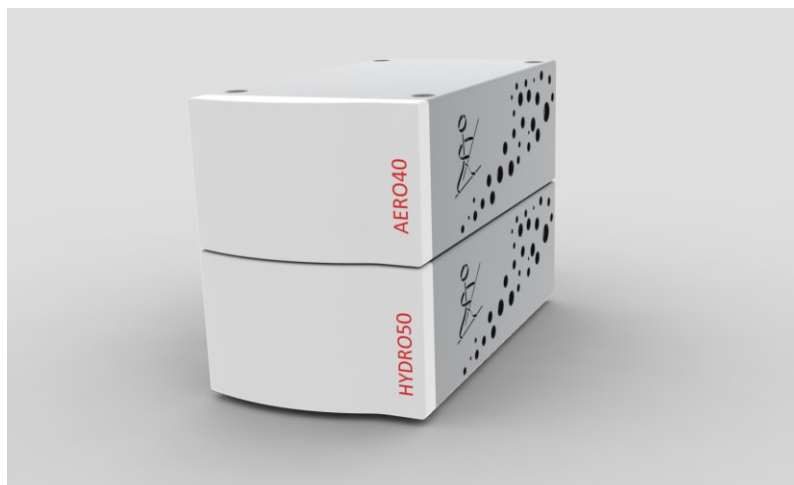


## FID STATION 50L : HIGH PURITY HYDROGEN & ZERO AIR GENERATORS



# H<sub>2</sub> + AIR

### APPLICATION

- ✓ Combustion gases for FID

### DESCRIPTION

**PEUS-Instruments** designed the **FID STATION 50L** product line of **High Purity Hydrogen & Zero Air generators** to supply all gases necessary to FID detector, close to the consumer in laboratory environment.

The FID Station is composed of an Hydrogen generator and an Ultra Zero Air generator:

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. Externally compressed Air is first filtered from particulates down to 5µm and dried; then passes throughout a hot catalytic chamber to remove CO, CH<sub>4</sub> and HC. After the purification process, Air is filtered of remaining particulates down to 0.1µm and pressure is regulated to the set value, between 0.5 and 7 bar.

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

Due to the software being focused on safety, automatic regulation and reliable communications, the **PEUS-Instruments FID STATION 50L** 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.
- ✓ H<sub>2</sub> and Zero Air available 24/7 at constant purity. No contamination.
- ✓ Independent source of Hydrogen and Zero Air, can be easily moved around the laboratory. Remote control from PC, I-phone and I-pad
- ✓ Low noise functioning < 45dB(A)).
- ✓ 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.





# FID STATION 50L

## SPECIFICATIONS

<b>Models</b>	<b>FIDSTATION50L-100/1000 ; FIDSTATION50L-250/3000 FIDSTATION50L-500/6000</b>
Outflow capacities @ 1013/20°C	FIDSTATION50L-100/1000 : 100 Nml/ min H2 & 1000 Nml/min AIR FIDSTATION50L-250/3000 : 250 Nml/ min H2 & 3000 Nml/min AIR FIDSTATION50L-500/6000 : 500 Nml/ min H2 & 6000 Nml/min AIR
H2 purity	>99.999% (maximum HC content: 0.1ppm )
AIR purity	< 0.05 ppm HCnm ; < 0.05 ppm CO and CH4
Dew point H2 and Air	< -40°C
Outlet Pressures	H2 : from 0.5 to 7 bar (7 to 100 psig), adjustable by software. AIR: from 0.5 to 7 bar (7 to 70 psig), adjustable by software.
Water quality	High purity distilled+filtered water. TOC free.
Water capacity	5L external tank. Generates about 6000L Hydrogen
Compressed Air	Oil free, dried compressed Air; according to DIN ISO 8573-1 class3
Safety	Low H2 stored volume; over pressure valve; internal leak test; automatic shut down; maximum current limit, water quality, over temperature.
Sound pressure	< 45 dB(A), measured at 1m
Manual control	ON-OFF power switch, buzzer and Bi-color LED for functioning status+alarms
Remote control, Communications	<ul style="list-style-type: none"><li>■ Through 2 potential free relay contacts (I/O)</li><li>■ RS485 (Mod-Bus), USB.</li><li>■ Trough Ethernet 10/100 network (option)</li><li>■ Trough WLAN network, with PC, I-Phone, I-Pad (option)</li><li>■ Log book download by USB.</li></ul>
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)	FIDSTATION50L-100/1000 : maximum 400W FIDSTATION50L-250/3000 : maximum 500W FIDSTATION50L-500/6000 : maximum 650W
Dimensions	W=210mm/8.3ins, H=275mm/10.8ins, D=360mm/14.2ins
Net weight	FIDSTATION50L-100/1000 & FIDSTATION50L-250/3000 : 14.5 Kg FIDSTATION50L-500/6000: 16.5 Kg
Certification	CE

## ORDERING NUMBERS

Model	Article #
FIDSTATION50LC-100/1000	732101
FIDSTATION50LC-250/3000	732103
FIDSTATION50LC-500/6000	732105

Model	Article #
WLAN Interface option	732181
LAN Interface option	732182
ZERO WATER 12x5L refill	711092

## PEUS- INSTRUMENTS GmbH

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