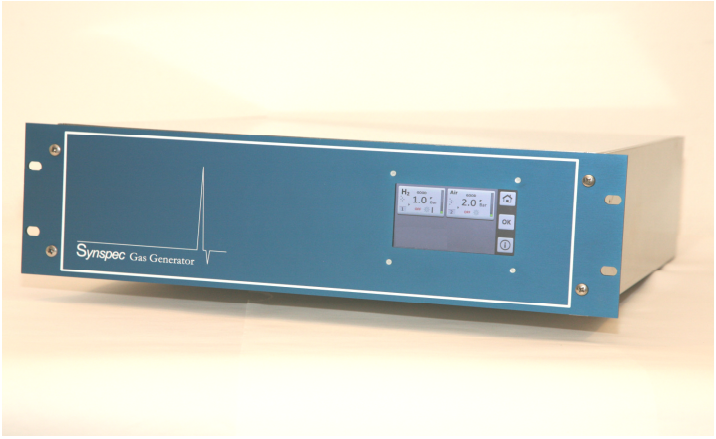
Synspec b.v.

SPECIALISTS IN GASCHROMATOGRAPHY FOR AMBIENT AIR AND INDUSTRIAL HAZARD MONITORING

FIDSTATION RC: HIGH PURITY HYDROGEN & ZERO AIR GENERATORS



H_2 + AIR

APPLICATION

- ✓ **Combustion gases for FID**

DESCRIPTION

Synspec B.V. supplies the **FIDSTATION RC** product line of **High Purity Hydrogen & Zero Air generators with compressor** to supply all gases necessary to aliment the FID detector, close to the consumer in an elegant 19" casing with full color display and touchpad.

The FID Station is composed of a High purity Hydrogen generator and an Ultra Zero Air generator with on board Air compressor. Based on the field proven Solid Polymer Electrolyte (PEM) cell technology, pure Hydrogen is produced at low pressure from electricity and high quality deionized water. It is available 24/7 with constant purity >99.999%. Output pressure is regulated electronically and can be set from 0.5 to 7 bar. This process can be started on demand and does not require any caustic solution. Based on the Pressure Swing Absorption (PSA) technology, compressed Air is dried and filtered from pollutant gases and optionally passes through an hot catalytic chamber to remove HC, CO and CH4.
Output pressure is regulated from 0.5 to 5 bar.

Each instrument is equipped with high performance communication interfaces USB, RS485 and Ethernet to create a very flexible gas network with local or central control.

Due to the software being focused on safety, automatic regulation, intuitive and up to date communications, the **FIDSTATION RC** is easy to install, reliable, safe and pleasant to operate.

BENEFITS

- ✓ Reduces in operation costs. Return on investment within 15 months.
- ✓ Improves resolution and detection limit versus Helium only usage.
  Provides High pressure stability.
- ✓ H2 and Zero Air available 24/7 at constant purity. No contamination.
- ✓ Independent source of Hydrogen and Zero Air that does not require any piping and can be easily moved around the laboratory. Remote control from PC, I-phone and tablet.
- ✓ Very safe operation, internal leak-test, automatic shut-down, over-pressure valve, current and voltage limits.
- ✓ No handling and storage of cumbersome gas cylinders. No cylinder rental fee.
- ✓ Extended autonomy with 5L water tank.

FIDSTATION RC

SPECIFICATIONS

Models	**FIDSTATION50RC-70/2000 with or without catalyst**
Outflow capacities @ 1013/20°C	FIDSTATION50RC-70/2000 : 70 Nml/ min H2 & 2000 Nml/min AIR
H2 purity	>99.999% (maximum HC content: 0.05ppm)
AIR purity	< 250ppm H2O (<-40°C DP / -38°F DP), if input Air is according ISO8573-1/3 < 0.05 ppm NMHC ; < 0.05 ppm CO and CH4 with catalyzer option
Outlet Pressures	H2 : from 0.5 to 7 bar (7 to 100 psig), adjustable by software. AIR: from 0.5 to 5 bar (7 to 70 psig), adjustable by software.
Water quality	High purity deionized + filtered water. TOC free.
Water capacity	5L external tank, included. Generates about 6000L Hydrogen
Compressed Air	On Board Compressor / If without on board compressor: Oil free, supplied by external source.
Safety	Low H2 stored volume; over pressure valve; internal leak test; automatic shut down; maximum current limit, water quality, over temperature.
Sound pressure	< 57 dB(A), measured at 1m
Manual control	Through a 4.3" TFT-LCD color display with touch screen, located on the front panel. Display of major parameters, functioning status and alarms. Intuitive navigation to functions by menus and sub menus.
Remote control, Communications	■ USB. RS485 (Mod-Bus) or Display. ■ Trough Ethernet 10/100 network ■ Log book download by USB.
Outlet fittings	Compression stainless steel 1/8" OD for H2 and brass 1/8" for Zero Air
Power supply	100 to 130VAC / 60Hz or 210 to 260VAC 50/60Hz, to be précised when ordering
Power consumption (max at full flow)	FIDSTATION50RC-70/2000: maximum 600W
Dimensions	W=483mm/19ins, H=132mm/5.2ins (3U), D=520mm/21ins
Net weight	FIDSTATION50RC-70/2000 with CAT: 23Kg

ORDERING NUMBERS

Model	**Article #**
FIDSTATION50RC-70/2000 with CAT	8051
FIDSTATIONS with other capacity	on demand

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