



Leman Instruments

FIDSTATION ULTRA LC: ULTRA HIGH PURITY HYDROGEN & ZERO AIR GENERATORS



H₂ + AIR

APPLICATION

- ✓ **Combustion gases for FID**

DESCRIPTION

LEMAN-INSTRUMENTS designed the **FIDSTATION LC** 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 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 >99.9999%. Output pressure is regulated electronically and could be set from 0.5 to 5 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 ULTRA LC** 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 (Option)
- ✓ 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 ULTRA LC

SPECIFICATIONS

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| Models | FIDSTATION ULTRA LC-70/500; FIDSTATION ULTRA LC-100/1000; FIDSTATION ULTRA LC -160/2000; FIDSTATION ULTRA LC -250/3000 FIDSTATION ULTRA LC -500/6000 |
| Outflow capacities @ 1013/20°C | FIDSTATION ULTRA LC -70/500 : 70 Nml/ min H2 & 500 Nml/min AIR FIDSTATION ULTRA LC -100/1000 : 100 Nml/ min H2 & 1000 Nml/min AIR FIDSTATION ULTRA LC -160/2000 : 160 Nml/ min H2 & 2000 Nml/min AIR FIDSTATION ULTRA LC -250/3000 : 250 Nml/ min H2 & 3000 Nml/min AIR FIDSTATION ULTRA LC -500/6000 : 500 Nml/ min H2 & 6000 Nml/min AIR |
| H2 purity | >99.9999% (maximum HC content : 0.05ppm), Dew point -75°C |
| AIR purity | < 10ppm H2O (<-60°C DP); < 50 ppb HC ; < 50 ppb CO and CH4; Particulates <0.1µm |
| Outlet Pressures | H2 : from 0.5 to 5 bar (7 to 70 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) | FIDSTATION ULTRA LC -70/700 : maximum 450W FIDSTATION ULTRA LC -100/1000 : maximum 550W FIDSTATION ULTRA LC -160/2000 : maximum 600W FIDSTATION ULTRA LC -250/3000 : maximum 650W FIDSTATION ULTRA LC -500/6000 : maximum 800W |
| Dimensions | W=230mm, H=600mm, D=500mm |
| Net weight | FIDSTATION50LC-70/700, FIDSTATION50LC-100/1000: 25Kg FIDSTATION50LC-160/2000, FIDSTATION50LC-250/3000: 29Kg FIDSTATION50LC-500/6000: 35Kg |

ORDERING NUMBERS

| Model | Article # |
|-------------------------|-----------|
| FIDSTATION50LC-70/700 | 732290 |
| FIDSTATION50LC-100/1000 | 732291 |
| FIDSTATION50LC-160/2000 | 732292 |

| Model | Article # |
|-------------------------|-----------|
| FIDSTATION50LC-250/3000 | 732293 |
| FIDSTATION50LC-500/6000 | 732294 |
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