

# MegaTorr<sup>®</sup> PS8 Nitrogen Gas Purifiers

*Efficient bulk gas removal of H<sub>2</sub>O, O<sub>2</sub>,  
CO, CO<sub>2</sub>, and H<sub>2</sub> impurities*

The auto regenerable MegaTorr<sup>®</sup> PS8 Series nitrogen 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 833,333 slpm*

## APPLICATIONS

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

## FEATURES & BENEFITS

|                                                                             |                                                                                                                  |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Uses dual adsorption processes</b>                                       | Provide ultra-high purity gas for semiconductor applications                                                     |
| <b>Two adsorber vessels alternate between purify and regeneration modes</b> | Provide continuous purification in a single process                                                              |
| <b>Optimized design</b>                                                     | Provides sub-ppb performance in small footprints with flow rates up to 833,333 slpm (50,000 Nm <sup>3</sup> /hr) |

## SPECIFICATIONS

|                                        |                                                                         |                  |
|----------------------------------------|-------------------------------------------------------------------------|------------------|
| <b>Gas purified</b>                    | N <sub>2</sub>                                                          |                  |
| <b>Impurities removed to &lt;1 ppb</b> | H <sub>2</sub> O, O <sub>2</sub> , CO, CO <sub>2</sub> , H <sub>2</sub> |                  |
| <b>Flow rates</b>                      | <b>Nm<sup>3</sup>/hr</b>                                                | <b>slpm</b>      |
| PS8-MGS10 - PS8-MGS40                  | 10 - 40                                                                 | 167 - 667        |
| PS8-MGS50 - PS8-MGS60                  | 50 - 60                                                                 | 833 - 1,000      |
| PS8-MGS90 - PS8-MGS120                 | 90 - 120                                                                | 1,500 - 2,000    |
| PS8-MGT200 - PS8-MGT300                | 200 - 300                                                               | 3,333 - 5,000    |
| PS8-MGT400 - PS8-MGT600                | 400 - 600                                                               | 6,667 - 10,000   |
| PS8-MGT700 - PS8-MGT1000               | 700 - 1,000                                                             | 11,667 - 16,667  |
| PS8-MGT1200 - PS8-MGT3000              | 1,200 - 3,000                                                           | 20,000 - 50,000  |
| PS8-MGT4000 - PS8-MGT10000             | 4,000 - 10,000                                                          | 66,667 - 166,667 |
| <b>Maximum pressure drop</b>           | <0.7 bar (70 kPa)<br><1 bar (100 kPa), PS8-MGT4000-PS8-MGT10000 only    |                  |

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

| Standard Features                                                                                                                                                                                                                                                                                                                                                                                      | Optional Features                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Automated microprocessor controller</li> <li>HMI (Human Machine Interface)</li> <li>System alarms</li> <li>Electric gas preheaters</li> <li>Closed-loop temperature controls</li> <li>All-metal closure with doors</li> <li>Hydrogen blending station</li> <li>High-temperature hardware interlock</li> <li>Over-pressurization safety relief system</li> </ul> | <ul style="list-style-type: none"> <li>Inlet and outlet isolation valves</li> <li>Mass flowmeter with 4-20 mA output</li> <li>Inlet and outlet pressure transducers</li> <li>Instrument air management system</li> <li>Auto or manual bypass</li> <li>Ultrafine 0.003 µm particle filter</li> <li>Separate control power</li> <li>Factory regenerable or automatically regenerable purifier in the bypass line</li> </ul> |

#### 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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