



## Gas Measurement for Air Separation

EXCELLENCE  
THROUGH DIVERSITY





## Who we are

We at Ntron are proud of our reputation developed over the last 25 years. We have established ourselves as market leaders in the design and manufacture of Gas Measurement Systems for process and people safety in a wide variety of industrial applications.

Today, Ntron strives to exceed customer expectations by continuous innovation, developing better and more efficient gas analysis and control solutions to help maximize process efficiency, improve product quality, protect the health and safety of personnel and the environment, as well as preserve capital equipment and investments.

Our experienced team provides customised solutions across a wide range of sectors internationally. Our goal is to ensure qualitative and efficient gas measurement systems for your specific gas measurement requirements.

## 25 years experience in Gas Measurement for the Air Separation industry

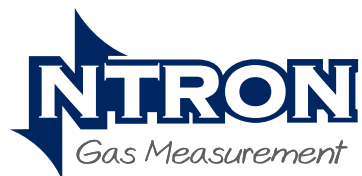
Ntron has developed a specific line of high purity analysers for the air separation – gas generation industry.

We custom design analysers specifically for our customers' individual requirements. From private labelling to developing sensors with specific I/O requirements for OEM customers' control systems.

With our technology, we assure you of accurate, long-life, reliable and easy-to-handle analysers. We utilise a variety of sensor technology which includes Zirconia, Electrochemical, Infra-red and Paramagnetic.

Due to our experience and high quality analysers, we have developed successful relationship with several gas generation manufacturers.





## Ntron Gas Measurement Solutions for Air Separation Applications

Demand for Gas Generators in Industrial and Medical markets is growing rapidly due to advances in Air separation technology. On-site Generation offers a cost effective, reliable and safe alternative to traditional nitrogen / oxygen gas supplies such as cylinder or liquid.

The development of PSA technology has led to the rise of gas generators which are capable of supplying high quality nitrogen or oxygen.

### Schematic Diagram for PSA Nitrogen Generator



**Medical gas analysers:**  
Designed to comply with the requirements of Pharmacopoeia directives for the measurement of oxygen, carbon monoxide and carbon dioxide for Medical Applications.

**Ambient oxygen analysers for personal safety monitoring**

Storage Tank

Surge Tank

Nitrogen Generator

Dryer

Compressor

**Oxygen Analysers for product quality measurement:** OEM Zirconia oxygen sensor for integration in PSA and Membrane gas generators to measure the gas quality.

**Transportable analyser for the measurement of PPM and % oxygen**

With this emerging market, Ntron has developed a specific line of analysers for this application.

Our solutions include:



**SIL2 rated oxygen analyser:**  
for nitrogen generation plants when the Nitrogen is required for safety critical applications



**Point of use analysers for product quality measurement:**  
for the measurement of O<sub>2</sub>, CO<sub>2</sub> for MAP applications





## Products



### 1. Analysers for product quality measurement

Microx oxygen analysers comprise of a range of low-cost OEM solutions for the ppm or % oxygen measurement which utilises zirconia technology. It gives a reliable and fast response time, long life and no drift.

They are available in panel, wall or din rail configuration and have an analogue output of 4-20 mA and RS232 for communication with gas generator PLC. They also have an LCD display and 3 configurable alarm contacts.

The SenzTx also utilises zirconia technology and it has an analogue output and RS232 communication. It is also available in ppm or % configuration.



### 2. SIL2 rated oxygen analyser

The SIL2 rated oxygen analyser has been developed specifically for the measurement of oxygen for safety critical application within the chemical and pharmaceutical industries. This analyser is designed for use in hazardous areas and has an inbuilt galvanic isolation barrier which accepts an input from an intrinsically safe oxygen sensor.

Application for this analyser includes the measurement of oxygen on inerting applications for explosion prevention. This analyser has 3 configurable alarm outputs, 4-20 mA and RS232/ RS485 communication. The complete analyser solution meets the requirements of SIL02.



### 3. Medical gas analysers

The MoGas93 has been specifically designed for medical oxygen generation systems. This analyser is fitted with oxygen, (zirconia or paramagnetic), carbon monoxide and carbon dioxide sensors for the continuous measurement of the oxygen gas stream.

This wall mounted analyser has a large LCD display, 2 alarm contacts per channel and a 4-20 mA per gas sensor. This complete solution has been designed to meet the requirements of Pharmacopeia directives for medical oxygen plants.



### 4. Ambient oxygen measurement

The Gasenz oxygen analyser is a low-cost solution for the measurement of oxygen deficiency with the risk of asphyxiation due to the presence of inert gas. This analyser uses a zirconia oxygen sensor to give a reliable and fast response, long life and no drift for oxygen measurement. It also has an inbuilt audio and visual alarm indication.



### 5. Point of use analysers

The Microx-OL is designed for use in measuring the gas purity at the customer's plant. This analyser uses zirconia technology and has an inbuilt audio and visual alarm indication, integral pressure regulation and control and it is designed for positive pressure applications up to 10 bar. This analyser can also be integrated with an infrared CO2 sensor for MAP applications.



### 6. Transportable analyser

Yellow-Box portable oxygen analyser provides a robust solution for portable high purity oxygen measurement applications. Housed in a rugged high impact case, it can measure ppm and % oxygen and utilises zirconia technology. This unit is also fitted with a rechargeable battery pack. This analyser is also fitted with an integral flow meter for positive pressure applications up to 10 bar. (Sample pump optional.)



## Contact Information

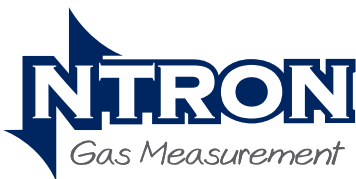
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