GateKeeper® GPU Ozone Gas Purifiers

Superior volatile metal purification and particle filtration

GateKeeper® GPU ozone gas purifiers efficiently reduce solid and volatile metals such as chromium (Cr) and manganese (Mn) from ozone gas. These advanced purifiers significantly reduce metal contamination on wafers, increasing yield.

Advanced gas purification technology enables a >99% volatile efficiency removal rating for Cr, which means the conditioning time required for the ozone gas delivery system can be significantly reduced. In addition to dramatically reducing tool startup time, (depending on the purifier installation point), the purifier with an integrated PTFE/PFA particle filter membrane also helps eliminate metal spiking after conditioning, greatly reducing the risk of wafer defects from metals contamination.



APPLICATIONS

- Chemical vapor deposition (CVD) tools
- Dry etching/ashing tools
- Wet etch and clean (WEC) tools

FEATURES & BENEFITS

Efficiently removes solid and volatile metals (Cr and Mn) from O_3 gas, reducing initial conditioning time of the ozone gas delivery system
Removes particles immediately after media purification, reducing wafer particles and eliminating the need for an independent particle filter
Enables fast, easy installation



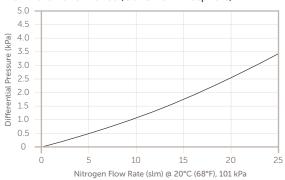
SPECIFICATIONS

Materials of construction	Filter membrane	PTFE	
	Purification media	Porous inorganic material	
	Housing	316L stainless steel	
	Surface finish, internal	Ra <0.17 µm (electropolished)	
	Gasket	Stainless steel	
Retention	Volatile metals	Cr and Mn	
	Volatile metal removal efficiency	>99% for Cr	
	Particles	>99.999999% for particles ≥0.003 µm	
Connection	½" gasket seal		
Gas	Ozone (O ₃) <300 g/Nm ³ concentration		
Inlet metal level	Cr: <1 ppm		
Recommended flow rate	5 to 25 slm		
Housing design pressure	0.99 MPa (143.5 psig) @ 40°C (104°F)		
Operating conditions	Purified condition for ozone gas: Pressure: 20 kPa (2.9 psi), temperature: 20° to 30°C (68° to 86°F)		

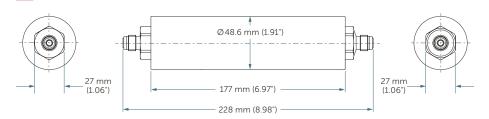
Please consult Entegris for flow rates and O_3 gas concentrations exceeding specifications. Please contact Entegris for pressure applications over 20 kPa (2.9 psi).

PERFORMANCE DATA

Flow Rate Performance (Outlet to Atmosphere)



DIMENSIONS



ORDERING INFORMATION

Part number	Description
GPUS200TOZ04R12CA	GateKeeper GPU ozone gas purifier

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit <u>entegris.com</u> and select the <u>Contact Us</u> link to find the customer service center nearest you.

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