

The Purest Hydrogen On The Planet

saes
group

SAES Pure Gas

making **innovation happen**, together



Applications

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

SAES Pure Gas micro-channel palladium purifiers (formerly from **Power+Energy**) produce the purest hydrogen on the planet. All purifiers use patented micro-channel palladium membrane technology to remove all impurities to parts-per-trillion levels. The compact PE-2100 purifier is ideal for low flow rate university, laboratory, and industrial applications. The hydrogen purifier can be installed downstream of compressed cylinders or generators.

Key Features

- Ultra-pure hydrogen from any source
- < 99.9999999% purity; < 1 ppb total impurities
- Patented palladium micro-channel technology
- Push button operation
- Automatic N₂ purge valve
- Pure hydrogen inlet valve
- Bleed gas vent line with fixed orifice
- Temperature controller with digital display

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
- Easy to verify performance with in-situ helium leak test

PE-2100 Micro-Channel Palladium Purifiers

Cabinet Rear View



Model Number

Maximum Flow Rate

PE-2100HP	6 slpm
PE-2100KP	14 slpm
PE-2100MP	30 slpm

Maximum flow at 200 psig inlet, 30 psig outlet pressure

Flow curves available on request

Feature	Specification
Flow Rate	Up to 30 slpm
Maximum Inlet Pressure	200 psig (13.6 Barg)
Inlet Purity	99.95% typical
Outlet Purity	99.99999999% <1 ppb O ₂ , H ₂ O, CO, CO ₂ , N ₂ , CH ₄ , NMHC
N ₂ Purge	70 - 150 psig (4.8 - 10.2 Barg)
Instrument Air	Air or N ₂ 65 - 80 psig (4.4 - 5.4 Barg)
Power	100 - 120 VAC 50/60 Hz 200 - 240 VAC 50/60 Hz
Dimensions	10"W x 10"D x 8"H (254 x 254 x 203 mm)
Weight	15 lb (7 kg)



SAES Pure Gas
The Technology of Pure Gas

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