

REB's Mr. Hydrogen, Palladium-membrane hydrogen purifier

Description

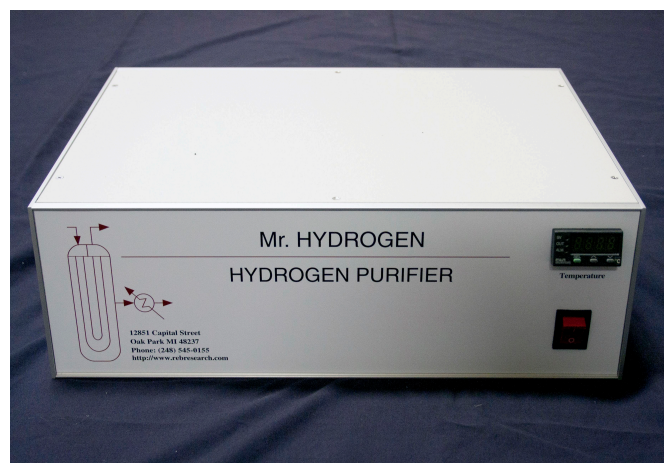
Mr. hydrogen is a cost effective, convenient, solution for extracting ultra-pure hydrogen from standard bottled gas. Total impurity levels below .05 ppm are standard for continuous operation.

REB's Mr. Hydrogen, palladium-membrane hydrogen purifiers are available in 120 V or 240 VAC versions, delivering from 1 to 50 liters per minute. For larger purifier outputs, Call us.

All Mr. Hydrogen products aim for energy efficiency and simple ease of use. They include a fixed bleed that needs no customer adjustment. Larger –output units include a hydrogen to hydrogen heat exchanger for energy efficiency and minimize the temperature of the output hydrogen. All you need do is connect up the purifier, turn on the on-switch, and turn on the source hydrogen. Mr. Hydrogen saves thousands of dollars per year by allowing the use of low grade of hydrogen in mission-critical applications.

Principle of Operation

The heart of the Mr. Hydrogen, is a membrane cell with palladium-coated palladium alloy tubes. Hydrogen from a customer's source is dissociated into atomic hydrogen. This atomic hydrogen passes through the metals of the tube wall, while the metallic membranes exclude all impurities. The atoms recombine to ultra-pure hydrogen gas that is delivered to your application.



Design Features

- Outputs hydrogen with less than 0.05 ppm total impurity content.
- Reliable palladium cell design
- Simple operation; just one switch
- Automatic bleed frit – no need to fiddle
- 120 or 240 VAC operation
- Low power draw
- Lightweight and compact
- Temperature/ fault indicator
- Easy replacement of burnt out heaters or TCs

Applications

Mr. Hydrogen is intended for laboratory and small manufacturing use. For carrier gas or flame ionization gas in gas chromatography; for metallurgy, brazing, semiconductor manufacturing, hydrogenation, catalysis, controlled atmospheres, and nuclear research.

Specifications

Total flow capacity range: 1 to 75 liters /min.
Power input : 120/240 VAC
Operating pressure range : 0 - 250 psi
Size: 12"L, 17"W, 5"H

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