SRI GC Innovations

H_2-50 Hydrogen Generator and the Extended Run H_2-50 Upgrade Kit

- ***Safer than gas cylinders***
- ***Produces 50mL/min at 35psi***
- ***Uses grocery store quality distilled water***

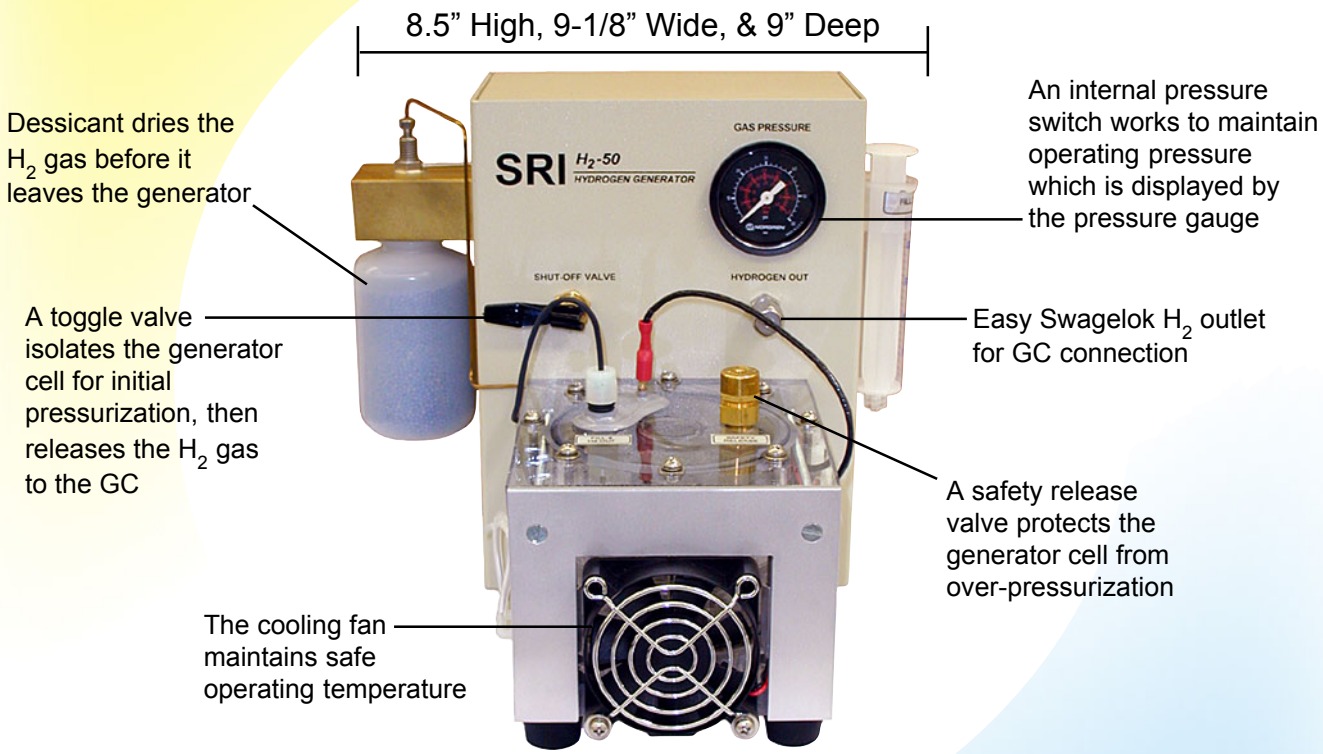
Using hydrogen as carrier gas can increase analysis speed, making overall analysis time shorter, which translates into time and money savings. More analytical runs can be made, and hydrogen carrier results in better column efficiency. Because of the long-term expense and safety hazards associated with the use of compressed gas cylinders, many analysts are turning to hydrogen generators to supply their gas. For an initial investment, the generator will pay for itself and save considerable expense over time compared to the ongoing costs and safety hazards of cylinder rental, handling, storage, and transportation. SRI offers the H_2-50 hydrogen generator and the Extended Run H_2-50 Upgrade Kit.

