

# Take Control of Your Nitrogen Gas Cost

simply generate your own supply

You can now generate your own nitrogen gas at the press of a button – as much or as little as you need, at a fraction of the cost of your existing supply and at the purity your process requires. The generators are virtually maintenance free. Turn the switch on and let the nitrogen generator do the rest. The SMG only produces nitrogen when there is a demand and the rest of the time it is in sleep mode to conserve energy.



PMG's SMG series nitrogen generators operate on the Pressure Swing Adsorption (PSA) principle to produce a continuous stream of nitrogen gas from compressed air. The PSA system is the reliable method of nitrogen generation and designed for industrial use. The system uses pairs of extruded aluminum columns filled with carbon molecular sieve (CMS). Compressed air enters the bottom of the 'on-line' bed and flows up through the CMS. Oxygen and the other trace gases are preferentially adsorbed by the CMS, allowing nitrogen to pass through. The pair of CMS beds switch between separation and regeneration to ensure continuous and uninterrupted nitrogen production.

Nitrogen gas is the fourth largest utility in industry today behind power, water and natural gas. With your current nitrogen gas supplier you not only pay for the nitrogen but also for:

- Tank/Cylinder Rental
- Delivery Fee
- Cylinder / Material Handling Fee
- Hazmat Charges
- Safety Issues

**Take control of your nitrogen gas supply today.**

## Benefits of On-Premise

### Nitrogen Generation

- The Safest Supply
- Convenient, Secure Supply
- The Right Purity
- Space Saver
- Cost Savings
- Environmentally Friendly

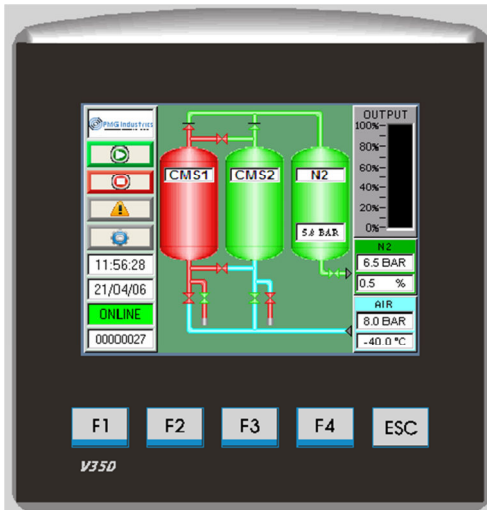
## Why PMG Industries?

- The Tri-States Most Experienced Nitrogen Generation Team
- Custom Designed Systems
- Committed Partner Mentality To All Projects

## Other Capabilities:

- CO2 Bulk Storage
- Gas Blenders/Mixers
- Industrial Gases
- Laboratory Gas Generators
- Gas System Design & Service
- Sterile Air & Gas Filtration
- Industrial Chillers

## HMI Touch Screen Technology



### Features Include:

- HMI control displaying real time process
- Inlet air quality monitoring (dewpoint)
- Outlet nitrogen purity readout (O2 analyzer)
- Alarm display with help menu
- Outlet flow indicator (%)
- Trend Graphing for QC reports
- Energy saving mode
- Remote access using Ethernet
- Maintenance records screen with alarm

## Technical Specifications

Nitrogen Outlet Flowrate - SCFH vs. Oxygen Content			
Model	99.99%	99.5%	98%
SMG2Lc	45	100	150
SMG4Lc	90	200	300
SMG6Lc	135	300	450
SMG 104c	230	600	900
SMG 108c	445	1,140	1,550
SMG 112c	670	1,720	2,150
SMG 120c	1,025	2,640	3,310

Specification based on 115 psig inlet air pressure

Ambient Range	40 <sup>0</sup> -80 <sup>0</sup> F
Nitrogen Outlet Pressure	100 psig
Nitrogen Dewpoint (@ 99.5%)	Dewpoint -40F
Electrical Supply	120 AC/1 ph:240-480AC/3ph
	60 Hz
Inlet/ Outlet Connections	1/2" npt