

GateKeeper® GPU Gas Purifiers Model GPUS10MF- 8R/12R

Superior purity control

Entegris' GateKeeper® GPU gas purifiers were designed to improve purity consistency, lifetime and final purity. Leveraging its expertise in material science, Entegris has developed a new generation of purification products that deliver unsurpassed value and performance. Models 10M-8R and 10M-12R are designed for peak flow rates up to 1000 slpm.



FEATURES & BENEFITS

Process Control and Protection

- Purity control to ppt levels
- Low pressure drop across the purifier
- CE certified to the Pressure Equipment Directive (PED) and manufactured in an ISO® 9001:2000 facility

Cost Effective

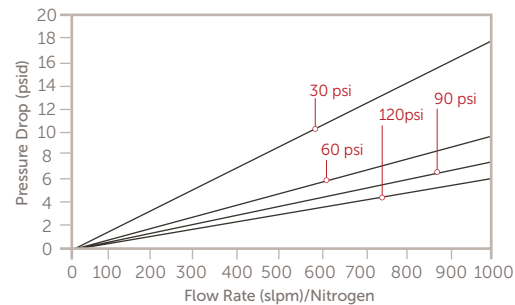
- Regenerable – eliminates disposal issues and costs
- Long lifetime – improved cost of ownership

Safe and Simple to Use

- Use ambient temperature purification – no heat or power required to operate

PERFORMANCE DATA

Pressure Drop vs. Gas Flow Rate*



*The flow rate displayed on this graph may exceed maximum flow rate specification of the purifier model referenced in this data sheet. Please refer to maximum flow rate in the specifications section of this data sheet.

Note: Pressure drop may vary depending on media type.

SPECIFICATIONS

	10M-8R	10M-12R
Materials of construction (housing)	316L stainless steel, electropolished	
Particle filtration type	Wafergard® 16L stainless steel membrane	
Particle retention	Up to 3 LRV* for particles larger than 0.003 µm	
Filtration removal rating	≥0.003 µm	
Maximum operating temperature	65°C (149°F)	
Fitting size and type	½" and ¾" gasket seal**	
Fitting configuration	Male-to-male	
Maximum operating pressure	1724 kPa (250 psig)	
Maximum flow rate	1000 slpm	
Leak rating	1 × 10 ⁻⁹ atm cc/sec	
Length	737 mm (29.0")	748 mm (29.46")
Approximate weight	20 kg (44 lbs)	22 kg (49 lbs)

*Referenced as most penetration particle size.

**Also referred to as VCR® or face seal.

AVAILABLE MEDIA

Media	Gases purified	Contaminants removed	Performance/validation technique
EX	H ₂ , N ₂ , Noble gases, H ₂ /N ₂ , H ₂ /Noble gases	H ₂ O, CO ₂	<100 ppt in H ₂ and N ₂ /APIMS
		O ₂	<250 ppt in H ₂ and N ₂ /APIMS
		CO	<1 ppb in H ₂ and N ₂ /APIMS
		C _x H _y (45–100 amu)	<10 ppt/GC-FID in N ₂
		C _x H _y (>100 amu)	<1 ppt/GC-FID in N ₂
		Refractory compounds (as HMDSO)	<1 ppt/GC-FID in N ₂
HX	H ₂ , N ₂ , Noble gases, H ₂ /N ₂ , H ₂ /Noble gases	H ₂ O, O ₂ , CO, CO ₂	<100 ppt in H ₂ and N ₂ /APIMS
IX	N ₂ , Noble gases	H ₂ O, O ₂ , CO, CO ₂ , H ₂	<100 ppt in Ar and N ₂ /APIMS
	Freon ² 13, 14, 23, 41, 116, 218	H ₂ O, O ₂	
TX	CDA, N ₂ , Noble gases CO ₂ , NH ₃	Condensable organics (as Toluene)	<1 ppt/GC-FID
		Non-condensable organics ¹ (as Butane)	<5 ppt/GC-FID
		Refractory compounds (as HMDSO)	<1 ppt/GC-FID
WX	CDA, H ₂ , N ₂ , Noble gases, CO ₂ , NH ₃ , AsH ₃ , PH ₃ , GeH ₄ , SiH ₄	H ₂ O	<100 ppt in N ₂ /APIMS
			<12 ppb in NH ₃ /CRDS
OP	CDA, N ₂ , Noble gases	H ₂ O	<100 ppt in N ₂ /APIMS
		Condensable organics (as Toluene)	<1 ppt/GC-FID
		Non-condensable organics ¹ (as Butane)	<5 ppt/GC-FID
		Refractory compounds (as HMDSO)	<1 ppt/GC-FID
		Volatile acids (as SO ₂)	<1 ppt/GC-PFPD
		Volatile bases (as NH ₃)	<10 ppt/IC

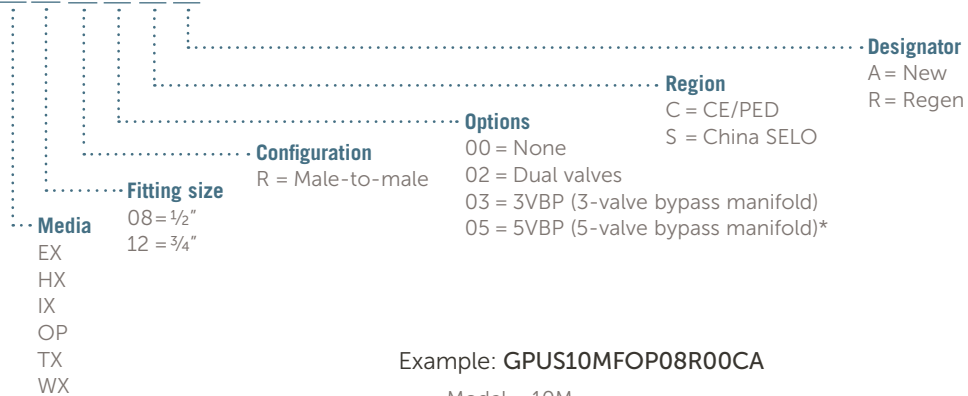
¹ Consult Entegris with specific non-condensable contaminants.

² Removal of H₂O and O₂ only.

ORDERING INFORMATION

GateKeeper GPU Gas Purifier Models GPUS10MF-08R and -12R: part number

GPUS10MF 08 R



Example: GPUS10MFOP08R00CA

- Model = 10M
- Media = OP
- Fitting = 1/2"
- Configuration = Male-to-male
- Options = None
- Region = CE/PED
- Designator = New

FOR MORE INFORMATION

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

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