

AX8410 PRIME

High Concentration, Ultra High Flow Ozone Generator



The AX8410 PRIME is part of MKS' next generation platform of compact, high concentration, ultra high flow, ultra clean ozone generators. It uses a patented cell and power structure to achieve twice the ozone output of earlier models while maintaining a similar footprint.

supports new process requirements requiring higher ozone concentrations at flow rates up to 80 slm. The increased flow rate and higher concentration position the AX8410 PRIME generator to meet the ozone requirements for the next generation of semiconductor processes.

The AX8410 PRIME converts oxygen to ozone through silent electrical discharge. Its novel patented cell design

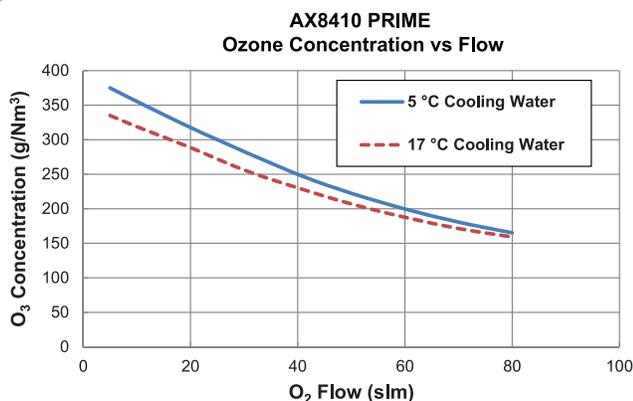
Product Features

- Ozone concentration up to 375 g/Nm³ or 24.2 wt% at 5°C supports new process requirements and fast processing speeds
- Patented cell structure design improves gap uniformity to enable production of high concentration ozone
- Closed-loop operation for tighter process control
- New multi-parameter touch screen interface for smart front panel operation and control
- Backwards compatible communication interface with AX8407



Key Benefits

- O₂ flow rate from 5 slm to 80 slm enables process flexibility
- High ozone output enables innovative system design opportunities
- Expanded data logging capabilities
- Reliability tested to >100,000 hours



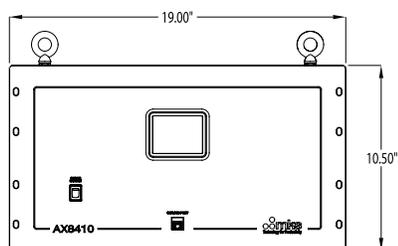
Performance Chart – Typical Ozone Output

Specifications

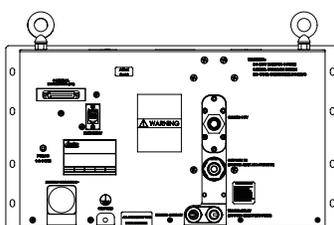
Maximum Ozone Output	with 17°C Cooling Water with 5°C Cooling Water	<ul style="list-style-type: none"> • 335 g/Nm³ (21.8 wt%) • 375 g/Nm³ (24.2 wt%)
O₂ Flow Range		5 - 80 slm
Operating Range	Ambient Temperature Nominal Cell Pressure (Delivery)	<ul style="list-style-type: none"> • 10 - 40 °C (50 - 104 °F) • 15 - 45 psig (100 - 310 kPa)
Pressure		Maintain process pressure at 20 - 50 psig
Control Interface		Front panel control and remote operation
Feed Gas	Oxygen Nitrogen	<ul style="list-style-type: none"> • Grade 6 or better O₂ • 100 - 1000 ppm Grade 5 or better N₂
Cooling Water	Temperature Filtration Quality Water Flow	<ul style="list-style-type: none"> • 5 - 25 °C (41 - 77 °F) • 100 microns • Resistivity ≥ 50 KΩ/cm • 22.7 lpm (6.0 gpm) minimum
AC Power	Voltage Phase Current Frequency	<ul style="list-style-type: none"> • 208 VAC (±10%) • 3Ø & GND, no Neutral • 50A • 50/60 Hz
Weight		77 kg (170 lb)
Dimensions (W x D x H)		483 x 521 x 267 mm (19.0 x 20.5 x 10.5 in)
Compliance		SEMI S2-0302, SEMI F47, UL 61010-1, CAN/GSA-61010-1

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

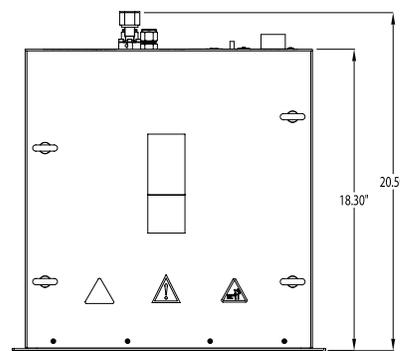
AX8410 PRIME Front View



AX8410 PRIME Rear View



AX8410 PRIME Top View



Dimensional Drawing —

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