

Product Information

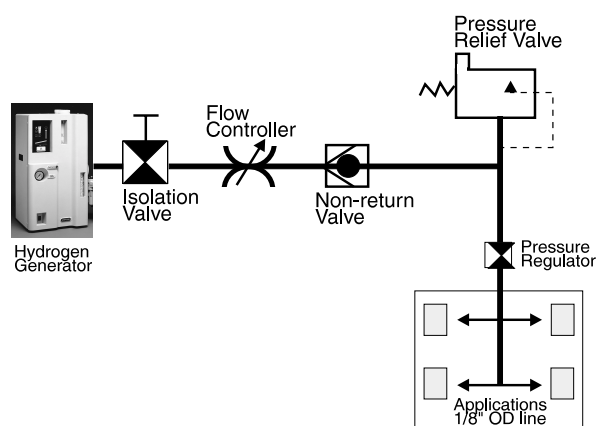
NITROX UHP Hydrogen Generators



domnick hunter hydrogen generators are a safe and economic alternative to high pressure gas cylinders. These generators deliver a continuous stream of 99.9999% pure hydrogen, suitable for use with any laboratory instrument requiring a supply of ultra high purity hydrogen, and ideal for carrier gas and fuel gas applications. domnick hunter hydrogen generators use a proprietary ion exchange membrane to produce ultra-high-purity hydrogen from laboratory grade deionized water, totally eliminating the need for caustic solution.

These generators are designed for total safety and highly reliable operation. Hydrogen is generated only on demand, at low pressure, and minimal volume is stored within the unit. A unique digital display gives system status and diagnostic capabilities not available on any competitive hydrogen generator.

Recommended Basic System Layout



G001371

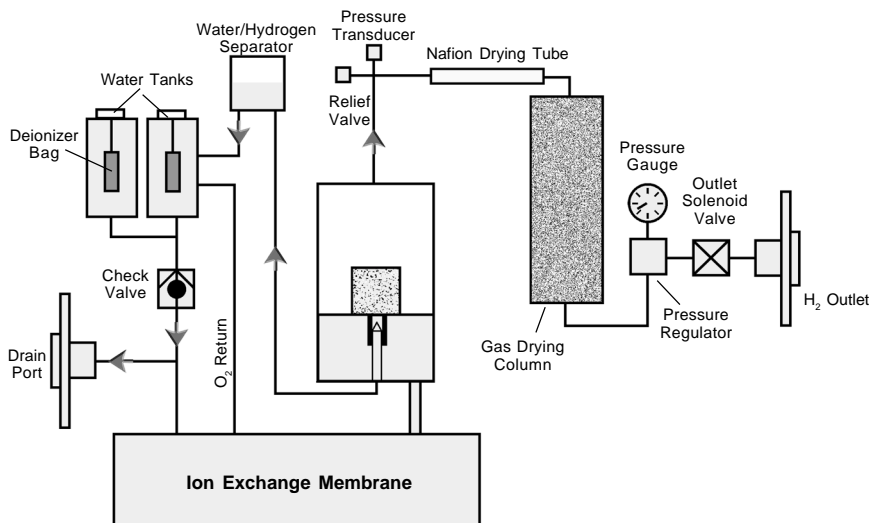
Features and Benefits

- 99.9999% pure hydrogen
- Remote start/stop and remote alarm
- Automatic leak detection
- Low water detection (audible alarm)
- Poor water quality detection (audible alarm)
- Integrated microprocessor control
- Meet CE, CSA, UL requirements

Specifications

Product Purity:	99.9999% pure hydrogen gas	Dimensions (H x W x D):	27 x 14 x 14" / 69 x 36 x 36cm
Input Water Quality:	deionized, >1 megohm/cm	Weight Dry:	58lbs / 26kg
Reservoir Capacity:	4 liters	Water Consumption: (approximate)	20H: 128cc per day/0.9 liters per week 40H: 256cc per day/1.8 liters per week 60H: 511cc per day/3.6 liters per week (Values based on full flow with 24-hour operation at 22°C)
Output Flow:	Model 20: 160 (cc/min) (supplies 3-4 FIDs) Model 40: 250 (supplies 6-8 FIDs) Model 60: 500 (supplies 12-16 FIDs)	Power Consumption:	20H: 150 watts 40H: 285 watts 60H: 285 watts
Delivery Pressure:	0.1-90psig	Operation Temp. Range:	+5° to +35° C
Outlet:	1/8" Swagelok®	Water Quality Required:	> 1 M ohm cm
Power Requirements:	90-264VAC, 47-63Hz (self-switching)		
Power Rating:	Model 20: 190 (watts) Model 40: 285 Model 60: 285		

Hydrogen Generation Process



G001372

Installation:

Installation is quick and ease. After removing the unit from its box and positioning it on the floor or bench where you would be using it then simply follow steps 1 through 7.

Installation Procedure

1. We recommend that the generator be sited as close to the application as possible, but do not connect gas supply pipework until the recommended system layout has been read and understood in the manual.
2. Remove the fitting cover from the hydrogen outlet port.
3. Connect to existing piping for your application. We advise you purge the outlet pipework for 15 minutes to remove oxygen before connecting to the application. (Use pipework recommended for hydrogen gas.)
4. Obtain a supply of de-ionized water (>1 M ohm cm) and fill the water container to the FULL mark on the visual window on the front of the generator.
5. Remove the deionizer bags from the packaging: locate the T fastener on the top of each bag through the center hole on the top cap of the water container. Put one bag into each top cap, then place the bags into the water containers and fit caps securely.
6. Remove desiccant drying cartridge from its packaging and remove blanking plugs from each end. Open the door on the front of the generator and locate one end of the cartridge into the quick connector on the bottom of the enclosure. Locate the cartridge securely in the two brackets and connect the top quick connector.
7. Plug the unit in and push the power button to the on position. Follow the start up instructions in the manual.

Ordering Information:

domnick hunter Hydrogen Generators

Manufactured in a rigorous ISO 9001 quality system; CE approved.

One year parts and labor warranty from domnick hunter.

DESCRIPTION	CAT. NO.
NITROX UHP Hydrogen Generator, Model 20	27748-U
NITROX UHP Hydrogen Generator, Model 40	27749-U
NITROX UHP Hydrogen Generator, Model 60	27750-U
Deionizer Bags (pk. of 2)	27768-U
Desiccant Cartridge	27769-U

Replacement part frequency: Deionizer Bags and Drying Tubes every 6 months

An electronic version of the operational manual is available upon request. Please contact our Technical Service Department, phone: 800-359-3041, email: techservice@sial.com to receive a copy.

Trademarks

dh, domnick hunter, NITROX – domnick hunter limited
Swagelok – Crawford Fitting Co.

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