



AX8407C is a compact point-of-use ozone generator for ultra high concentration and extremely high purity ozone.

Plasma &

Reactive Gas Solutions

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SEMOZON® AX8407C

COMPACT, CONFIGURABLE, HIGH CONCENTRATION OZONE GENERATOR

The AX8407C is a new, compact ozone generator capable of high concentrations of ultra-clean ozone at relatively low flow. The AX8407C is available in 4 output configurations to provide process flexibility and ensure the lowest cost of ozone by matching performance to process requirements. Applications for the AX8407C in semiconductor production include Atomic Layer Deposition (ALD), Chemical Vapor Deposition (CVD), photoresist strip, cleaning, contaminant removal, surface conditioning and oxide growth.

Additionally, the AX8407C is used for sterilization, disinfection, environmental remediation and other applications requiring a compact source for low cost, point-of-use ozone. The AX8407C leverages the innovative AX8407 series generator design for high efficiency ozone production providing low-flow, high-concentration ozone from an extremely compact generator. The generator utilizes the MKS industry standard, patented ozone generating cell technology. MKS generators produce ozone through silent electrical discharge and achieve the highest output concentration levels available.

Features & Benefits

Configuration Flexibility and Lower Cost

- Modular ozone generating unit
- Ozone output matched to process requirements
- No need to buy more capability than you will use

Lowest Cost of Ozone

- High efficiency generator provides maximum concentration for generator size and cost

Flexible Control Interface

- Analog, RS232, DeviceNet™ and TOOLweb®

Compact Footprint

- More than 60% smaller than conventional AX8400 Series generators
- Small enough for tool mount
- Easy integration

Clean, Safe, Cost-Effective Alternative to Other Process Chemicals

- Generated at point-of-use
- High redox potential
- Green chemical, easily converts back to oxygen
- No chemical disposal costs



Specifications and Ordering Information

Model	AX8407C-1	AX8407C-2	AX8407C-3	AX8407C-4
Maximum Ozone Output* (g/hr)	27.5	54.5	87.5	105
Flow Range** (slm)	0.5 - 2.5	0.5 - 5	1 - 7.5	2 - 10
Recommended Flow				
L/min	1.2	2.3	3	3.8
Nominal G/min	0.3	0.6	0.8	1
Amps				
Nominal Current (max)	1.2	2.4	3.5	4.7
Weight				
lbs	32	36	40	44
kg	14.5	16.4	18.2	20.0

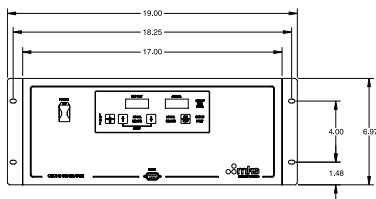
The following specifications are available on all AX8407C models listed above

Operating Range	
Ambient Temperature	10 – 40°C (50 – 104°F)
Nominal Cell Pressure (Delivery)	0.7 – 3.1 bar _{gauge} (10 – 45 psig)
Control Interface	Front Panel Control and Remote Operation
Feed Gas	
Oxygen	Grade 6 or better O ₂
Nitrogen	50 - 100 ppm grade 5 or better N ₂
Cooling Water Flow	
Temperature	17 – 23°C (63 – 73°F)
Filtration	20 microns
Quality	Resistivity ≥ 50 KΩ/cm
AC Power	
VAC (± 10%)	230 VAC
Phase	3 Ø
Hz	50/60 Hz
Dimensions (W x D x H)	259mm x 431mm x 176mm, (10.19" x 17" x 6.92")
Compliance	SEMI S2-0302, SEMI F47, UL 61010-1, CAN/CSA-61010-1

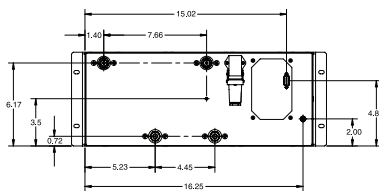
* @ 25 psi ozone delivery pressure and 17°C cooling water
 ** @ 30 psi differential pressure

Please contact your local MKS office for price and availability information.

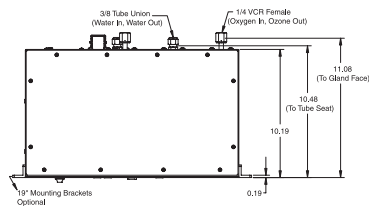
AX8407C Front View



AX8407C Rear View



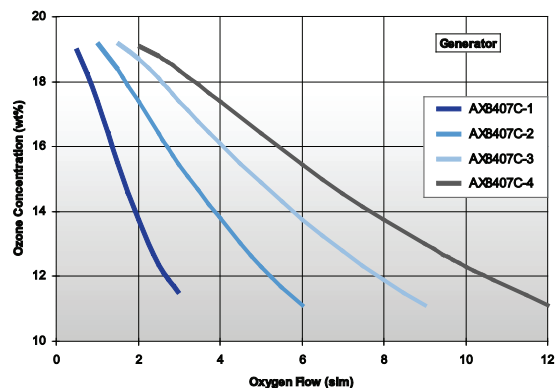
AX8407C Top View



Dimensional Drawing —

Note: Unless otherwise specified, dimensions are nominal values in inches.

AX8407C Compact Ozone Generator Performance Graph



Typical Ozone Output in wt% (std g/Nm³)



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AX8407C - 2/18
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