

Brezza *by* CLAI ND

# H<sub>2</sub> Gen



*"Designed for the future.  
The safe alternative  
to helium"*

**Hydrogen generator  
for carrier gas  
and detectors**



## MODELS

H<sub>2</sub> Gen 200

H<sub>2</sub> Gen 400

H<sub>2</sub> Gen 600

- ✓ Designed for **Carrier Gas** in GC, GC-MSD and “**FAST GC**”
- ✓ **UHP Purity** that meets the needs required by **track analysis**
- ✓ **Security system** with display messages, automatic stop devices and warning signals in case of gas leak
- ✓ **Availability of automatic switch with inert gas** if the production of hydrogen stops
- ✓ **Parallel connection** from series up to 4 stacked generators



## FEATURES

- **Modular configuration**
- Equipped with the innovative HT PEM cell for high purity
- **Removable water tank** for easy cleaning and water change; automatic water loading pump included for external water supply
- **Maintenance:** simple substitution of the deionizing bag and drier, only after 50.000l of H<sub>2</sub> produced
- **CPU with Touch Screen Display** connectable with CAN BUS to the generators (up to 32 units), which allows the monitoring of operational status
- **Hydrogen production proportional to consumption**, with the minimum gas storage within the instrument
- CPU equipped with **LAN connection**

## APPLICATIONS

Carrier gas

In GC as a fuel for the flame of detectors FID, NPD, FPD and ATF

In ICP for collision reaction interface



## TECHNICAL SPECIFICATIONS

FLOW RATE	200/400/600 Nml/min $\pm$ 10% a 2000 m slm (possibility to connect in parallel up to 4 stacked generators)
TECHNOLOGIES EMPLOY	HT PEM electrolytic cell
OUTPUT PRESSURE	2 - 8 bar $\pm$ 3% /30 - 116 psi $\pm$ 3%
PURITY	99,9999 % Oxygen < 1 ppm
MOISTURE	Better than -70° C dew-point ATP at 20°C
REQUIREMENTS OF DEMINERALIZED WATER	Required resistivity >1 M $\Omega$ cm @25°C; ASTM Type II Advised resistivity >10 M $\Omega$ cm @25°C; ASTM Type I
ELECTRICAL SUPPLY	115/230 VAC (+/- 10%) 50-60 Hz HyGen 200: 110W HyGen 400: 180W HyGen 600: 250W
INDEX OF PROTECTION	IP20
NOISE	< 50 dBA
OPERATING TEMPERATURE	5°C - 35°C / 40°F - 95°F
ENVIRONMENTAL HUMIDITY	max 90% without condensation
MAX ALTITUDE	2000 m slm
DIMENSIONS	Height: 40 cm + 7 cm (base) /15.8" + 2.8" Width: 38 cm/14.9" Depth: 53 cm/20.8"
WEIGHT	30 kg/67 lbs
PNEUMATIC CONNECTIONS	Hydrogen output : G 1/8" female AISI 316 Exhaust: quick coupling for plastic pipe 4 mm Input demineralized water: flexible hose with 1/4" connection
WARRANTY	2 years

## CERTIFICATIONS



Complies with ATEX





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