H_2-50

Extended Run H_2-50

H_2-50 Hydrogen Generator

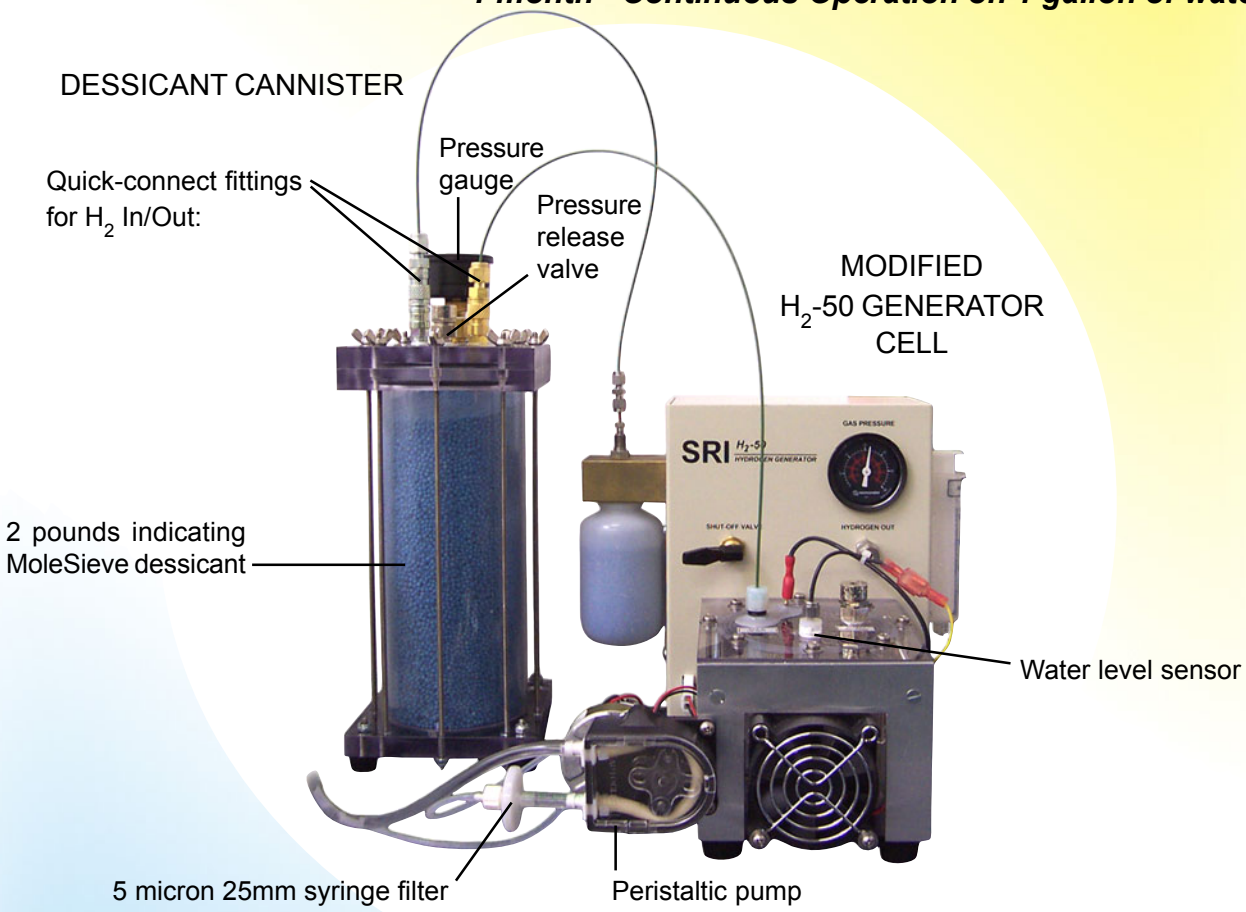
- ***Safer than gas cylinders***
- ***Produces 50mL/min at 35psi***
- ***Uses grocery store quality distilled water***
- ***Convenient small size***



