ONLINE GAS ANALYZER EXPERTS

GAS ANALYZER GC 866

HYDROXYCHROM

Hydrogen generator and air option

H2

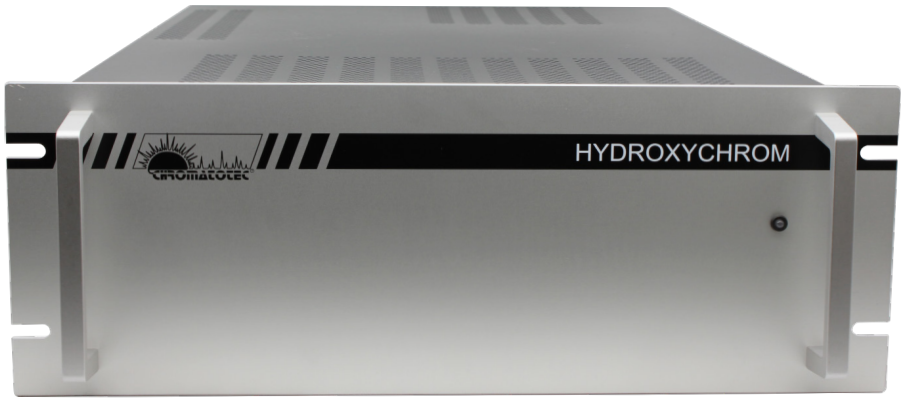
Compact

Transportable

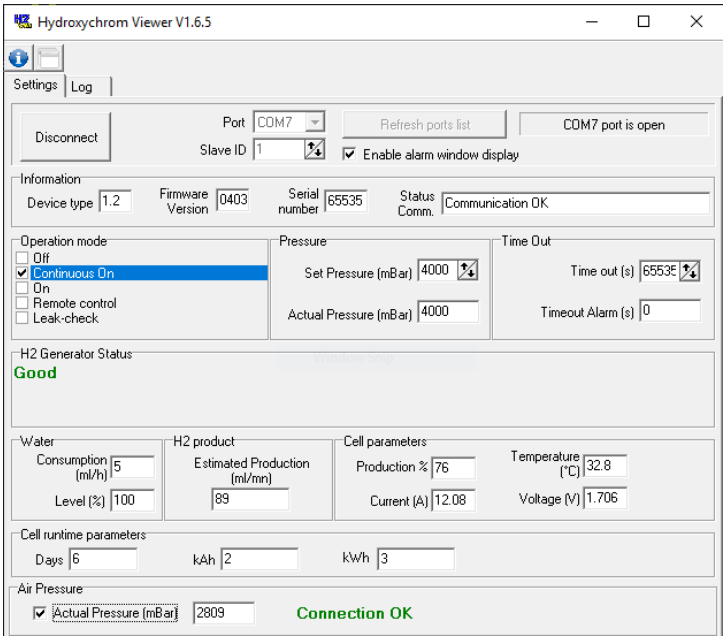
No cylinder

Remote control

Alarms



Model: XXX916



SCAN or CLICK ME

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.

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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: XXX919) and pressure is regulated at 2 bars in standard for chroma and 4 bars for airmo.

Safety:

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

The production capacity of the hydrogen generator is limited electronically and by software to 120 mL/min in standard even with malfunction.

In case the generator produce hydrogen at the maximum capacity during more than setting time it will stop automatically.

For airmoVOC, in case of the head column pressure in analyser is bellow 50 hPa, the piezo valve will be closed automatically and instrument in standby to avoid any hydrogen leak.

For example in the wall version, the worst case with the biggest hydrogen leak will generate 120 mL/min inside the 227 liters wall mounted cabinet. The wall mounted cabinet is continously purged by fan with a permanent flow of 105m3/hour which correspond to 1750 liters/min. Under such condition the maximum hydrogen concentration is around 68ppm. The lower explosion limit of hydrogen is 4%.

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-pressurevalve, current and voltage limits.
- No handling and shortage of cumbersome gas cylinders. No cylinder rental fee.

Product technical specifications:

Hydrogen flow rate (XXX916):

- 100 mL/min in standard

Hydrogen high flow rate (XXX917):

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

Chromatotec detector consumption for XXX917 and XXX916 : 30 mL/min for FID and 70 mL/min for FPD

Zero air flow rate:

- 300 mL/min in option XXX919
- 1 L/min in option XXX032

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 H2 pressure:

- Adjustable with 2 bar in standard
- Adjustable with 2 to 4 bars

Hydrogen purity:

- 99.9999% with continuous drying
- With XXX918 zero air pressure measured and display in VC
- Moisture : < - 60°DP
- Hydrocarbons < 0.1 ppb

Zero air purity:

- Hydrocarbons <0.1ppb
- Moisture -30°DP

Life time of the de-ionizer bag:

- 12 months

Screen / Keyboard:

- Controlled by Hydroxychrom Viewer software
- Installed in an analyzer supervisor GC866

Connection:

- USB

Electrical consumption:

- 150W in standard
- 210W with XXX032 option
- 380W with XXX919 option

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

CLICK HERE FOR ADDITIONAL DIMENSIONS DETAILS

Options:

- 160 ml/min for higher production capacity with XXX917
- Zero air pressure measurement and display in VC with XXX918
- Internal zero air generator with up to 300 cc/min for one GC with XXX919
- Can be integrated in wall mounted box with the GC
- Can be integrated in Exp wall mounted box with the GC for hazardous area application

To order:	Model:
Hydrogen generator (4U) 100mL/min	XXX916
Hydrogen generator (4U) 160 mL/min	XXX917
Hydrogen generator expert	XXX918
Air generator for FID only (Not for Calibration dilution)	XXX919
AirmoPure (for one FID or one FPD)	XXX031-D

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

To contact us: sales@chromatotec.com

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