PE9000MS Series Hydrogen Gas Purifiers

The Purest Hydrogen on the Planet

Power + Energy micro-channel palladium purifiers produce the purest hydrogen on the planet. All P+E purifiers use patented micro-channel palladium membrane technology to remove all impurities to parts per trillion levels. The PE9000MS gas purifiers provide a durable purifier for any flow and any inlet gas source. This compact design can be wall-mounted to provide the purest hydrogen for point-of-use or area gas purification.

KEY FEATURES

- Ultra-pure hydrogen from any source
- High flow capacity up to 88 Nm^3/hr.
- < 1 ppb O_2, H_2O, CO_2, CO, N_2, CH_4, NMHC
- Patented palladium micro-channel technology
- Lowest power consumption
- Lowest H_2 vent flow rate
- Smallest footprint—minimal side and back clearance
- Wall or table mount
- 25 different sizes to match your flow rate and pressure specifications

APPLICATIONS

- LED device manufacturing
- Silicon Carbide (SiC) epitaxy
- Crystal growth
- Photovoltaic production
- III/V and II/VI MOCVD processes
- Polysilicon manufacturing
- Carbon nanotubes
- LCD display processes
- Silicon & compound semi

Palladium Advantages

- Only hydrogen passes through to the pure side—the purest gas
- Every impurity is removed—no exceptions
- Unlimited lifetime—no regeneration or vessel replacement
- Separates pure H2 from source gas with ppm or % level impurities

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Feature	Specification
Flow Rate	**5—88 Nm^3/hr.**
Maximum Inlet Pressure	300 psig (20.4 Barg)
Inlet Purity	**99.95% typical**
Outlet Purity	99.9999999% < 100 ppt O_2, H_2O, CO, CO_2, N_2, THC
N_2 Purge	**70-90 psig (4.8-6.2 Barg)**
Instrument Air & Z-Purge	Air or N_2 70-90 psig (4.8-6.2 Barg)
Power	**200-240 VAC 50/60 Hz 2-16 kW Peak (startup) 0.7—4 kW average**
Dimensions	21"W x 18"D x 24"H (540 x 458 x 626mm)
Weight	**100 lbs (45 kg)**

STANDARD FEATURES

- ASME U-stamp pressure vessel
- H2 sensor
- Inlet particle filter
- Pressure sensors
- PLC with color HMI
- Alarm history and data storage
- Ethernet connection

OPTIONAL

- Inlet H2 particle filter

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