



DESK SERIES

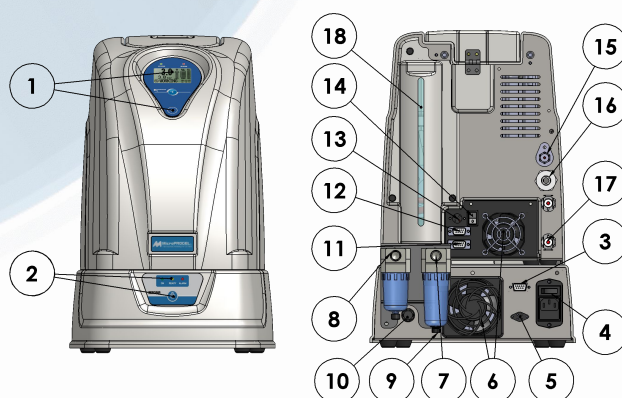
FID STATION

This unit, combining an LC series hydrogen generator and a ZEROAIR module, can supply H₂ gas and zero air for FID detectors in Gas Chromatography.

Hydrogen is produced using an electrolytic cell with polymeric membrane (PEM), no acid or alkaline solutions are used. The LC series features a desiccant cartridge that needs to be replaced or refilled only when saturated.

Zero air is produced by purifying the compressed air supplied by the laboratory's compressed air system, bringing total hydrocarbon concentration below 0.05 ppm.

Both sections, hydrogen and zero air, can be controlled from the same touch-screen LCD panel.



- 1 Touch-screen LCD 128x64 pixel and START/STOP button (*H₂ Generator*)
- 2 Status LEDs and START/STOP button (*ZeroAir*)
- 3 RS485 to H₂ Generator
- 4 Power connection and switch
- 5 Power supply to H₂ generator (24VDC)
- 6 Cooling fans air intake
- 7 Compressed air inlet
- 8 Air outlet
- 9 Water drain purge
- 10 Pressure Adjust
- 11 RS232 port (*for debug*)
- 12 RS485 to MINI.ZA.xxxx
- 13 Power supply from ZA.FID
- 14 Power switch (*H₂ Generator*)
- 15 Water connector for filter and for emptying the internal tank
- 16 Hydrogen purge
- 17 Hydrogen Outlet
- 18 Desiccant cartridge compartment

Main Applications

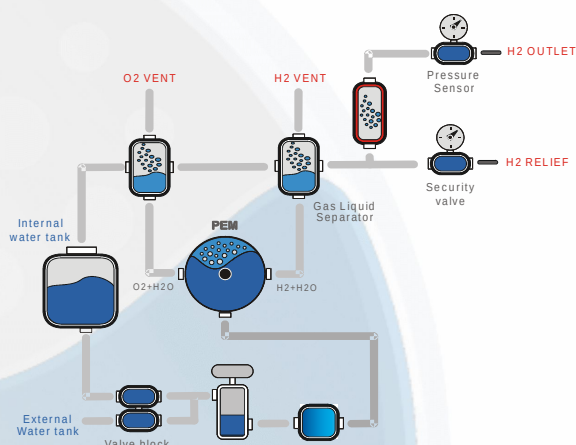
- Flame photometric detectors
- Flame ionization detector feed gas (FID)
- Total hydrocarbons analysers

Main Features

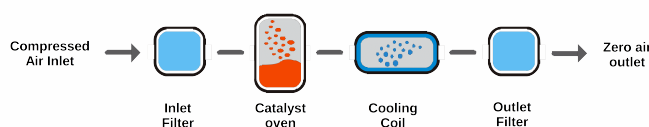
- **Available Flow-rates:**
100, 140, 180 cc/min (*Hydrogen*)
1500, 3000 cc/min (*Zero air*)
- **Outlet pressure:**
up to 7 bars (*Hydrogen*)
up to 6.5 bars (*Zero air*)
- **Hydrogen purity:**
>99.9995%
- **Drying system:**
Refillable molecular sieve column
- **Internal water tank:**
1.2 litres, with electronic level control
- **Dimensions:**
24x38x43(H) cm
- **Weight:**
< 15 kg
- **Certification:**
CE, ISO9001

Principle diagram

Hydrogen section



Zero air section



Models	LC.H2.100	LC.H2.140	LC.H2.180
General information			
Electrolysis cell	PEM technology		
H2 purity	>99.9995% ¹		
Outlet pressure	7 Bar(101 psi)		
H2 flow rate cc/min (Max)	100	140	180
Communication			
RS232	X	X	X
RS485	X	X	X
Software function			
Parallel mode capability	NO		
Automatic filling of water tank	Optional		
Fill canister function	X	X	X
Water			
Quality	Deionized, ASTM II, <0,1uS		
Supply Pressure (Min)	0.2 Bar (1,4 psi)		
Supply Pressure (Max)	1 Bar (14 psi)		
Supply Flow Rate (min, Max)	0,2 Lt/min, 1,5 Lt/min		
Internal water tank	1,2 Lt		
Electrical data			
Power supply Connection type	Mini din 4 pole		
Supply voltage	24VDC (from ZA module)		
Installation Power (max)	90W	120W	
Dimensions	24x29x31(H) cm		
Net weight(water tank empty)	7Kg		
Connections			
Hydrogen Outlet	1/8" Compression Fitting		
Water	Quick Release Push in Fitting		

Models	ZA.MINI.1500	ZA.MINI.3000
Air outlet		
Flow rate (Max)	1,5 l/min	3,0 l/min
OUTLET pressure (Max)	Pressure INLET – 0.5 Bar (8 psi)	
Total hydrocarbon content	< 0.05ppm	
Start-up time	40 min	45 min
Compressed air inlet		
Max inlet hydrocarbon content	100ppm	
Min Supply Pressure	3 Bar (43psi)	
Max Supply Pressure	10 Bar (145 psi)	
Dew point	< -20°C	
Temperature (Min-Max)	1°C (34°F) - 35°C(95°F)	
Communication		
RS485	X	
Electrical data		
Connection type	IEC320-C13	
Supply voltage	100-240Vac 50/60Hz	
Installation Power (Max)	240W (280VA)	
Fuse Rating (5x20mm)	4A	
Dimensions	24x38x12(H) cm	
Net weight	7Kg	8Kg
Connections		
Outlet port	1/8" Female	
Inlet port	1/8" Female	
Water purge	6mm(1/4) push fitting	
Ambient data		
Temperature	5-35°C (41-95°F)	
Humidity (Max, non condensing)	80% at 25°C (77°F)	
Noise	<25dB(A)	
IP rating	IP20	

¹ Referred to O₂, dew point < -55°C