The SRI H_2-50 hydrogen generator gives you the ability to produce hydrogen gas economically and consistently, right in the laboratory, or wherever your GC field work takes you. Its small size makes it lightweight and portable. Its external power supply lets you operate it on various voltages around the world. It produces a maximum of 50mLs per minute at 35psi, using readily available distilled water from grocery and convenience stores. The H_2-50 can supply enough hydrogen gas for a detector or two, in addition to providing the GC carrier gas. During operation, it even stores enough hydrogen gas to operate a split injector for short periods. Explosion hazards are avoided since the H_2-50 stores just 160-250mLs of H_2 gas at a time. With the H_2-50’s go-anywhere power supply and the ability to use grocery store quality distilled water, you can perform analyses around the globe without the hassle of compressed gas cylinders.

Extended Run H_2-50 Upgrade Kit

- ***Peristaltic Pump***
- ***Water Level Sensor***
- ***Large Dessicant Chamber***
- ***1 month+ Continuous Operation on 1 gallon of water!***



The SRI Extended Run H_2-50 hydrogen generator consists of a modified hydrogen generator cell and electronics, a peristaltic pump, and a large dessicant cannister. The dessicant cannister holds about two pounds of indicating MoleSieve dessicant beads—enough for continuous operation at 50mL/minute for a month, or longer if the H_2 flow requirement is lower. The quick connect fittings on the dessicant cannister allow you to swap in a precharged cannister without interrupting the analysis. The Extended Run generator cell comes equipped with a water level sensor, which automatically turns the peristaltic pump ON/OFF to maintain a constant water level in the cell reservoir. A one gallon bottle of grocery store quality distilled water is sufficient for a month or more of operation. A disposable syringe filter is used to prevent clogging of the waterways inside the generator by dust and small fibers.

As shown in Specifications table, the H_2-50 with the Extended Run Upgrade Kit offers much longer continuous operation capability than the standard H_2-50. Use it in the field or at any remote station for one month of continuous H_2 production at 50mL per minute and 35psi. The indicating MoleSieve beads in the dessicant cannister are easily regenerated in a microwave oven, and will last indefinitely.

SPECIFICATIONS:	**H_2-50**	**Upgraded Extended Run H_2-50**
PRODUCTION RATE	maximum 50mLs/min at 35psi	maximum 50mL/min at 35psi
GAS PURITY	99.5%	99.5%
WATER VOLUME	160mL to the top fill line of the generator cell	maintained by the water level sensor and peristaltic pump
GAS PRESSURE	35psi (factory set); safety pressure release actuates at 45-50psi	35psi (factory set); safety pressure release actuates at 45-50psi
GAS PRODUCTION	30 hours of continuous operation at 50mL/min on one reservoir (160mLsof distilled water)	1+ month of continuous operation at 50mL/min on less than one gallon of distilled water
WATER REQUIRED	Grocery store quality distilled water; tap water in a pinch	Grocery store quality distilled water; tap water in a pinch
H_2 PRODUCTION CONTROL	Internal pressure switch	Internal pressure switch
OUTPUT CONNECTION	1/8" Swagelok	1/8" Swagelok; quick-connect inlet and outlet on dessicant cannister
INPUT VOLTAGE	100-240VAC or 12 volts DC	100-240VACor 12 volts DC
CURRENT	6.4 amperes	6.4 amperes

Because the Extended Run H_2-50 Upgrade Kit makes a maximum of 50mL per minute, it can take hours to purge air out of the cannister after regenerating the dessicant beads. Therefore, it makes more sense to regenerate the dessicant cannister in the lab rather than in the field. To avoid downtime, we recommend that you order a spare dessicant cannister, so that when you arrive onsite to perform periodic maintenance, you can swap it right into your system.

8680-0350	H_2-50 hydrogen generator with external power supply	$ 2,295.00
8680-0351	Extended Run H_2-50 Upgrade Kit with large dessicant cannister, peristaltic pump, and water level sensor	$ 1,195.00
8680-0352	Spare dessicant cannister (recommended)	$ 595.00

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