



Leman Instruments

FIDSTATION RC: HIGH PURITY HYDROGEN & ZERO AIR GENERATORS



H₂ + AIR

APPLICATION

- ✓ **Combustion gases for FID**

DESCRIPTION

LEMAN-INSTRUMENTS designed 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 Zero Air generator. Compressed Air is Based on the field proven Solid Polymer Electrolyte (PEM) cell technology, pure Hydrogen is produced at low pressure from electricity and high quality distilled water. It is available 24/7 with constant purity >99.999%. Output pressure is regulated electronically and could 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 Adsorption (PSA) technology, compressed Air is first dried and filtered from pollutant gases. 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 and 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	FIDSTATIONRC-100/1000; FIDSTATIONRC-160/1500 FIDSTATIONRC-250/3000; FIDSTATIONRC-500/6000
Outflow capacities @ 1013/20°C	FIDSTATIONRC-100/1000 : 100 Nml/ min H2 & 1000 Nml/min AIR FIDSTATIONRC-160/1500 : 160 Nml/ min H2 & 1500 Nml/min AIR FIDSTATIONRC-250/3000 : 250 Nml/ min H2 & 3000 Nml/min AIR FIDSTATIONRC-500/6000 : 500 Nml/ min H2 & 6000 Nml/min AIR
H2 purity	>99.999% (maximum HC content: 0.05ppm)
AIR purity	< 400ppm H2O (<-30°C DP / -28°F DP), if input Air is according ISO8573-1/3
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 deionised+filtered water. TOC free.
Water capacity	5L external tank. 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	<ul style="list-style-type: none"> ■ USB. RS485 (Mod-Bus) or Display. ■ Trough Ethernet 10/100 network ■ Trough WLAN network, with PC, I-Phone, Tablet (option) ■ Log book download by USB.
Outlet fittings	Stainless steel 1/8" OD compression
Power supply	Automatic switching from 90VAC to 260VAC, 47 to 63 Hz
Power consumption (max at full flow)	FIDSTATIONRC-100/1000: maximum 550W FIDSTATIONRC-160/2000: maximum 600W FIDSTATIONRC-250/3000: maximum 650W FIDSTATIONRC-500/6000: maximum 800W
Dimensions	W=483mm/19ins, H=132mm/5.2ins (3U), D=520mm/21ins
Net weight	FIDSTATIONRC-100/1000: 21Kg; FIDSTATIONRC-160/2000: 23Kg FIDSTATIONRC-250/3000: 24Kg; FIDSTATIONRC-500/6000: 35Kg

ORDERING NUMBERS

Model	Article #
FIDSTATIONRC-100/1000	722110
FIDSTATIONRC-160/2000	722112

Model	Article #
FIDSTATIONRC-250/3000	722113
FIDSTATIONRC-500/6000	722115

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