

H2

# Hydroxychrom

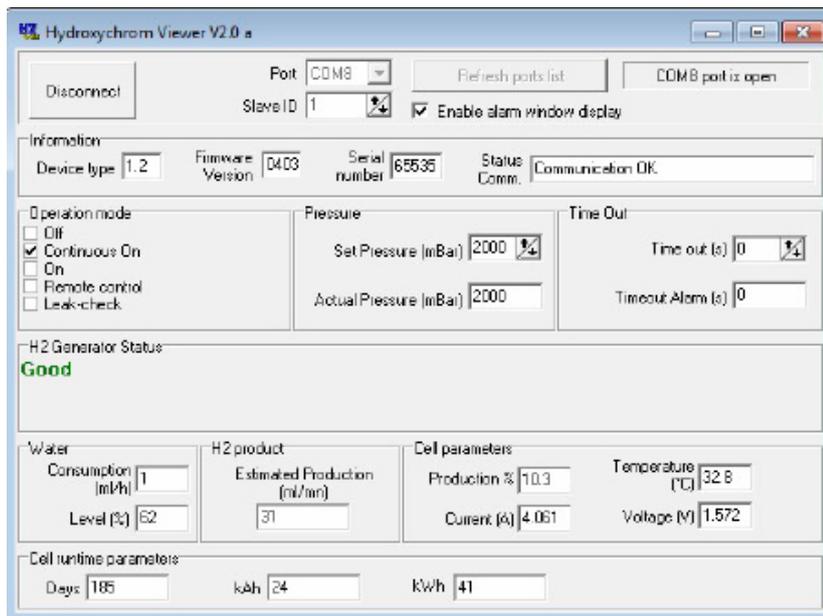
Hydrogen generator and air option

Compact



Model: XXX916

No cylinder



Remote control

Alarms

Hydroxychrom is a high purity hydrogen generator and an important tool for the incoming H2 of FID, FPD detectors, BTEX, VOC analyzers and others

Chromatotec® is specialized in VOC, Sulfur and permanent gases analysis at trace and ultra trace levels (ppm, ppb, ppt). Please visit our website for more details.

# Hydroxychrom

Hydrogen generator and air option



## Hydrogen generator:

Thanks to hydroxychrom, there is no need for a heavy and costly gas cylinder. The instrument's internal program and processor ensures the control of the generators and operational parameters such as water level, outlet H2 pressure and electrolyses current to be monitored online.

It uses the latest membrane technology (PEM) available for the production of electrolytic hydrogen. This technology is preferred to other techniques because it requires less maintenance and there is no need for dangerous caustic solutions. The reduction of dead volumes (<100 ml) as well as an "on demand generation" allow not to store hydrogen and to use this instrument in areas where hydrogen cylinders are forbidden. H2 is dried on-line, no need of cartridge to dry gas.

## Principle:

Hydrogen is produced by electrolysis of water through a polymer membrane. The electrolysis cell is fed with the distilled water located in the intermediate internal tank, which is supplied by the main external tank.

The hydrogen produced is dried continuously (need for dry air by external source: XXX916 or by internal source: XXX918) and pressure is regulated at 2 bar in standard.

## Safety:

In case of incorrect internal operation, overpressure, or the opening of the H2 circuit, the production of H2 is stopped and an alarm is generated (automatic leak check).

**An automatic re start is done after a power cut**

## Advantages:

- Reduces operation costs. Return on investment within 2 years.
- Improves resolution and detection limit versus Helium usage only.
- Provides High pressure stability.
- H2 available 24/7 at constant purity. No contamination.
- Independent source of Hydrogen that does not require any piping and can be easily moved around the laboratory.
- Remote control from PC, I-phone and I-pad
- Very safe operation, internal leak-test, automatic shut-down, over-pressure valve, current and voltage limits.
- No handling and shortage of cumbersome gas cylinders. No cylinder rental fee.

## Product technical specifications:

### Flow rate:

- 100 mL/min in standard
- 160 mL/min in option
- 30 mL/min for FID and 70 mL/min for FPD

### Water consumption:

- With 30 mL/min H2 consumption and with 3L of distilled water, the production of hydrogen will be of 83 days.
- External tank filled with 3L of distilled water or 5L distilled water bag in option

### Outlet pressure:

- Adjustable with 2 bar in standard

### Purity:

- 99.9999% with continuous drying
- Moisture : < - 60°DP
- Hydrocarbons < 0.1 ppb

### Life time of the de-ionizer bag:

- 12 months

### Screen / Keyboard:

- Controlled by Hydroxychrom Viewer software.
- Installed in an analyzer supervisor of Chroma or Airmo

### Connection:

- USB

### Electrical consumption:

- 480W

### Dimensions and weight:

- Rack 19" – 4U
- Height : 180 mm
- Width : 482 mm
- Depth : 600 mm
- Net weights : 17 kg et 22 kg with air option

### To order:

Hydrogen generator (4U)  
AirmoPure (for one FID or one FPD)  
Air generator for FID only  
(Not for Calibration dilution)

### Model:

XXX916  
XXX031-D  
XXX918

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice



#### **EUROPE**

AIRMOTEC AG SAS  
15 rue d'Artiguelongue  
33240 Val de Virvée - FRANCE  
Phone: +33 (0) 557 940 626  
Fax: +33 (0) 557 940 620



**Lauper Instruments AG**  
Irisweg 16B  
CH-3280 Murten  
Tel. +41 26 672 30 50  
info@lauper-instruments.ch  
www.lauper-instruments.ch