



SAES Pure Gas

The Technology of Pure Gas



Palladium Hydrogen Purifiers: PD05



SAES Pure Gas palladium Hydrogen purifiers use patented micro-channel technology to remove all impurities to parts-per-trillion levels (ppt). The compact PD05 purifier is ideal for low flow applications such as; universities, laboratories, and industrial applications. This purifier can be installed downstream of compressed cylinders or generators.

Applications

- Gas chromatography (GC)
- Analytical instrument zero/carrier gas
- GaN epitaxy
- Silicon carbide (SiC) epitaxy
- III/V and II/VI MOCVD
- Fuel Cell

Palladium Advantages

- Only Hydrogen passes through to the pure side
- Every impurity is removed - no exceptions
- Unlimited lifetime - no regeneration or vessel replacement
- Pure H₂ from a variety of source gases with ppm or % level impurities
- Patented Micro-Channel Palladium technology
- Easy to verify performance with Helium leak check

Palladium Hydrogen Purifiers: PD05

Specifications	
Flow Rate	Up to 50 slpm
Maximum Inlet Pressure	200 psig (13.6 Barg)
Inlet Purity	99.95% typical
Outlet Purity	99.9999999% <1 ppb O ₂ , H ₂ O, CO, CO ₂ , N ₂ , CH ₄ , NMHC, Ar, He
N ₂ Purge	99.95% 70 - 100 psig (4.8 - 6.9 Barg)
Instrument Air and Z-Purge	Air or N ₂ 70 - 100 psig (4.8 - 6.9 Barg)
Power	120 VAC 50/60 Hz 230 VAC 50/60 Hz
Dimensions	13.0"W x 15.1"D x 13.5"H (330 x 384 x 343 mm)
Weight	< 33 lbs (15 kg)

Model Number	Typical Flow Rate
PS7-PD05-08-1 (120 VAC) PS7-PD05-08-2 (230 VAC) PS7-PD05-08-3 (230 VAC)	5.5 slpm
PS7-PD05-21-1 (120 VAC) PS7-PD05-21-2 (230 VAC) PS7-PD05-21-3 (230 VAC)	12.5 slpm
PS7-PD05-50-1 (120 VAC) PS7-PD05-50-2 (230 VAC) PS7-PD05-50-3 (230 VAC)	28.4 slpm
Typical flow at 200 psig inlet, 60 psig outlet pressure	

Features and Benefits
<ul style="list-style-type: none"> • Ultra-pure hydrogen from a variety of sources
<ul style="list-style-type: none"> • Automatic nitrogen purge for cell protection
<ul style="list-style-type: none"> • Outlet check valve to prevent back diffusion
<ul style="list-style-type: none"> • Boost bleed valve for quick purging
<ul style="list-style-type: none"> • Electrical cabinet Z-purge
<ul style="list-style-type: none"> • PLC controller with color touch screen
<ul style="list-style-type: none"> • High/Low temperature alarms
<ul style="list-style-type: none"> • CE Marked



SAES Pure Gas, Inc.
4175 Santa Fe Road
San Luis Obispo, CA, USA, 93401
Phone: +1 805 541 9299
Website: www.saespuregas.com
E-mail: spg@saes-group.com