# MegaTorr<sup>®</sup> PS21 Ammonia Gas Purifiers

Efficient bulk gas removal of  $H_2O$ ,  $O_2$ ,  $CO_2$ , and organic impurities

The auto regenerable MegaTorr<sup>®</sup> PS21 Series ammonia gas purifiers are enhanced, optimized designs providing sub-ppb performance in compact footprints.

Entegris has drawn on years of experience in ultra-high purity (UHP) piping design, advanced process material analysis, and state-of-the-art integrated control systems to develop this family of purifiers to meet the needs of low capital cost, high reliability, and high performance.



Optimized design with flow rates up to 1,667 slpm

## **APPLICATIONS**

- Semiconductor
- Data storage
- Flat panel display
- LED
- Solar

## **FEATURES & BENEFITS**

Uses adsorption processes	Provide ultra-high purity gas for semiconductor applications
Two adsorber vessels alternate between purify and regeneration modes	Provide continuous purification in a single process
Optimized design	Provides sub-ppb performance in small footprints with flow rates up to 1,667 slpm (100 Nm <sup>3</sup> /hr)



### **SPECIFICATIONS**

Gas purified	NH <sub>3</sub>	
Impurities removed to <1 ppb	H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , NMHC, metals	
Flow rates	PS21-MGS10 - PS21-MGS20	10 - 20 Nm <sup>3</sup> /hr (167 - 333 slpm)
	PS21-MGS30 - PS21-MGS60	30 - 60 Nm <sup>3</sup> /hr (500 - 1,000 slpm)
	PS21-MGS80 - PS21-MGS100	80 - 100 Nm <sup>3</sup> /hr (1,333 - 1,667 slpm)
Maximum pressure drop	<0.7 bar (70 kPa)	

Note: Purifiers are gas specific and should only be used for the gas indicated.

ndard Features	Optional Features	
<ul><li>Automated microprocessor controller</li><li>HMI (Human Machine Interface)</li></ul>	<ul><li>Inlet and outlet isolation valves</li><li>Mass flowmeter with 4-20 mA output</li></ul>	
<ul> <li>Electric gas preheaters</li> </ul>	<ul> <li>Inlet and outlet pressure transducers</li> </ul>	
Ammonia detection sensor	<ul> <li>Auto or manual bypass</li> </ul>	
Closed-loop temperature controls	<ul> <li>Ultrafine 0.003 µm particle filter</li> </ul>	
Vented cabinet purge	Separate control power	
All-metal closure with doors	MODBUS data communications port	
<ul> <li>Deconcration blanding station</li> </ul>	- LIDS uninterruptible neuver supply	

- Regeneration blending station
- High-temperature hardware interlock
- Over-pressurization safety relief system
- UPS uninterruptible power supply

#### 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.

#### TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit entegris.com and select the Terms & Conditions link in the footer.



Corporate Headquarters Customer Service 129 Concord Billerica, MA 01821 USA

Tel +1 952 556 4181 Fax +1 952 556 8022 Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on entegris.com/trademarks. All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©2021 Entegris, Inc. | All rights reserved. | Printed in the USA | 7242-11585ENT-0821