PRODUCT DATASHEET

# High-Pressure Laboratory Hydrogen Generator for Reactors

PEM hydrogen generators with a booster to fill hydrogenation reactors without cylinders

Product page





Close-up: booster, buffer vessel and regulator panel

## OVERVIEW

The Tech Inc. High-Pressure Laboratory Hydrogen Generator for Reactors supplies hydrogen for laboratory hydrogenation without cylinders. A PEM electrolyser makes dry hydrogen at moderate pressure; for reactors that need more, a compact booster raises the pressure into a small buffer vessel, and a panel with regulators, flow measurement and relief feeds the reactors and shakers.

## TYPICAL DESIGN DATA

| | |
|---|---|
| **Output** | About 0.5 to 1 L/min of hydrogen |
| **Generator pressure** | To about 16 bar |
| **Booster** | To about 100 bar into a buffer vessel |
| **Codes and standards** | Electrical to IEC 61010-1; pressure parts to ASME B31.3 practice |
| **Purity** | High-purity dry hydrogen from PEM |
| **Safety** | Leak detection, relief, flame arrestor and shut-down |
| **Control** | Pressure and flow display with alarms |

## MODELS AND CAPACITIES

- **TI-HPH-500** – about 500 mL/min
- **TI-HPH-1000** – about 1 L/min
- **TI-HPH-B** – with booster and buffer
- **TI-HPH-P** – bay package

Indicative output.

## ORDERING CODE

Example **TI-HPH-1000-B**: **1000** output, mL/min; **B** options: B booster, P bay package, N none.

## SCOPE OF SUPPLY

**Included:** factory acceptance test with a written report; drawings for approval, material certificates and manual.
**Options:** booster and buffer; bay panel with valves; remote alarm contact; annual service.

## KEY ADVANTAGES

- **No cylinders** – hydrogen on demand
- **Safe** – leak detection and shut-down
- **Reactor pressure** – with the booster
- **Small inventory** – buffer only

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