

# Combined Nitrogen-Air Generator



The *Peerless* Nitrogen-Air Generator produces nitrogen gas simply and cost-effectively from compressed air. It is designed to meet the purity and pressure requirements of GC/GC-MS instruments.

Atmospheric air which is a mixture of mainly Nitrogen and Oxygen, is pumped into the Generator by a built-in air compressor. This air is then passed into a catalytic chamber where in the presence of PCAN carrier and noble metal catalyst it gets ionized. The ionized air is then fed into an electrolytic bath where water is being disassociated into hydrogen and oxygen ions (see Figure 1). The hydrogen ions combine with the oxygen

present in the air to form water thus effectively separating the oxygen from the air to provide almost oxygen-free (<5ppm O<sub>2</sub>) nitrogen. The alkali KOH is used to neutralize traces of CO, CO<sub>2</sub> that may be present in the air. The moisture-laden nitrogen is passed through a desiccant to deliver ultra-pure nitrogen at a constant pressure. The advantages of this unique technology is that the process is simpler than the existing PSA technology, higher purity levels are achieved, less air loss and higher recovery.

The compressed Air is further purified to yield high purity Air for use as a fuel gas for GC detector.

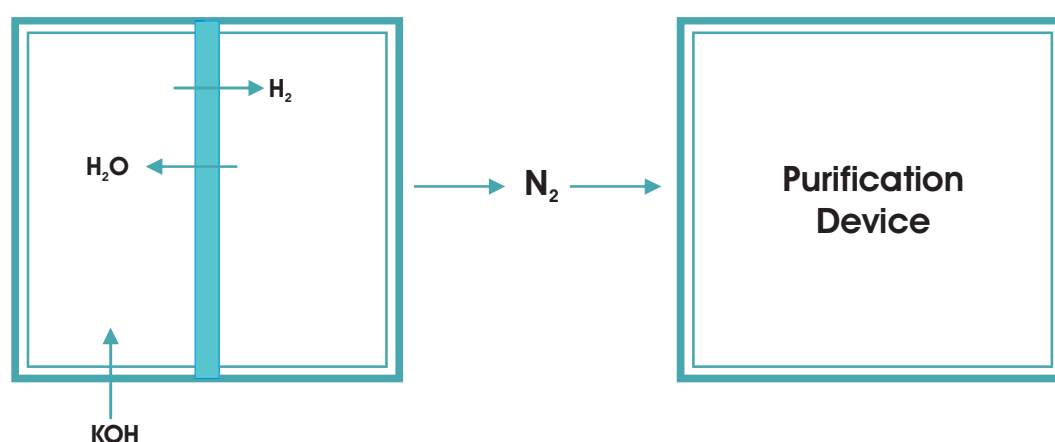


Figure 1



## Features

- Nitrogen Purity: 99.9995% (Oxygen < 5ppm)
- Unique Technology
- Built-in Air Compressor
- Noise Level <35 db
- Compact, Light Weight Design
- CE Certification

## Benefits

- Replaces Nitrogen & Air Gas Cylinder
- Convenience...Gas on demand
- Consistent Purity
- Safe...Very low volume stored at a max 5kgs/cm<sup>2</sup>

Models	Flowrate cc/min		Pressure	Voltage Vac	Electrical Consumption	Dimension (mm)			Weight kg
	N <sub>2</sub>	Air				A	B	C	
NA-300	300	2000	5 kg/cm <sup>2</sup>	220	275W	470	250	380	30
NA-500	500	2000	5 kg/cm <sup>2</sup>	220	275W	470	250	380	30