

# GateKeeper® GPU Gas Purifier Models GPUS17MF- 12R/16R

*Superior purity control*

Entegris' GateKeeper® GPU series of 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 17M-12R and 17M-16R are designed for peak flow rates up to 2000 and 2500 slpm, respectively.

## 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

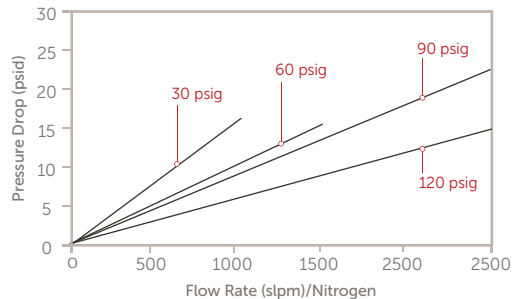
### Safe and Simple to Use

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



## PERFORMANCE DATA

### Pressure Drop vs. Gas Flow Rate



## SPECIFICATIONS

	17M-12R	17M-16R
<b>Materials of construction (housing)</b>	316L stainless steel, electropolished	
<b>Particle filtration type</b>	Wafergard® – 316L stainless steel membrane	
<b>Particle retention</b>	Up to 3 LRV* for particles larger than 0.003 µm	
<b>Filtration removal rating</b>	≥0.003 µm	
<b>Maximum operating temperature</b>	65°C (149°F)	
<b>Fitting size and type</b>	¾" and 1" gasket seal**	
<b>Fitting configuration</b>	Male-to-male	
<b>Maximum operating pressure</b>	1724 kPa (250 psig)	
<b>Maximum flow rate</b>	2000 slpm	2500 slpm
<b>Leak rating</b>	1 × 10 <sup>-9</sup> atm cc/sec	
<b>Length</b>	1085 mm (42.7")	1090 mm (42.9")
<b>Approximate weight</b>	33 kg (73 lb)	35 kg (77 lb)

\* Referenced as most penetration particle size.

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

## AVAILABLE MEDIA

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

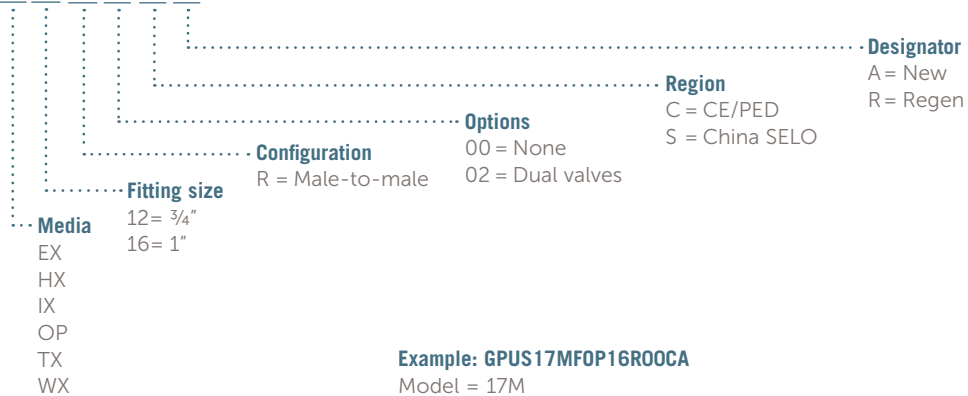
<sup>1</sup> Consult Entegris with specific non-condensable contaminants.

<sup>2</sup> Removal of H<sub>2</sub>O and O<sub>2</sub> only.

## ORDERING INFORMATION

GateKeeper GPU Gas Purifier Models GPUS17MF-16R and -12R: part number

GPUS17MF 16 R



### Example: GPUS17MF0P16R00CA

Model = 17M  
Media = OP  
Fitting = 1"  
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](http://entegris.com) and select the Contact Us link to find the customer service center nearest you.

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