

G3600/G3601

# Inert Gas Oxygen Analyzing System

Accurate Inert Gas Monitoring and Control

Accurate oxygen measurements to prevent combustible atmospheres



Maritime

 Green Instruments

The G3600/3601 Inert Gas Oxygen Analyzing System is designed to accurately monitor and control the content of oxygen in inert gas systems to enhance vessel safety, thus protecting cargo, ships, and crew.



# Robust and reliable monitoring

## Key features

- Protects cargo, ship, and crew
- Simple installation, operation, and maintenance
- Simple calibration by crew
- Automatic artificial calibration
- Configurable measuring range and signal outputs
- Low cost of ownership
- Graphic display – interface via touch screen
- Global service and support

Green Instruments oxygen analyzers provide user-friendly and robust monitoring in marine environments, ensuring accurate and reliable oxygen measurements. Inert gases are gases with a low concentration of oxygen that are used to fill void spaces in and around oil tanks. Oxygen analyzers are used to prevent combustible atmospheres. Having an oxygen analyzer on board is crucial for enhancing and maintaining vessel safety. Tankers are also required by

safety inspectors to document their safety when loading and discharging at ports.

## Simple operation

The heart of each oxygen analyzer is a microprocessor-based unit with a simple menu structure, ensuring fast set-up. The oxygen analyzers are designed for easy replacement of parts and simple system calibration. They use a zirconia sensor cell, which is well-proven and reliable sensor technology.

G3600/3601 INERT GAS OXYGEN ANALYZING SYSTEM - VERSION 1.0

G3601



## Configurable measuring and signal outputs

The G3600 and G3601 oxygen analyzer boards are ideal for standalone operation with output to other systems. Monitoring and signal output range are fully scalable according to needs and requirements.

**G3600:** Single board – an inexpensive and compact analyzer  
**G3601:** Double board – for cost effective redundancy and versatility  
 The G3601 ensures system redundancy, eliminating reliance on one sensor and analyzer, and

ensuring fail-safe if one sensor or analyzer malfunctions. This means that customers avoid costly delays caused by a system failure.

## MED approved oxygen analyzers

The core of the system is the G36 Oxygen Analyzer. The G36 is approved under the European Marine Equipment Directive (MED), becoming the first system to be certified under the new heading A 1/3.54 for fixed oxygen analyzers. It is mandatory for fixed oxygen analyzers to have MED type

G3600



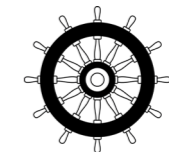
approval on both European and Norwegian flagged ships.

## Service and support

The G3600/3601 Inert Gas Oxygen Analyzing System is simple to install and have a low cost of ownership. Consumable parts are easy to replace by the crew. In the event that assistance is required, for example with the replacement of parts or with retrofitting, Green Instruments provides full service and support to ensure optimal operation throughout the entire product lifetime.



## Certificates



PERFECTING SENSIBLE TECHNOLOGY

# Specifications - G3600/3601

## ANALYZER

### Power supply

Standard 100 – 230 VAC, 50/60 Hz

Ambient temperature 0 – 55 °C

### Communication

Output signal 4 – 20 mA – range selectable  
Default: 0 – 25 %

Max load signal 600 Ω / 24 VDC

### Measurement

Sensor technology Zirconia type sensor

Measurement range 0 – 21 % O<sub>2</sub>

Repeatability ± 0.1 % of the measurement range

Accuracy ± 0.5 % of the measurement range

Response time 90 % of measuring scale in less than 45 sec. with sample flow rate of 0.8 l/min sample line of 1 meter

### Material/enclosure

Enclosure IP 67

### Dimensions/weight

Dimensions 170 x 200 x 90 mm

Weight 2.5 kg (without packaging)

## BOARD SPECIFICATIONS

Sample specification Pressure: 0.05 – 1 bar  
Flow: 2 – 8 l/min  
Temperature: 0 – 70 °C

Zero test gas Max 10 bar - 1/8" BSP connection

Span test gas Max 10 bar - 1/8" BSP connection

Sample manifold 3 ports - 1/8" BSP connection

G3600 single board 600 x 500 x 140 mm / weight: 12 kg  
(without water and packaging)

G3601 double board 610 x 790 x 140 mm / weight: 20 kg  
(without water and packaging)

## OPTIONAL EQUIPMENT

Extension board Expand a single board to a double board for redundancy

Digital flow switch 0.2 – 10 l/min

G36p Oxygen Analyzer 24 VDC – panel mounted

Filter Pre-filter for sample gas

Specifications subject to changes without notice

## EUROPE

### Green Instruments A/S

Erhvervsparken 29  
9700 Brønderslev, Denmark  
Tel: +45 96 45 45 00

[sales@greeninstruments.com](mailto:sales@greeninstruments.com)

## AMERICA

### Green Instruments USA, Inc.

6750 N. Andrews Avenue Suit 200  
Fort Lauderdale, FL-33309, USA  
Tel: +1 954 613 0400

[usa@greeninstruments.com](mailto:usa@greeninstruments.com)

## ASIA

### Green Instruments (S) Pte. Ltd.

4008 Ang Mo Kio Avenue 10  
#01-09/10 Techplace I, Singapore 569625  
Tel: +65 3100 0577

[sales.sg@greeninstruments.com](mailto:sales.sg@greeninstruments.com)



For more information, please visit us at [www.greeninstruments.com](http://www.greeninstruments.com).