

FID Gas Stations

Parker Balston's FID-1000NA and FID-2500NA Gas Stations provide both hydrogen gas and zero grade air to FID detectors on Gas Chromatographs. These systems are specifically designed to provide fuel gas and support air to 5-6 Flame Ionization Detectors, Flame Photometric Detectors or Total Hydrocarbon Analyzers.

Hydrogen gas is produced from deionized water using a Proton Exchange Membrane Cell. The hydrogen generator compartment utilizes the principle of electrolytic dissociation of water and hydrogen proton conduction through the membrane. The hydrogen supply produces up to 250 cc/min of 99.9995% pure hydrogen with pressures to 60 psig.

Zero air is produced by purifying on-site compressed air to a total hydrocarbon concentration of < 0.1 ppm (measured as methane). The zero air compartment produces up to 2500 cc/min of Zero Grade Air.

The FID Gas Stations are state-of-the-art systems with highly reliable components engineered for easy installation, operation, and long term performance.

The Parker Balston FID-1000NA and FID-2500NA eliminate all the inconveniences and cost of zero air and hydrogen cylinder gas supplies and dependence on outside vendors. Uncontrollable price increases, contract negotiations, long term commitments, and tank rentals are no longer a concern. With an FID Gas Station, you control your gas supply.

All Parker Balston gas generators exceed NFPA 50A and OSHA 1910.103 regulations which outline the storage of hydrogen.

Produced and supported by an ISO 9001 registered organization, Parker Balston's hydrogen generators are the first built to meet the toughest laboratory standards in the world: CSA, UL, CE and IEC 1010.



FID Gas Station, Models FID-1000NA and FID-2500NA



Features and Benefits

- Ideal for up to 5-6 FIDs
- Produces UHP zero air from house compressed air (<0.1 ppm THC) and 99.9995% pure hydrogen in one enclosure
- Eliminates inconvenient and dangerous zero air and hydrogen cylinders from the laboratory
- Increases the accuracy of analysis
- Reduces the cleaning requirement for the detector
- Recommended and used by many GC and column manufacturers
- Typical payback period of less than one year
- Automatic water fill
- Silent operation and minimal operator attention required

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Principal Specifications

FID Makeup Gas Generators	FID-1000NA	FID-2500NA
Hydrogen Purity	99.9995%	99.9995%
Zero Air Purity	< 0.1 ppm (total hydrocarbon as methane)	< 0.1 ppm (total hydrocarbon as methane)
Maximum Hydrogen Flow Rate	90 cc/min	250 cc/min
Maximum Zero Air Flow Rate	1000 cc/min	2500 cc/min
Electrical Requirements ⁽¹⁾	120/230VAC, 60/50Hz, 4 Amps	120/230VAC, 60/50Hz, 4 Amps
Hydrogen Outlet Pressure	60 psig	60 psig
Zero Air Outlet Pressure	40-125 psig	40-125 psig
Certifications	IEC 1010-1; CSA 1010; UL 3101; CE Mark	IEC 1010-1; CSA 1010; UL 3101; CE Mark
Dimensions	10.5"w x 17"d x 16.5"h (27cm x 43cm x 42cm)	10.5"w x 17"d x 16.5"h (27cm x 43cm x 42cm)
Inlet Port	1/4" NPTF compressed air supply	1/4" NPTF compressed air supply
Outlet Ports	1/8" Compression	1/8" Compression
Shipping Weight	53 lbs / 24 kg	53 lbs / 24 kg

NOTES

1 Refer to voltage appendix for electrical and plug configurations for outside North America.

Ordering Information

for assistance, call 800-343-4048, 8 to 5 Eastern Time

Description	Model Number
FID Gas Station	FID-1000NA, FID-2500NA
Installation Service	FID-1000-INST, FID-2500-INST
Annual Maintenance Kit	MKFID1000
Preventive Maintenance Plan	FID-1000-PM, FID-2500-PM
Extended Support (24 Month Warranty)	FID-1000-DN2, FID-2500-DN2

The Chromatograms (at right) compare baselines produced by a Parker Balston Zero Air Generator and bottled fuel air. The baseline produced by the Parker Balston Generator is very flat, with no fluctuations or peaks, in comparison with the chromatogram of the bottled air fuel supply, which has many peaks ranging from .25 ppm to -.25 ppm.

