone productivity	360 g/h, 19 lbs/day	720 g/h, 38 lbs/day	1100 g/h, 57 lbs/day
Control range	10 % – 100 %	10 % – 100 %	10 % – 100 %
Feed Gas			
Oxygen purity	> 94 %, < 1% N ₂ , Filtered	> 94 %, < 1% N ₂ , Filtered	> 94 %, < 1% N ₂ , Filtered
Oxygen dew point	< -70 °C, < -94 °F	< -70 °C, < -94 °F	< -70 °C, < -94 °F
Max gas pressure at inlet	3 bar(g), 44 psig	3 bar(g), 44 psig	3 bar(g), 44 psig
Ozone pressure	< 2.9 bar(g), < 42 psig	< 2.9 bar(g), < 42 psig	< 2.9 bar(g), < 42 psig
Target inlet gas pressure	2.5 bar(g), 36 psig	2.5 bar(g), 36 psig	2.5 bar(g), 36 psig
Gas connector	½" internal threaded BSP	½" internal threaded BSP	½" internal threaded BSP
Max oxygen consumption	41 l/min, 92 SCFH	81 l/min, 180 SCFH	120 l/min, 280 SCFH
Cooling water			
Min water flow	0.63 m³/h, 2.8 GPM	1.3 m³/h, 5.5 GPM	1.9 m³/h, 8.3 GPM
Max water pressure	6 bar(g)	6 bar(g)	6 bar(g)
Water quality	Drinking water (98/83/EC), closed loop.	Drinking water (98/83/EC), closed loop.	Drinking water (98/83/EC), closed loop.
Cooling water target T, ΔT	10 °C, 5 °C / 50° F, 9° F	10 °C, 5 °C / 50° F, 9° F	10 °C, 5 °C / 50° F, 9° F
Water pressure drop	0.4 bar / 6 psi	0.4 bar / 6 psi	0.4 bar / 6 psi
Water connector	1" BSP	1" BSP	1" BSP
Cooling agent composition	~30 % ethylene glycol, ~70 % water	~30 % ethylene glycol, ~70 % water	~30 % ethylene glycol, ~70 % water
Power Input			
Power supply	400/230 V+N+PE AC 50/60 Hz	400/230 V+N+PE AC 50/60 Hz	400/230 V+N+PE AC 50/60 Hz
Max power	3.6 kW	7.2 kW	10.8 kW
Power factor, full %	0.99	0.99	0.99
Max fuse	16 A	40 A	40 A
Compliance & Certifications			
CE		EN 60204-1:2016, EN 61558-1:2005, EN 61558-2-16:2009, EN 1050: 1997	
FIFRA est. Number		95235-SWE-1	
Noise level		< 55 dB, EN 9614-1:2009	
Ingress protection		IP44	
EMC Emission&Immunity		EMC2014/30/EU, EN61000-6-2EN61000-6-4	

DETAILED SPECIFICATIONS

	GM24 2.0	GM36 2.0	GM48 2.0
Dimensions			
Height	1634 mm / 64.32"	1634 mm / 64.32"	2010 mm / 79.1"
Width	855 mm / 34"	855 mm / 34"	855 mm / 34"
Depth	992 mm / 39"	992 mm / 39"	992 mm / 39"
Weight	470 kg / 1,036 lbs	570 kg / 1,256 lbs	710 kg / 1,565 lbs
Ozone Output			
Max ozone productivity	1400 g/h, 76 lbs/day	2200 g/h, 110 lbs/day	2900 g/h, 150 lbs/day
Control range	10 % – 100 %	10 % – 100 %	10 % – 100 %
Feed Gas			
Oxygen purity	> 94 %, < 1%N ₂ , Filtered	> 94 %, < 1 %N ₂ , Filtered	> 94 %, < 1 %N ₂ , Filtered
Oxygen dew point	< -70 °C, < -94 °F	< -70 °C, < -94 °F	< -70 °C, < -94 °F
Max gas pressure at inlet	3 bar(g), 44 psig	3 bar(g), 44 psig	3 bar(g), 44 psig
Ozone pressure	< 2.9 bar(g), < 42 psig	< 2.9 bar(g), < 42 psig	< 2.9 bar(g), < 42 psig
Target inlet gas pressure	2.5 bar(g), 36 psig	2.5 bar(g), 36 psig	2.5 bar(g), 36 psig
Gas connector	½" internal threaded BSP	½" internal threaded BSP	½" internal threaded BSP
Max oxygen consumption	160 l/min, 370 SCFH	240 l/min, 550 SCFH	320 l/min, 690 SCFH
Cooling water			
Min water flow	2.5 m³/h, 11 GPM	3.6 m³/h, 17 GPM	5.0 m³/h, 22 GPM
Max water pressure	6 bar(g)	6 bar(g)	6 bar(g)
Water quality	Drinking water (98/83/EC), closed loop.	Drinking water (98/83/EC), closed loop.	Drinking water (98/83/EC), closed loop.
Cooling water target T, ΔT	10 °C, 5 °C / 50° F, 9° F	10 °C, 5 °C / 50° F, 9° F	10 °C, 5 °C / 50° F, 9° F
Water pressure drop	0.4 bar / 6 psi	0.4 bar / 6 psi	0.4 bar / 6 psi
Water connector	1" BSP	1" BSP	1" BSP
Cooling agent composition	~30 % ethylene glycol, ~70 % water	~30 % ethylene glycol, ~70 % water	~30 % ethylene glycol, ~70 % water
Power Input			
Power supply	400/230 V+N+PE AC 50/60 Hz	400/230 V+N+PE AC 50/60 Hz	400/230 V+N+PE AC 50/60 Hz
Max power	14.4 kW	21.6 kW	28.8 kW
Power factor, full %	0.99	0.99	0.99
Max fuse	63 A	63 A	63 A
Compliance & Certifications			
CE	EN 60204-1:2016, EN 61558-1:2005, EN 61558-2-16:2009, EN 1050: 1997		
FIFRA est. Number	95235-SWE-1		
Noise level	< 55 dB, EN 9614-1:2009		
Ingress protection	IP44		
EMC Emission&Immunity	EMC2014/30/EU, EN61000-6-2EN61000-6-4		

INSTALLATION SOLUTION

