

FID Makeup Gas Generators

- ▲ Ideal for up to 5-6 FIDs
- ▲ Produces makeup grade nitrogen with less than 0.05 ppm THC (measured as methane)
- ▲ Eliminates dangerous and costly helium or nitrogen cylinders from the laboratory
- ▲ Improves flame shape within the FID detector and maximizes sensitivity
- ▲ Recommended and used by many GC and column manufacturers
- ▲ Payback period of typically less than one year
- ▲ Silent operation and minimal operator attention required



MGG-2500NA FID Makeup Gas Generator

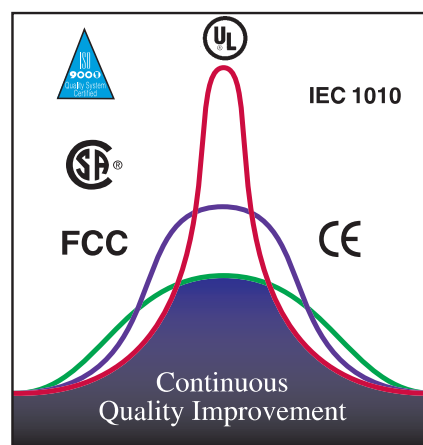
Parker Balston's MGG-400NA and MGG-2500NA, Makeup Gas Generators can provide nitrogen gas and zero grade air to FID detectors on Gas Chromatographs. These systems are specifically designed to provide only nitrogen gas or both nitrogen and zero air to 5-6 Flame Ionization Detectors.

Zero grade nitrogen gas is produced by purifying on-site compressed air through the use of a heated catalyst technology mated with a hollow fiber membrane separator. The heated catalyst removes all heavy and light hydrocarbons while the hollow fiber membrane delivers nitrogen molecules to the generator's output. The nitrogen from the system is 99.9999+% pure in respect to hydrocarbons (suitable for FID Makeup Gas) and is 99+% pure in trace in respect to oxygen and water vapor.

Zero air is produced by purifying on-site compressed air to a total hydrocarbon concentration of < 0.05 ppm (measured as methane). The zero air compartment produces up to 2500 cc/min of zero grade air.

The Makeup Gas Generators are complete systems with state-of-the-art, highly reliable components engineered for easy installation, operation and long term performance. The Parker Balston® MGG-400NA and MGG-2500NA eliminate all the inconveniences and of 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 a Parker Balston Makeup Gas Generator, you control your gas supply.

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



FID Makeup Gas Generators

Principal Specifications

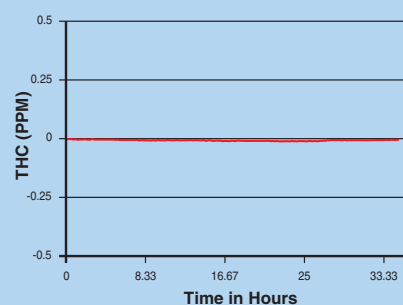
Makeup Gas Generators

Nitrogen Purity	99.9999+% (with respect to hydrocarbons)
Nitrogen Purity	99+% (with respect to oxygen)
Zero Air Purity	<0.05 ppm (total hydrocarbon as methane)
Maximum Nitrogen Flow Rate	MGG-400NA: 400 cc/min MGG-2500NA: 400 cc/min
Maximum Zero Air Flow Rate	MGG-2500NA: 2500 cc/min
Electrical Requirements (1)	MGG-400NA: 120VAC, 60Hz, 580 Watts MGG-2500NA: 120VAC, 60Hz, 580 Watts
Nitrogen Outlet Pressure	60 - 120 psig
Zero Air Outlet Pressure	60 - 120 psig
Certifications	IEC 1010-1; CSA 1010; UL 3101; CE Mark
Dimensions	7" w x 26" d x 16.5" h (18cm x 66cm x 42cm)
Inlet Port	1/4" NPT (female)
Outlet Ports	1/4" NPT (female)
Shipping Weight	MGG-400NA: 60 lbs / 27 kg MGG-2500NA: 60 lbs / 27 kg

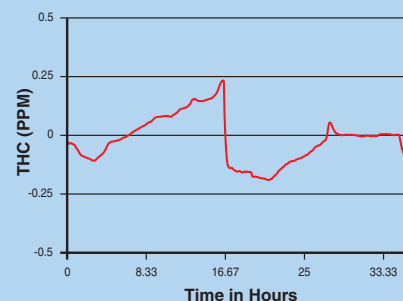
(1) Refer to voltage appendix to select correct part number and plug for Japan and 220VAC/50hz configurations.

The Chromatograms (below) compare baselines produced by a Parker Balston Makeup Gas 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.

**Baseline
MGG-2500NA Makeup Gas Generator**



Baseline Bottled Fuel Air



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

Model	Description
MGG-400NA, MGG-2500NA	Makeup Gas Generator
MGGW-400NA, MGGW-2500NA	Makeup Gas Generator (wall mount)
MGG-400-INST, MGG-2500-INST MGGW-400-INST, MGGW-2500-INST	Installation service
MKMGG400-12	Annual Maintenance Kit
MKMGG2500-12	Annual Maintenance Kit
MGG-400-PM, MGG-2500-PM, MGGW-400-PM, MGGW-2500-PM	Preventive Maintenance Plan
MGG-400-DN2, MGG-2500-DN2, MGGW-400-DN2, MGGW-2500-DN2	Extended Support with 24 Month Warranty

Nitrogen Technology

Membrane Technology

Nitrogen
Oxygen
Water vapor

Nitrogen

Oxygen and water vapor are "fast" gases which quickly permeate the membrane, allowing nitrogen to flow through the fiber bores as the product stream.

This technology features advanced HiFluxx Fiber