

HYGEN



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

**HYDROGEN GENERATOR
FOR CARRIER GAS
AND DETECTORS**



MODELS

Hy Gen 200

Hy Gen 400

Hy 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 H₂ 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 / 30 - 116 psi
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 Ω cm @25°C; ASTM Type II Advised resistivity >10 M Ω 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**





CLAIND

GAS GENERATORS AND PURIFIERS

Via Regina 24
22016 Tremezzina
Loc. Lenno (CO)
Italy

Ph. +39 0344 56603
Fax +39 0344 56627
Email: info@claind.it
Website: www.claind.it