# MegaTorr® PS5 Rare Gas Purifiers

Efficient bulk gas removal of  $H_2O$ ,  $O_2$ , CO,  $CO_2$ ,  $H_2$ ,  $N_2$ , and THC impurities

The PS5 Series rare 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 5,833 slpm

#### **APPLICATIONS**

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

## **FEATURES & BENEFITS**

Getter alloy	Operates at elevated temperature to remove impurities by forming irreversible chemical bonds	
Hydrogen Removal Unit (HRU) secondary ambient temperature getter cartridge	Removes hydrogen impurities downstream of the heated getter colum	
Includes GettSafe™ fast response thermal production	Quickly detects excessive heat in the getter column and takes action to isolate the purifier	
Optimized design	Provides sub-ppb performance in small footprints with one meter front/rear access and flow rates up to 5,833 slpm (350 Nm <sup>3</sup> /hr)	



#### **SPECIFICATIONS**

Gases purified	He, Ar	
Impurities removed to <1 ppb	H <sub>2</sub> O, O <sub>2</sub> , CO, CO <sub>2</sub> , H <sub>2</sub> , N <sub>2</sub> , THC (including CH <sub>4</sub> )	
Maximum flow rates*	Nm <sup>3</sup> /hr	slpm
PS5-MGT15	15	250
PS5-MGT30	30	500
PS5-MGT50	50	833
PS5-MGT100	100	1,667
PS5-MGT150	150	2,500
PS5-MGT200	200	3,333
PS5-MGT350	350	5,833
Maximum pressure drop	<1 bar (100 kPa)	

<sup>\*</sup>Other flow rates are available. Contact Entegris for details.

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

### Standard Features Optional Features

- Automated microprocessor controller
- HMI (Human Machine Interface)
- GettSafe high temperature safety shutdown system
- Metal 0.003 µm particle filter
- Inlet and outlet sample ports with isolation valves
- Automatic bypass
- Gas-to-gas heat exchanger
- Electric gas preheater system
- Air cooled heat exchanger
- All metal cabinet with doors
- High-temperature hardware interlock
- Alarm relay, life status indicator relay, remote contact shutdown, gas relay
- Relief valve

- Inlet mass flowmeter
- Inlet and outlet isolation valves
- Instrument air management system
- Manual bypass valve
- Pneumatically actuated manual bypass valve
- Separate control power
- UPS uninterruptible power supply
- MODBUS data communication port

#### FOR MORE INFORMATION

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

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